



The
University
Of
Sheffield.

Professional Development of Teachers for Assessment for Learning

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Dedication

I dedicate this work to my wife, Lucienne and my son, Gary for supporting and encouraging me silently, but consistently.

Acknowledgments

Throughout this journey, I have been privileged to be supported by so many people, whom I wholeheartedly thank.

I thank my supervisor, Prof. Cathy Nutbrown, not only for the insights and guidance provided throughout the development of this research study but also for the encouragement and words of support which were critical to my perseverance in this journey. I also thank Prof. Peter Clough for providing me with guidance in the foundation stages of this study.

I thank my parents for providing me with opportunities to learn since my very early years. I also thank my extended family for never failing to believe that I could bring the study to its completion.

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Abstract

This phenomenological study explores the perceptions of a group of seven teachers within a Maltese post-secondary college as they engaged with a bespoke professional development programme on Assessment for Learning strategies. Assessment for Learning has long been established in policy but, while the positive impact this could have on learning is strongly supported in literature, its implementation within Maltese educational institutions may not be as extensive as the policy would anticipate.

The study focused on the way participants negotiated with their own conceptions as they were exposed to learning strategies from alternative perspectives. The study explores the teachers' challenges, understandings and attitudes when implementing Assessment for Learning practices within their particular learning community, and the extent to which a professional development programme on Assessment for Learning strategies helped them address their challenges, improve understandings and change attitudes.

The study used semi-structured initial interviews, prior to nine bespoke group sessions on particular Assessment for Learning strategies, followed by second set of participant interviews to evaluate impact on participants' conceptions.

Eight main themes emerged from the study: Assessment for Learning: making connections; rubrics as a learning tool; drafting and redrafting; exemplars as a learning tool; learning intentions: for learning or for teaching?; assessment for student learning; assessment for teacher learning; professional development for Assessment for Learning.

This study exposed the importance which the participants attribute to positive relationships and the value of fairness when providing feedback to students. Teachers' conceptions on the need for clarity when assessing tasks were revealed, especially in the context of a clear preference for verbal over written feedback and the use of rubrics as an assessment tool. Another key finding reflected the participants' outlook on providing students with an opportunity to resubmit previously assessed work, before its final evaluation. Other emergent themes were related to the importance of clarifying the learning journey through the use of exemplars and learning intentions, as well as other factors which contribute to the effectiveness of assessment as a learning tool. The final two themes were related to the empowerment of teachers as leaders of their own learning and to factors related to the design of professional development programmes on Assessment for Learning.

This study affirms the importance of developing an awareness of the participating teachers' mindset and preconceived ideas. Moreover, identifying the roots of such positions is critical, especially at the early stage of planning professional development programmes.

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Glossary of Abbreviations

AERA	American Educational Research Association
ARG	Assessment Reform Group
COI	Council of Institutes
DQSE	Directorate for Quality and Standards in Education
ECDL	European Computer Driving Licence
EQF	European Qualifications Framework
ECTS	European Credit Transfer and Accumulation System
ECVET	European Credit System for Vocational Education and Training
IAT	Initial Assessment Test
IfE	Institute for Education
ITS	Institute of Tourism Studies
JCSEE	Joint Committee on Standards for Education Evaluation
MCAST	Malta College of Arts, Science and Technology
MEE	Ministry for Education and Employment
MQF	Malta Qualifications Framework
NCHFE	National Commission for Further and Higher Education
NCF	National Curriculum Framework
NMC	National Minimum Curriculum
NRC	National Research Council
OECD	Organisation for Economic Co-operation and Development
PGCE	Post-Graduate Certificate in Education

QF/EHEA	Qualifications Framework of the European Higher Education Area
SEC	Secondary Education Certificate
SSC&P	Secondary School Certificate and Profile
THOR	The House of Representatives
VET	Vocational Educational Training
VTTU	Vocational Teacher Training Unit
UK DfE	Department for Education (United Kingdom)
NUS	National Union of Students (United Kingdom)

Chapter 1 - Introduction

1.1 Introductory Statement

A key strategic document which sets out the guiding principles of policies and practices within the local educational system, the Maltese National Curriculum Framework (NCF, 2012), clearly places assessment as an integral component of the student's learning. It also emphasises the need for effective and carefully designed sustained programmes which support local educators in the interpretation and implementation of strategies which are aimed at strengthening learning. This research study builds on the extensive literature which already exists on these two areas and sets out to explore pertinent issues which local educators engage with when considering the implementation of alternative assessment strategies within their own teaching and learning contexts.

1.2 Overview of the Thesis

This thesis is organised in five chapters:

- Chapter 1 - Introduction
- Chapter 2 - Literature Review
- Chapter 3 - Methods and Methodology
- Chapter 4 - Data Analysis and Interpretation
- Chapter 5 - Conclusion

This first chapter introduces the area of study and provides an overview of its position within the local educational context. My personal interest in the area

together with a brief description of my professional background is also included in this chapter. The two research questions which this study set out to answer, the purpose of the study, as well as a description of the research design are presented as the foundation of the rest of the thesis.

The second chapter proposes a critical discussion on pertinent literature about Assessment for Learning and professional development of teachers, with a particular focus on the overlapping issues between the two main areas.

Chapter three links the purpose of the study, as reflected in the research questions, with the research approach and design, providing a justification of the data generation tools and methods chosen, that is semi-structured interviews and group professional development sessions. The participants are introduced to the reader while also providing a detailed description of their teaching contexts. A key component of this chapter outlines the ethical considerations which were taken into account to ensure participant confidentiality and informed consent.

Chapter four contains a detailed discussion on the findings of this study. The eight key emergent themes, together with the related sub-themes were analysed and compared with other research studies and related literature. This chapter also proposes various implications of the themes and sub-themes on practice, which are then elaborated on in the final chapter of this thesis.

The concluding chapter of this dissertation presents a summary of the key findings together with the respective implications for practice. It also contains

a number of limitations encountered and finally, recommendations for further study.

1.3 The Maltese Educational System

1.3.1 The Local Context

Educational institutions within the Maltese islands can be broadly categorised in three sectors – the State sector, the Catholic Church sector and the Independent sector. All schools, with the exception of the independent ones, are funded by the state through the payment of the salaries of the academic and support staff. However, Church schools may choose to ask for a voluntary contribution from parents to finance capital projects. The Education Act (The House of Representatives (THOR), 1988) together with the later amendments, namely Act No. XIII (THOR, 2006), provide the legal framework which regulates the provision of education. Act No. XIII (THOR, 2006) also regulated the re-establishment of Malta College of Arts, Science and Technology (MCAST) which was originally set up in 2001 to consolidate vocational education across the Maltese islands. This research study was conducted at MCAST and a more detailed overview of this institution is included in chapter three of this thesis¹.

The 2006 Act also established the Directorates through which the then Ministry for Education and Employment (MEE) managed and assured quality across all schools. The Directorate for Quality and Standards in Education (DQSE) was set up to “regulate, establish, monitor and assure standards and

¹ See section 3.3.3.2

quality in the programmes and educational services provided by schools, whether State schools or not” (Act No. XIII, 2006, Chapter 327, Paragraph 8). The mission of the second regulatory body, the Directorate for Educational Services, was to “ensure the effective and efficient operation and delivery of services to the Colleges and State schools within an established framework of decentralisation and autonomy.” (Act No. XIII, 2006, Chapter 327, Paragraph 10).

Act No. XIII also gave the State the right to establish a National Curriculum Framework (NCF, 2012) which replaced an earlier, highly prescriptive (Serracino Ingloft, 2011) National Minimum Curriculum (NMC, 1999). The NCF was intended to promote “a lifelong learning policy and strategy” (Act No. XIII, 2006, Chapter 327, Paragraph 9). One of the key outcomes as a result of the NCF and which, during the period of this research study, was impacting the teaching and learning within the compulsory educational sector, was the Learning Outcomes Framework (DQSE, 2015). This framework was intended to shift the focus from a teaching-centred approach to one which focuses on what the student should know and be able to do through learning. MCAST had already adopted a learning outcomes approach with all the units having set learning outcomes and relative grading criteria mapped on Bloom’s taxonomy (1956) and grouped into three categories: knowledge and understanding, synthesis and evaluation, and analysis and application.

1.3.2 Compulsory Education

Children between the ages of five and sixteen are obliged by law to attend school in any one of the licenced educational institutions. Prior to the 2006 Education Act amendment, compulsory schooling in Malta was divided into two. Primary schools catered for students between the ages of five and ten while Secondary schools offered education to students between the ages of eleven and sixteen. At the end of secondary education, students were expected to sit for the national examinations run by the University of Malta, the Secondary Education Certificate (SEC) examinations². Depending on the number of passes achieved at SEC level, students would be eligible to enrol in any of the local and international post-secondary institutions, including MCAST.

In the state sector, in order to emphasise a seamless transition between primary and secondary education, following the review report 'Transition from Primary to Secondary Schools in Malta: A Review' (Grima et al., 2008), the competitive examination which streamed students into different categories of schools was abolished. This was replaced by a set of benchmark assessments in Mathematics, English, and Maltese and which are set in the final year of primary school. In their first year of secondary education, students are grouped in different tracks, depending on the benchmark assessment grades attained in the respective subjects. Students in Church and independent schools may also sit for these assessments. However, these two

² Additionally, some schools may prepare students for international 16+ examinations.

sectors are not obliged to set their enrolled students as a result of the benchmark assessments.

In the early years of primary schooling (Kindergarten to Year 2 – ages 3 to 7), assessment is informal in nature and, as the National Curriculum Framework (2012) recommends, focuses on “development and progress” (p. xv), and is formative in nature. The policy document further suggests that in the later part of the primary years (Year 3 to Year 6 – ages 7 to 11), summative assessments are introduced gradually and should be complemented with assessments which are formative in nature. As students progress through secondary education, the high-stake examinations set in the final years shift the focus towards a more summative approach. Grima and Chetcuti (2003) and later, Buhagiar and Murphy (2008) claimed that formal, summative assessments were still the predominant mode of assessment with the purpose of preparing students for the end-of-secondary SEC examinations. Grima and Chetcuti (2003) further noted an incongruence between these predominant practices and the educators’ positive perceptions on the learning gains linked with the implementation of Assessment for Learning. In recent years, research on teachers’ challenges, understandings, and attitudes about Assessment for Learning within the local context has been very limited. Through an investigation of these relevant issues, as teachers participate in a bespoke professional development experience, the study reported in this thesis aims to contribute to addressing this gap in knowledge. This will be discussed further in Chapter four which reports and discusses the analysis and interpretation of this thesis.

1.3.3 Post-secondary, Further, and Higher Education

The setting for research is an educational institution which offers vocational education training (VET) at post-secondary level (16 years and over). Students choosing to pursue their education after completing the compulsory primary and secondary years have various progression options, depending on their performance in the end-of-secondary examinations and the route they wish to embark on. State, Church, and Independent sixth forms prepare students for entry to higher education either in local or international universities or in vocational institutions such as the Malta College of Arts, Science and Technology (MCAST), within which this study was carried out. Alternatively, students may choose the vocational route immediately upon completing secondary education successfully or once they are sixteen years of age. Both MCAST and the Institute of Tourism Studies (ITS) provide vocational courses from Level 1 to Level 6 of the Malta Qualifications Framework³ (MQF). MCAST has recently offered the first Level 7 degrees at Master level.

The largest local provider of tertiary education is the University of Malta, which is state funded and offers degrees up to doctoral level. Other privately-run institutions, some in collaboration with international universities, also offer courses at various levels including doctoral levels.

³ The Malta Qualifications Framework is referenced to the European Qualifications framework (EQF) and the Qualifications Framework of the European Higher Education Area (QF/EHEA) (National Commission for Further and Higher Education, 2016)

1.4 Teacher Education, Training and Development

1.4.1 Pre-service Teacher Education

The University of Malta is currently the sole provider of pre-service teacher training. Up until 2015, students could either enrol in a four-year Bachelor's degree at Level 6 or follow a one-year post-graduate certificate (PGCE), as long as they already possessed a degree in any other field. Currently, the teaching qualification has been upgraded to a Master level. Students wishing to pursue a professional teaching career are required to follow a two-year programme in Education after having completed a general degree in a preferred area of specialisation.

In, 2015, the Institute for Education (IfE) was established to provide training for current educators. The strategic plan for this Institute also extends to providing Bachelor and Masters degrees in education, mostly through after school-hours sessions, online and practical modules (Institute for Education, 2018).

1.4.2 Continuous Professional Development

Following various collective agreements between the union of teachers and the government, up until 2017 educators within the State and Church schools were obliged to attend twelve hours of professional development every scholastic year. While individual schools, including the independent ones, could organise their own programmes, the state designed a series of in-service training which teachers could choose from. With the establishment of the

Institute for Education, these courses fell under its remit. Although the National Curriculum Framework (2012) identifies assessment as one of the key strategic areas for development and urges all schools to develop policies which support the “essential contribution to learning and progress at all levels” (p. 41), only two courses which are particularly focused on this area are listed in the Institute for Education’s 2018 prospectus. This demonstrates that the local need for carefully designed, well-researched professional development programmes, as discussed in greater detail in the literature review in Chapter two, is not yet met.

1.5 My Interest in the Research Area and Rationale for the Study

Throughout the last 25 years, through my work in schools both as a teacher and eventually as a school leader, I had the opportunity to experience different forms of professional development programmes, covering various aspects related to teaching and learning, including the different modes of assessing and giving feedback. Reflecting on my experiences, I was intrigued by the vast physical, financial, and human resources which schools invest in their assessment practices. My persistent concern echoed the assertion put forward by Wiliam and Black (1996) that “if nothing different can happen as the result of an assessment, there can be little point in conducting the assessment in the first place” (p. 543). What I observed as a considerable dependence on summative, evaluative modes of assessment, contrasted with what literature proposed through the exposition of assessment as an integral part of the learning process. I was becoming increasingly interested in

understanding what the teachers' views about the various forms of assessment were. The meanings and purposes which I attributed to terms like formative assessment, Assessment for Learning, and Continuous Assessment were somewhat different to how these were used in everyday educational discourse.

Over the years, I became increasingly aware of the fact that although many teachers acknowledged the positive impact Assessment for Learning could have, the implementation of such practices were, many times, not congruent with what the literature proposes. I was interested to explore the extent to which there was a mismatch between theory and practice, possibly contributing to narrowing the potential learning gap. Moreover, well aware that teachers' schedules were considerably hectic, I wished to focus on how the practices which teachers may already be implementing could be changed to be more conducive to greater learning gains – working smarter rather than working harder.

1.6 Purpose of the Study

Aware of the problem of Continuous Professional Development and assessment, I decided to focus not on the manifestation of the problem but rather on what I considered might be possible reasons for the problem. My engagement with the pertinent literature led me to postulate that teachers' convictions and perceptions about Assessment for Learning had a significant bearing on practice - an educational research area which, as Evans (2014) contends, is not sufficiently investigated. The limited research related to the

Maltese context, evidenced by the lack of available published literature, contributes to the importance of investigating this area. The purpose of this phenomenological study is that, through a clearer understanding of teachers' points of view, one could be in a better position to support teachers in the assimilation of Assessment for Learning practices in their teaching. This is intrinsically linked with the *method* of providing support – which is the second main focus of this research study, that is, how certain factors may be incorporated in professional development programmes to encourage engagement and implementation of Assessment for Learning practices.

1.7 Research Questions

In order to achieve the aims and purposes described above, this research study sets out to answer the following research question:

- What challenges, understandings and attitudes do teachers need to negotiate when implementing Assessment for Learning practices within a particular learning community?

Moreover, a subsidiary question which underpins this study is:

- In the context of participating in a professional development programme on Assessment for Learning strategies, what factors contribute to addressing these challenges, understandings and attitudes?

These two research questions create the bounded context of this study which, has a context specific focus. Furthermore, these questions acknowledge that

the challenges linked with the implementation of practices are multi-faceted. Careful design of professional development programmes necessitates a focus which goes beyond merely addressing the cognitive domain. The literature review section of this thesis (Chapter two) and the findings of this research study (reported in Chapter four) suggest that for effective implementation to take place, there needs to be an active and deep engagement on the part of the teachers which, I suggest, goes beyond the mere understanding of the proposed strategies. As a result, this requires a prior understanding of the teachers' positionality on relevant issues. This is consistent with an approach which regards teachers as learners and Ramaprasad's (1983) original notion of bridging the learning gap. Therefore, professional development programmes with a purpose of supporting and inviting teachers to consider alternative methods of teaching and assessment, need to build around their mindset and conceptions of assessment. This thesis seeks to address this need within the context of a local educational institution. The way these two research questions inform the research design of this study is discussed in more detail in the methodology chapter (Chapter three) and a brief overview is included in the following section.

1.8 Research Design

After obtaining all the required approvals from the participating institution and from the University of Sheffield to carry out the proposed research, a purposefully sampled group of seven teachers were approached and agreed to participate in the study. Introductory meetings with all participants were

held separately, during which logistic and operational issues were discussed. Queries and concerns which each teacher may have had were also addressed during these meetings. Even though no participant taught at the Institute I was responsible for, since we worked within the same wider College, that is MCAST, I reassured them that their anonymous participation was protected and that this was in no way related to their work performance.

Data generation was divided into three main phases. Individual semi-structured interviews were held with each of the seven participants to help me understand their points of view on Assessment for Learning prior to participating in the professional development programme. The original plan for the duration of this programme had to be adjusted due to constraints related to the College's academic calendar, the participants' workload, and their personal commitments. Nine sessions of ninety minutes each, focused on various practices and strategies related to the implementation of assessment as a learning tool. Moreover, the participants were at liberty to intervene and raise pertinent issues at any time during the sessions. This was critical for this research study because it contributed to the clarification of their respective positions as they analysed their current teaching environments with the issues being discussed. The last phase of the data generation stage was a second set of semi-structured individual interviews with the participants which served the purpose to probe on any particularly interesting issues which required further clarification following the group session discussions.

Following the audio recording and the verbatim transcription of the interviews and group sessions, through the analysis and interpretation stage, eight emergent themes and related subthemes were identified and discussed in Chapter four.

Chapter 2 - Literature Review

2.1 Chapter Introduction

The positive impact of adopting assessment practices which are focused on future learning rather than evaluating past achievements is supported by various instances in literature. Moreover, research strongly points towards the transformation in teachers' attitudes and beliefs through their participation in carefully designed professional development programmes which are focused on the formative nature of assessment and feedback.

This critical review of literature is divided in two main sections, one focusing on assessment in schools and another addressing issues relevant to professional development of teachers, with a particular focus on Assessment for Learning. The common rationale in these two sections is that of analysing how various researchers give meaning to the interaction between professional development and Assessment for Learning practices in different educational contexts and how this impacts on student learning and achievement.

2.2 Assessment in Schools

2.2.1 Introduction - The Meaning of Assessment

Evaluation, an integral part of any process or system provides an indication of whether one is effective with regard to one's intentions. It can provide information on the current state of matters, the desired stage and the journey between the two. Learning and teaching are not immune to this need of

constant evaluation; both are journeys which are intertwined and, under the ideal conditions, should work in synergy towards learner development. Both journeys consist of small steps which slowly stretch the learners (and teachers) beyond their comfort zones. In this context, by merely focusing on the day-to-day tasks involved in teaching and learning, one runs into the danger of missing the bigger picture; the woods for the trees.

The processes which involve human interactions are inherently complex and it comes as no surprise that learning and teaching, and consequently their evaluation, is complex too. In the literature, notions of assessment are abundant and varied. This area has drawn the attention of a large number of researchers who have addressed the topic from different aspects, varying in the breadth and depth of their investigations and the specific areas of focus. As far back as, 1977, Kulhavy described assessment as the practice of deciding whether the student's response to the teacher's instruction is correct or not. Crooks (1988) broadened this notion and maintained that evaluation should focus on the educational activities which students embark on and that it should in fact form an integral part of this journey. A common line of thought in these two views is the importance of a clear understanding of the current and desired state. This is critical to the success of any journey; corrective measures are important at each step. These interventions cannot be the result of random analyses without giving extensive consideration to the learning process. The process of evaluation has to be aligned with the learning process, both in structure and nature, and not considered as an end in itself but rather a practice that supports learning. As much as teaching and learning is a well-

thought out process with a clear scope and purpose, evaluations should be “systematic [which] often provide powerful inquiry mechanisms and accurate findings” (Joint Committee on Standards for Education Evaluation [JCSEE], 2010, p. 4) in that it is a methodical and deep analysis (Guskey, 2002a) aimed at giving a clear understanding on the narrowing of the gap between the current and desired states of development (Bell & Cowie, 2001; Ramaprasad, 1983; Sadler, 1989; Yin, Tomita, & Shavelson, 2014).

2.2.1.1 Overview of Assessment

Purposes of Assessment

I consider educational institutions within which teaching, learning and assessment occur as intricate environments. What makes them so complex is the fact that such processes rely, almost in their entirety, on human intervention. To make it even more complex, the physical, geographical and political contexts also vary from area to area. This infinite diversity of factors immediately establishes that any evaluation of the learning process cannot be one that fits all. There is no one type of assessment which addresses the extensive “range of purposes” (Riley, 2000, p. 43) which the process of assessment is meant to achieve. Similarly, “the uses to which assessment information is put” (Gardner, 2012a, p. 103) are notably varied: assessment is a tool to measure and support learning, to measure progress, to inform the teaching process, for certification purposes, for selection purposes, for accountability of courses and institutions, to celebrate success and to motivate students (Gardner, 2012a; Gardner & Holmes, 2010; Joyce & Showers, 2002;

National Research Council [NRC], 2001; (Nitko & Brookhart, 2014; Riley, 2000). Another critical factor that adds to the complexity of the evaluative processes within schools is that the purposes listed above have internal (within the context of school) and external (national and international) components.

The position of this research project is constructed around those assessment practices which may have a direct effect on teaching and learning (Gardner 2012a) “rather than traditional concepts of assessment as measurement” (Carless, 2005). This does not discredit the importance of other purposes and types of assessments, both those set within the local school environment, as well as those organised at a national or international level. These are different tools which serve different purposes. Selecting the right tool entails a clear understanding of the goals one would like to achieve, and these different tools can be implemented to elicit different types of information which adds richness to the information itself. Investigating the relationship between assessment practices, teaching, and learning can reveal a great deal of information about the “instructional strategies [which in turn can inform the] most appropriate course for future learning” (NRC, 2001, p. 103; see also Guskey, 2007). This relates very closely to Mats Björkman’s (1972) notion of ‘feedforward’ which stresses the need that the flow of information between the teacher and the learner is directed towards using feedback (the past) to inform the future (Carless, 2007a; Sadler, 2010). Carrying out an assessment exercise without having the opportunity of learning is not worth carrying out at all (Black et al., 2003a; James, 2007; NRC, 2001; Wiliam & Black, 1996).

Rather than using assessment as a judgemental tool, improving students' achievements through opportunity for clarifications (Wiggins, 2011) should in fact be central to assessment (Wiggins, 1998). He continues to argue in favour of striving for assessment practices which reflect the "core challenges of the field of study [which are] not the easily scored" (Wiggins, 1998, p. 23). The tension between the summative and formative purposes of assessment is very evident here, especially when this argument is set within a context where different stakeholders prioritise the purposes of assessment differently. This originates from the fact that different players, be it students, parents, school administrators or educational authorities, tend to value the relevance of information differently, usually depending on their own agenda or the one set for them.

Conceptions of Assessment

The position teachers take on the nature of assessment, to a large extent, relates to purposes they attribute to their assessment practices and beliefs they hold about it. Within the context of this research study, as Harlen and Gardner (2010) note, it is critical that educators are well versed in the implications of assessment practices within their classrooms to an extent that they are able to take the correct decisions based on the information elicited from such practices. In a study to investigate the effects of professional development on teacher assessment literacy and student learning, Koh (2011) in fact identified "teachers' conceptions about authentic assessment" (p. 260) as one of the two determining factors to measure⁴. Teachers' own experiences

⁴ For a more detailed discussion on assessment literacy, see Section 2.3.2.3

as students, the training they receive in the pre-service period, and the macro- and micro-contexts within which they practise, all contribute to their perceptions, attitudes and beliefs. The interdependence between beliefs and the practices is a complex one. Buehl and Beck (2015) present different approaches to this relationship and argue that some literature points towards the notion that beliefs precede practice while others opine that beliefs are constructed through and reflected in practice. Furthermore, Buehl et al. (2015) also present arguments which claim that practices and beliefs are entirely unrelated and independent of each other. In the context of this research study, a position which I tend to favour is one which suggests a symbiosis between practices and teachers' beliefs on Assessment for Learning. For a reflective practitioner, the tasks usually associated with teaching and learning are intertwined, with episodes of reflection on practices. Even if professional development sessions are spread over a number of days, these are usually integrated within the school calendar. While reflecting on their practices, possibly prompted through contemporary research, teachers may be adjusting their understanding and beliefs, albeit in small steps. This may in turn consolidate future practices.

Barnes, Fives, and Dacey (2015) assert that while there may be a correlation between knowledge and beliefs, one cannot simply assume that exposing teachers to contemporary theories about assessment will alter their convictions, and eventually, practices. Following the strong arguments made some twenty years ago by Hart and Hargreaves (1998) to actively engage the heart, rather than merely the mind, of educators, I believe that professional

development programmes need to delve deeper into the *why* as well as the *what* of teachers' practices. Barnes et al. (2015) go to the extent of insisting that assessment practices can only be altered if the respective "beliefs and conceptions" (p. 296) are addressed and challenged.

Due to the diverse backgrounds and experiences of teachers, and the diverse learning needs of students, one would not expect conceptions about assessments to be fixed and common across all educational contexts. This could possibly explain why certain initiatives may be successful in some environments and unsuccessful in others. The wide spectrum of teachers' viewpoints on assessment is strongly reported in literature (Barnes et al., 2015; Brown 2008), with Davis and Neitzel (2011) maintaining that the audience for which the assessment is intended is a determining factor in the purposes attributed to assessment practices. The negotiation between the expected functions of assessment and the teachers' beliefs may eventually lead to a discrepancy between beliefs and practices – especially if the expectations of assessment are not congruent with supporting learning. In such challenging contexts, as James and Pedder (2006) who conducted a survey of 558 teachers in England found out, the mismatch between beliefs and practices almost always resulted in the promotion of assessment methods which were less conducive to learning. James et al. (2006) reported that typically, teachers implemented *more* performance-oriented assessment practices than they actually favoured and *fewer* methods which promoted autonomy and clarity in the learning objectives than they would have selected had they been in a less constraining environment. Such constraints, though

complex (Buehl & Beck, 2015), are not always beyond teachers' ability to overcome; therefore, professional development programmes could specifically focus on what the teachers believe to be within their remit and achievable. Moreover, programme designs should challenge the positions teachers take on assessment and possibly, consider alternative ways to the ones with which they may be accustomed. As discussed in Chapter one, this is one of the purposes of the study reported in this thesis, that is, understanding the varying positions of teachers, working within a Maltese educational institution, on the implementation of Assessment for Learning practices to strengthen long-lasting learning.

Properties of Good Quality Assessment Practices

Notwithstanding the label one attaches to the evaluation practices or the agendas of the different stakeholders, it is critical to stress that:

- assessment practices should have clear objectives right from the early stages of implementation and
- the information elicited from the assessment practice is congruent to these objectives.

In this context, the information that is elicited needs to reflect the true picture of the learning context and that any decisions made are of good quality and valid. Gardner (2012a) strongly argues that unless such levels of validity are achieved, the respective assessment exercise would be “simply a waste of time” (p. 112). Shepard (2008) stresses the importance that, in order to make

the right decisions, the information is elicited from “multiple sources of evidence” (p. 292). Viewing and analysing the student’s performance from different angles provides a more comprehensive understanding and a clearer picture which interventions may be based upon. Baker (2003) advocates for “multiple measures” since, she argues, the interpretation of the student’s achievements will be more just and give students more opportunities to reveal their actual standard. The American Educational Research Association (AERA, 1999) goes to the extent of stating that no decision which might have a significant effect on the student’s future should be taken unless it is based on evidence obtained from multiple sources. It suggests “school record[s], classroom observations [and] parent reports” as sources of information which could be referred to by decision makers (AERA, 1999, p. 147). Henderson-Montero, Julian, and Yen (2003) highlight the technical advantages of interpreting data from multiple sources because, in doing so, the assessment errors, which are invariably linked with the subjectivity of the observer, compensate for each other.

The issue of subjectivity of assessment is a bone of contention between those who favour either formative or summative assessment practices. This argument will be explored later on in this chapter, but a related key characteristic of all useful assessment practices is their reliability which Sadler defines as “degree of consistency” (2009a, p. 161) between different assessors or by the same assessor on different occasions (Sadler, 2013a). He refers to these as “inter-grader reliability” (2009, p. 161) and “temporal reliability” (2009, p. 162) respectively (See also Sadler, 2014).

Adopting Henderson-Montero's et al.'s (2003) idea of counteracting assessment errors and building on Sadler's (2009a) two types of reliability, I propose the term *inter-assessment reliability* which acknowledges the importance of building a comprehensive and reliable understanding of the student's competences through *multiple* assessment practices. When carried out under different conditions, assessments should yield comparable evidence and information not only about the level of a piece of work, but more importantly, on what the student has actually learned, with a clear understanding on the remedial steps required to take learning to the next level. Adding the third dimension of the *multiplicity of assessments*, ideally of different types, the progression of the student's growth and development would be more explicit, more comprehensive, more accurate and consequently, fairer and just. Nonetheless, it is pertinent to note that no matter how much assessors try to be objective and comprehensive in their assessment, one could not claim that such feedback is absolutely accurate and free from *all* subjectivity. In this regard, Gardner (2012a) emphasises that the boundaries within which validity of a particular assessment is claimed are set and communicated with the key stakeholders.

Assessment can only be useful if there is congruence with the learning process. Ramaprasad (1983) emphasises the need for a clear understanding of both aspects, that is, assessment and learning. He goes on to argue that learning will in fact not take place at all if the "subsequent measurement of the true state [is] fuzzy" (p. 11-12). Ruiz-Primo, Shavelson, Hamilton, and Klein (2002) argue that this clear understanding is dependent on the intimacy of the

relationship between the two, which could be “immediate, close, proximal, distal, and remote” (p. 371; see also Wiliam, 2010). The NRC (2001) argues that one of the key purposes of assessment is to determine the *what*, the *how* and the *when* of the learning process. This can only happen successfully if there is an intimate symbiosis between assessment and learning, and if the *why* of assessment is also clear from the outset. The NRC (2001) lists “coherence” (p. 272) as one of the three key features of a balanced assessment system. Shepard (2008) defines this property “a shared model of learning linking curriculum, instruction, and assessment” (p. 292). I argue that the common line of thought in these assertions is not limited to the educational realm but rather, a universal principle which can be applied in various scenarios when the efficient implementation of a task needs to be achieved – an awareness of the task and an awareness of the path to follow to fulfil this task.

Linked very closely to this is and using the analogy above, identifying the right tool for the job at hand is critical when eliciting evidence on the student’s progress in a specific domain. This not only emphasises the importance of having a meticulous understanding of the tools available to elicit information from the student’s work, but also a grasp of the learning pathways, together with the steps students take in their journey to acquire the knowledge, skills and competences associated with particular domains. In the context of this research study, as will be discussed in more detail in the following chapters, this is one of the key areas that professional development programmes should

address in order to secure a positive, long-lasting effect on student learning and achievement.

When designing a task, especially if its implementation spreads over an extended period of time, having the clear outcomes which are explicit right from the start, will reduce the likelihood of students losing focus along the way. This echoes Covey's (2004) contention that keeping the end in mind is crucial to any successful journey. Setting the direction will invariably require awareness of the intended learning outcomes as well as a clear understanding of how information and evidence will be used to achieve these outcomes. A direct consequence of this is the need to implement various modes of assessment which are commonly categorised as 'Assessment *for* Learning' and 'Assessment *of* Learning'. As the terms imply, both have specific and distinct natures and functions and consequently, different purposes.

2.2.1.2 Overview of Assessment for Learning

Introduction

William and Black (1996), in their analysis of the functions of formative and summative assessments, describe how as far back as 1967, Michael Scriven introduced the term 'formative' when describing the different types of assessment. In his renowned contribution, *The Methodology of Evaluation*, Scriven (1967) discusses the characteristics of formative and summative evaluation by contrasting the arguments for and against. Apart from suggesting that formative evaluation is carried out throughout the teaching

and learning process, he implied that such assessments should close the teaching-learning cycle by informing the “development of the teaching instrument” (1967, p. 51) and the design of new curricula.

To be constructive, assessment should not yield inert and unconnected pieces of information, which Taras (2003) refers to as “freestanding” (p. 550), but rather a process carried out *during* the teaching and learning process with the clear and explicit intention to provide information on both the teaching and learning processes (Maughan, Peet, & Willmott, 2001; Shepard et al., 2005). The significance of assessments with a formative purpose is evident when the teacher and student utilise the information to inform the future. In this context, Black and Wiliam (2010) argue that assessment should be timed in such a way that the findings can be fed back to the teacher and student. With a clear assertion against the formative use of end-of-module tests, they argue that it would be too late to utilise the information as a learning tool. Such tests may serve other purposes associated with assessment but limit direct and immediate effect on teaching and learning.

End-of-module and assessments carried out during the scholastic year are often wrongly referred to as formative assessment (Pachler, Daly, Mor, & Mellar, 2010). This may either be due to an mis-understanding of the concepts or to the fact that textual feedback and comments are deemed sufficient to achieve the positive gains associated with Assessment for Learning. Nitko and Brookhart (2014), Gardner (2010b), and Harlen (2010a) insist that the term ‘formative’ is not a property of the assessment or of feedback about the

student's work but rather refers to the decisions one takes as a result of this feedback.

Definitions and Meanings

The term 'formative' implies a significant effect on teaching and learning (Black, Harrison, Lee, Marshall, & Wiliam, 2003a). Merely by giving feedback, irrespective of how well-crafted and carefully written this feedback may be, is not a recipe for immediate success. It is not the magic wand that brings about change in the student's performance and academic achievements. Hattie (2009) argues against this behaviourist approach to feedback and insists that it is what students make of the information that counts and not the feedback itself. In fact, the results of good use of feedback will only be evident once the "student attempts to repair the defect" (Sadler, 1983, p. 74) indicated by the teacher. I extend this understanding of the functions of formative assessment to the effect on the teaching process and as well as on the learning process. Cowie and Bell (1999) and the Organisation for Economic Co-operation and Development (OECD, 2005) regard the teachers, as well as the students, as the key beneficiaries of the information that is elicited from Assessment for Learning processes.

At this point it is pertinent to hone in on the terms which are very often used interchangeably, that is 'Assessment for Learning' and 'formative assessment'. The two terms are commonly found in literature to denote a type of assessment which, in contrast with summative assessments (also commonly referred to as Assessment of Learning), focuses on informing the teaching and

learning journey of the student and teacher. However, Swaffield (2011) strongly argues that the two terms have different meanings and therefore, distinctive purposes. Sue Swaffield (2011) attributes six key features to Assessment for Learning which she claims do not necessarily relate to formative assessment:

- Assessment for learning is a learning and teaching process ;
- Assessment for learning is concerned with the immediate and near future ;
- The protagonists and beneficiaries of assessment for learning are the particular pupils and teacher in the specific classroom (or learning environment) ;
- In assessment for learning pupils exercise agency and autonomy ;
- Assessment for learning is a learning process in itself ;
- Assessment for learning is concerned with learning how to learn as well as specific learning intentions .

(Swaffield, 2011, p. 443)

Building on these contentions, for the purpose of this research project, the term 'Assessment for Learning' will be adopted to describe a mode of assessment which is more concerned with teaching and learning, one which intends to inform the next step in learning (Gardner, 2012b) and one which supports learners to become autonomous and therefore, able to transfer their learning to other contexts.

The emphasis on utilising assessment as a tool to bring about learning gains may be noted in Black and Wiliam (1998) who define Assessment for Learning as those processes which bring together all the efforts which can elicit information from the student's performance and which can then be fed back "to modify the teaching and learning activities in which they are engaged" (p. 7-8). This definition emphasises the connection that teachers and students should have with the learning process to the extent that useful information can only be elicited if there is a deep commitment to learning. To some extent, it may be a source of internal conflict, especially when confronted with high-stakes examinations and accountability issues, just to mention two examples, where the priority shifts towards the *manifestation* of learning rather than learning itself - appearance over substance. Environments which are controlling, to the extent that the teachers feel that they are not trusted as professional practitioners, are not conducive to allowing them to be sensitive to their learning contexts and exploring alternative ways to support students towards deeper learning (Brown, 2008).

When learning is unrestrained by these external pressures, students have the freedom, time and space to explore their own identities and develop as capable and independent learners. Shepard (2008) contends that when this is set within the school context, through interactions with peers and teachers, the students hone their cognitive skills and abilities, mostly through trial and error. She argues in favour of Assessment for Learning since it can serve as a way to entice students to participate "in learning for its own sake" (2008, p. 287). This echoes the voice of other researchers who argue in favour of one of

the main characteristics of Assessment for Learning - feedback that focuses on improvement of the task rather than focusing on the self (see Butler, 1987, 1988, 2012; Carless, 2005; Crooks, 1988; Hattie & Timperley, 2007; Lau & Roeser, 2002; Nicholls, 1978; Sadler, 2010).

Undoubtedly, for an assessment to be truly formative, there needs to be a close correlation between the past and future assessments (Sadler, 2010). Lorrie Shepard (2008) identifies this as one of the three characteristics pivotal to addressing difficulties in learning and making “decisions about the next steps in instruction” (Black & Wiliam, 2009, p. 9).

Supporting Teaching, Learning, and Self-Assessment

The pivotal notion in the above discussion is that through the implementation of Assessment for Learning, one collects evidence on the learning needs, and then plans and adjusts the journey towards success accordingly (Harlen, 2007). This forms an integral part of learning - both for the teacher and the student. In this context, the value of feedback lies in the extent to which it has had an effect on the instructional decisions teachers take. In other words, would there be a noticeable difference in the decisions teachers take if the need to give feedback on a piece of work was removed (Black & Wiliam, 2009)? On the other hand, the information one draws from Assessment for Learning does not necessarily result in a need to adjust the instructional process (Black & Wiliam, 2009; Wiliam, 2010). In certain cases, as might be the case with experienced and seasoned teachers, the information may actually confirm that the instruction was appropriate and has in fact resulted

in the expected growth in student understanding and achievement (Black & Wiliam, 2009; Wiliam, 2010).

In order to ensure the effectiveness of assessment in promoting further learning, the other key players, the students, must value the feedback they receive about their work to the extent that they trust that this could have a bearing on their progress in achieving the expected standard (Cizek, 2010; Hattie et al., 2007). Students need the ability to relate to suggestions for improvement, tapping into their internal energy to build upon the strengths and weaknesses of their work (Sadler, 2010). As Cizek (2010) noted, feedback has to be detailed and specific to the steps required to bring about improvement. Through the implementation of this and other characteristics of good practice, one should expect to see an improvement in students' learning and achievement (Hattie & Timperley, 2007).

This developmental process will invariably hone the skills required towards becoming an independent learner. The first stage in this long and arduous journey is to become competent in understanding the feedback given by their teachers and implementing the suggestions in their future work. When this is carried out skilfully, by observing good practices, students will slowly develop the skill of self-assessing their work and taking control and responsibility of their own learning (Nicol & Macfarlane-Dick, 2006). Cizek (2010) insists that fostering "increased autonomy and responsibility for learning on the part of the student" (p. 4) is one of the principal functions of Assessment for Learning. The process can be viewed as moving from a teacher-assessment approach to

a student-self-assessment approach, which Avalos (2011) defines as the integration of “self-observation”, “self-judgement” and “self-reaction” (p. 14).

Minding the Gap

Assessment for Learning helps in building the student’s self-regulation strategies (Whitelock, 2007) as well as the teacher’s instructional strategies (Shepard, 2005). Stiggins, Arter, Chappuis, J., and Chappuis, S. (2004) claim that improvement will occur when the learners are aware of current and desired levels but more importantly have the capacity to “close the gap” (p. 34) between the two levels. The notion of bridging the gap was introduced in 1983 by Ramaprasad and developed further by Sadler (1989). In this context, Black et al. (2003a) go to the extent of insisting that the information generated from assessment practices should only be considered as feedback if it actually has an impact on learning. This echoes the NRC’s (2001) strong assertion that learning something new and relevant should be the consequence of any assessment experience.

Yin et al. (2014) elaborate on the concept of closing the gap between the current and desired state of understanding and contend that this is very closely linked to the ability to suggest appropriate actions that students need to take towards more sophisticated and deeper learning. One should then be able to be aware that the desired level has actually been reached and to identify the next gap in the learning progression of the particular domain. This exposes the need for teachers to be experts in the respective subject areas (NRC, 2001) and to have the right skills and competences to give useful

feedback on the student's work (Sadler, 1989; Tigelaar & Beijaard, 2013) - hence the need of professional growth opportunities.

2.2.1.3 Assessment for Learning and Summative Assessment

Introduction

The different purposes of assessments serve to classify assessments under two broad categories, commonly referred to as Summative Assessment and Assessment for Learning. The boundaries between the two are not distinct and for the untrained practitioner, this may lead to confusion and incoherence. To differentiate between the two, Wiliam and Black (1996) invite us to always refer to the core principle of assessment - that of looking at the outcome of the assessment exercise rather than the exercise itself. Different modes of assessment cannot be simply labelled as 'formative' or 'summative' but rather, the attribution of such properties depends on how the information which such a process elicits is then implemented to inform future learning (Black, Wilson, & Yao, 2011).

The different purposes and agendas of the various stakeholders within the educational context, can lead to different stakeholders pushing for their own agendas. This may lead to moving away from an approach which promotes learning through social constructivism (Black, 2001) towards practices which train students to pass the test (Carless, 2005). Both types of assessment purposes have a key role to play in the learning journey and one should not exclude either of them. The ideal learning environment is one where there is

a positive synergy between Assessment for Learning and summative assessment practices (Broadfoot & Black, 2004). This balance is not easy to achieve. Summative assessments, due to their very nature, tend to be predominant over Assessment for Learning (see Black, 1993; Harlen, 2005) so much, so that Wiliam (2000), in his keynote address to the European Association for Educational Assessment, acknowledges the difficulty in bringing the two practices together. At the other end of the spectrum, Harlen and James (1997) see no scope in keeping the two processes separate, calling this “wasteful and in any case impossible in practice” (p. 373; see also Black et al., 2003a; Boud, 1995a; Crooks, 2011; Looney, 2011). In this context, Wiliam and Black (1996) warn of the dangers which loom when a single assessment is set to serve both purposes, arguing that one will suffer over the other.

Comparison between Assessment for Learning and Summative Assessment

When comparing the type of information that can be elicited from the types of assessment, Cizek (2010) insists that the “coarse-grained information” (p. 15) which summative assessments yield add little value to the processes required to instil deep learning (Cizek, 2010). He shares Bloom’s (1971) view that summative assessment entails those tests which are conducted at specific, pre-determined times during the scholastic year with the primary purpose to evaluate the success of the instructional process and to categorise students according to the extent to which they have shown competency in a particular domain. In agreement, Sadler (2009b) categorises all assessments which in any way bear an effect on the final grades under the umbrella term

'summative'. Although Crooks (1988) advocates in favour of "moderate frequency of testing" (p. 449) due to its considerable positive impact on students, similar to Black et al. (2003a) and Crooks (2014), he insists that summative assessments should not be overbearing on the educational process - for teachers and students alike. The primary focus of any educational process should be that of instilling growth, development, the acquirement of knowledge and, more importantly, long-lasting learning. Any evaluation of this process should, by direct inference, support this process. This may not be achieved, at least to the extent one would desire, in cases of high-stakes examinations in which the students are more inclined to find ways of performing successfully on the test day rather than on learning itself. This is more evident in the case of older students who tend to focus more on performance than their younger peers (Assessment Reform Group [ARG], 2002). Shepard (2008) contends that the negative impact on long-lasting learning is even greater when such high-stakes examinations are set frequently. Moreover, one has to consider that the performance at a set time and date is dependent on many other factors which are not necessarily related to learning. The NRC (2001) includes the physical and psychological state of the student in a list of such factors.

Narrowing the scope of summative assessments and administering them regularly, does not necessarily increase their contribution to the formative component to learning (Cizek, 2010). In a dated, yet valid, reflection, Perrenoud (1998) argues that hurried classroom interactions, as well as regular testing do not contribute to increasing the prospects of individual

students' self-regulation. Conversely, Perrenoud (1998) insists that such practices allow for the revisiting of any observed learning gaps of the class as a group - "temporary microsummative evaluation, followed by remediation" (p. 91). The critical factor which differentiates between Assessment for Learning and Summative Assessments is not the frequency, type, or nature but rather the outcomes and eventual consequences of such assessments (Boud & Falchikov, 2007; Wiliam & Black, 1996).

2.2.1.4 Summary

The strong support from the public and educational sphere for testing and summative assessments is evident (Phelps, 2006; Polesel, Dulfer, & Turnbull, 2012). On the other hand, implementation of Assessment for Learning practices alone does not necessarily lead to the desired deep learning (Wiliam, 2010). Hattie (1999) insists that this is also the case of other initiatives aimed at creating the time and space for giving feedback. To mention just one example, he discusses the reduction of class sizes which "merely offers increased opportunities for more feedback and appropriately challenging goals to occur - it does not guarantee it occurs" (Hattie, 1999, p. 10). In this context, the next sections give an overview of the functions and desirable benefits of Assessment for Learning practices and discuss how these can be implemented to affect student learning.

2.2.2 A Case for Formative Assessment

2.2.2.1 Introduction

The **Aims** of education . . . seek to prepare all children to become lifelong learners, who are confident, successful, creative, connected and engaged in the community and the world around them and who are able to secure social justice. Their education should enable them to acquire the knowledge, skills, values and attitudes that make them capable of sustaining their life chances in the changing world of employment, and to become actively engaged citizens (Ministry for Education and Employment [MEE], 2012, p. 32-33). [Emphasis in original]

This strategic assertion by the Maltese Directorate for Quality and Standards in Education (DQSE) within the Ministry of Education and Employment is central to the genuine efforts to instil deep and long-lasting learning. Black and Wiliam (2010) contend that the most effective way of making students achieve more is by adopting Assessment for Learning practices within classrooms. In the 1970s Kulhavy (1977) exposed the positive effect this has on the academic progress of the student in his analysis of research on feedback. The “non-evaluative nature” (Cizek, 2010, p. 8) of feedback, backed by a solid “correctional” (Hattie & Timperley, 2007, p. 82) strategy, brings about not only a clear understanding of the learning journey itself but also the honing of skills and competences to address any obstacles to learning. This, in turn, builds the students’ internal capacity, motivating them to pursue deep learning to becoming independent learners and experts in the respective fields of study. These key stages form the basis of the discussion of the next section.

2.2.2.2 Clarification of the Learning Process

One of the key contentions of the cognitive theory is that new knowledge and understanding is constructed by making connections with existing knowledge. In my view, any attempt which actively supports the coupling between old and new knowledge is critical to the journey towards independence and expertise in the field of study. Students slowly develop expertise by being exposed to new knowledge, supported in fostering an appreciation of this new knowledge and guided on how this relates to prior knowledge (Yin et al., 2014). Well-crafted assessment, which Nicol and Macfarlane-Dick (2006) define as any intervention “that strengthen[s] the students’ capacity to self-regulate their own performance” (p. 205), serves the crucial purpose of giving students the opportunity to evaluate their own knowledge and addressing the hurdles they come across. Feedback should address the “nature of their mistakes” (NRC, 2001) to the extent that Kulhavy (1977) insists that assessment which addresses misconceptions is a highly effective learning tool. Sadler (1983) claims that a “connection is made when the student successfully constructs a positive instance” (p. 74). He clarifies this concept by using the analogy of colours - the concept of redness should not be explained by pointing out that red is not green but rather by focusing on the true nature of the colour red. Assessment for Learning not only helps students achieve the required standards but, more importantly, it also stimulates the engagement with these same standards (Sadler, 1989).

2.2.2.3 Motivation

I share Crooks' (1988) assertion that motivation is fundamental in striving towards achieving set goals because it enhances the level of engagement (See also Crooks, 2004). Learning is no exception; when students achieve success in their learning, however small this might be, they build the internal capacity to undertake the next step (ARG, 2002; see also Brookhart & DeVoge, 1999; Pollard, Triggs, Broadfoot, McNess, & Osborn, 2000). Ruth Butler (1988), in her investigation about the effect of assessment on motivation, concluded that when teachers provide feedback to students they are guiding them to improve the task at hand, resulting in a significant improvement in achievement. Contrary to the behaviourist approach which contends that change is merely a response to external stimuli (see Pritchard, 2014), Crooks (1988) argues in favour of intrinsic motivational factors which have a longer lasting effect on the efforts students make to address challenging tasks. By presenting tangible and pragmatic instructions on how to improve, the concept of 'being successful' is brought within the reach of students as an ideal that is indeed achievable. This supports practices which shift the focus away from high-stake examinations and towards more frequent, less critical, summative assessments which serve the purpose of evaluation and peer-comparison (Nicol & Macfarlane-Dick, 2006)⁵.

A major contribution teachers can make to their students is helping them maintain a consistent effort towards achievement. This commitment is strengthened when students believe that success is, after all, possible (Kluger

⁵ See also Section 2.2.4.3

& DeNisi, 1996) and within reach. Sadler (1989) emphasises the need to identify the “optimum gap” (p. 129) between the desired and current state of learning in an effort to sustain the appropriate level of motivation. In this context, Hattie and Timperley (2007) commend efforts which bring about positive learning experiences and which support students in their exploration of new and more challenging knowledge.

2.2.2.4 Addressing Obstacles to Learning

Black and Wiliam (2010) contend that a key factor that impinges on learning is the notion of intelligence, more specifically, how the teachers’ confidence in the ability of their students affects achievement. They present two predominant views on intelligence: the “fixed I.Q.” and the “untapped potential” (p. 87) view, arguing that the truth lies somewhere along the spectrum, but closer to the second. Teaching and learning is more effective when the potential to improve is recognised and any obstacles hindering this process are removed (Black & Wiliam, 2010). Hattie (1999) concurs with this view and believes that a key characteristic of effective programmes is that of identifying and removing any tasks that are not central to the learning progression (Wiliam, 2010) so that the learners can focus all their energies on grasping challenging tasks at hand. Assessment for Learning serves the purpose of supporting this (Black & Wiliam, 2010) in that, it helps to discover and address misunderstandings (Kahl, 2005) and difficulties (Wiliam, 2010) with the clear purpose of guiding students in working through their tasks correctly (NRC, 2001).

Closely related to addressing obstacles in learning is the extent to which teachers should intervene in this process. In other words, to what extent should teachers suggest solutions to students' difficulties, and if so, to which detail? Sadler (1989) maintains that assessment should serve the purpose of making learning more efficient by cutting down on learning by "trial-and-error" (p. 120). I do not share this position in its entirety because, in my view, the *process* of learning is as important as the *product* of learning (Bruner, 1966). A central principle in the constructivist and cognitive theories is that learners construct their own knowledge through interactions with previous knowledge and through social relations. "Short-circuiting" (Sadler, 1989, p. 120) this process might make it more efficient, but I have reservations on the extent to which one should hasten the process. Related to this, Shapira, Gundar-Goshen, Liberman, and Dar (2003) insist that excessive monitoring and interventions may be detrimental to the development of complex thought processes. In an interview Jerome S. Bruner (2013) gave during the Eastern Psychological Association Annual Meeting, he reflected on the concept that learning is a "possibility generator" and students generate their own knowledge through the construction of ideas; educational institutions should therefore strive towards creating an environment conducive to improvement through personal and collective creation of knowledge.

2.2.2.5 Deep Learning

The above discussion suggests that the emphasis of educational initiatives shifts away from rote learning and memorisation towards meaningful

learning which students can apply in real life situations (Sadler, 2010; Vosniadou, 2003). Bransford, Brown, and Cocking (2000) insist that deep learning is not necessarily the result of a better memory, but rather an ability to bring together seemingly unrelated pieces of information. “Metacognitive knowledge informs monitoring and control” (Serra and Metcalfe, 2009) - successful learners, apart from performing well in recall tests (Nelson, 1996), demonstrate evidence of their ability to utilise metacognitive skills by transferring the knowledge acquired to new settings. Dunstan (2007) shares the same view and stresses that when students pay attention to feedback given to them, learning improves significantly. On this note, Hattie and Timperley (2007) insist that when teachers focus their feedback on the actual steps students have taken, learning is deeper. As a result, students develop an internal capacity to face challenges in the learning journey (Shepard, 2008).

2.2.2.6 High Stakes Assessments

Although most educators would agree on the value of deep learning, due to the very nature and myriad of functions of schools, one would not be surprised to see that the recommendations supported by educational research are not always implemented in the classroom (Vanderlinde & van Braak, 2010). Bates (2002) contends that one of the main causes of this is that schools tend to focus on operational issues and tackle problems as they arise, thereby setting aside insufficient resources for further development. This, together with a “narrow preoccupation with grade attainment” (Butler, 1988, p. 12-13), puts

schools under pressure to maintain practices which *worked before* and get students to pass examinations (NRC, 2001).

Research strongly suggests that if schools' intention is to increase the attainment of students in summative assessments and high-stake examinations, Assessment for Learning is a very effective tool to adopt. Hattie (1999) goes to the extent of asserting that feedback is "the most powerful single moderator that enhances achievement" (p. 9). This assertion is sustained through the meta-analysis of 196 research studies through which Hattie and Timperley (2007) concluded that, on average, feedback is twice as effective as other interventions to bring about improvement in achievement levels. Further confirmation of this comes from Black and Wiliam (1998) who insist that achievement will increase through the implementation of "challenging assignments and extensive feedback" (p. 23). Later on, they quantified this improvement to between 0.4 and 0.7 effect size on test grades (Black & Wiliam, 2010), which equates to "between one-quarter and one half of a GCSE⁶ grade per student per subject" (Black et al., 2003a, p. 29).

These assertions provide evidence that Assessment for Learning not only improves learning but also raises the achievement in summative assessments - two fundamental responsibilities of schools towards their learners. The Maltese National Curriculum Framework⁷ stresses this contention by pushing for "a clear focus on improving the quality of education and raising the level

⁶ The General Certificate in Education (GCSE) is a qualification taken at the end of secondary education in England, Wales and Northern Ireland.

⁷ The "National Curriculum Framework" is the legal document that outlines the core components of the Maltese curriculum.

of student achievement” (MEE, 2012, p. 31) with a clear focus on helping children develop the skills of “working independently and collaboratively” (MEE, 2012, p. 22).

2.2.2.7 Becoming an Expert

Throughout the learner’s developmental process, the dependence on the teacher to construct knowledge and understanding needs to slowly decline until the learner reaches the stage of total independence (Beed, Hawkins and Roller, 1991; Jaramillo, 1996). This process is not necessarily predictable, and one might not achieve the same level of independence in all domains at the same time (Hockings, Thomas, Ottaway & Jones, 2018).

Sadler (1989) insists that a clear indication that advanced learning has been achieved is when the learner and teacher share the same proficiency and competences in the respective domain with a clear ability to adapt this knowledge in new, uncharted contexts. This goes far beyond the mere ability to memorise and recall “list[s] of disconnected facts” (Bransford et al., 2000, p. 9).

Lev Vygotsky’s ‘Social and Development Theory’ suggests that learning does not occur in isolation but rather through social and cultural interactions; the sharing of experiences between the learner and “adult . . . [or] more capable peers” (Vygotsky, 1978, p. 86) assists in this journey towards becoming an expert. Butler, Karpicke, and Roediger III (2008) believe that feedback can specifically serve the purpose of helping the learner identify mistakes and

providing support to surmount these challenges (see also Butterfield & Metcalfe, 2001, 2006). Assessment for Learning does not merely indicate which of the learner's responses are correct or wrong (Sadler, 1989), but rather give examples of ways in which an expert in the domain would tackle the task (NRC, 2001; Willis, 2011). Exposing learners to the standards they are expected to achieve can be an effective teaching strategy (Carless, 2007b). Moreover, as Black et al. (2011) contend, the teacher can encourage students to evaluate their understanding and adjust their learning towards the achievement of these standards. By doing so, students appreciate the "meaning and significance of the feedback" (Sadler, 1983), and consequently become active participants in their learning and competent in self-regulating their own learning activities (Hattie & Timperley, 2007).

2.2.3 Strategies for Assessment for Learning

2.2.3.1 Introduction

The formative nature of assessment does not depend on the type of assessment *per se*, but rather on the extent to which it addresses the purposes discussed above, thereby affecting learning (Kluger & DeNisi, 1996; Wiliam, 2010).

This section discusses a number of qualities and properties of feedback which adds to the formative value of assessment. By reflecting upon and incorporating such initiatives in the classroom, not necessarily in their entirety, one would lay the foundations of meaningful assessment. The focus

is on the outcomes of assessment, more specifically, on the information that this reveals on what students know (Kulhavy, 1977; Pryor & Crossouard, 2008), the gaps in their knowledge and how this information can guide them to bridge the gap. The expectation is that students react to the feedback provided to them. There is one caveat, however; the feedback has to be useful, in that it needs to be carried out during the course of teaching (Cizek, 2010; Shepard, 2008) to carry clear information on the specific shortcomings of the student with specific instructions on how to implement it. This, in itself, does not make assessment conducive to learning gains. Schools may have the misconception that merely grading or marking a piece of work during the year is formative due to the very fact that it is not set at the end of a module, term, or scholastic year. Moreover, as Shepard (2008) maintains, there is little significance in setting regular assessment tasks to identifying who the struggling students are, since teachers, through their regular interaction with the students, can reach such conclusions without the need to submit the student to regular, possibly disheartening, testing. On the other hand, textual feedback can be meaningless if it is not carefully written (Nicol & Macfarlane-Dick, 2006), explicit, direct and relevant to the learner's needs (Crooks, 1988) and which does not empower students to understand how their performance compares to the desired standard (Nicol & Macfarlane-Dick, 2006; Ramaprasad, 1983).

In this context, the practices presented below are concrete attempts to address the underlying principle of placing the learner at the "heart of the feedback process" (Hounsell, McCune, Hounsell, & Litjens, 2008), and were

selected because their positive impact on learning is well-documented in research (see also Gibbs & Simpson, 2004).

2.2.3.2 Feedforward

The term 'feedforward' was introduced in the field of cybernetics (Basso & Belardinelli, 2006) as "a process adjusting behaviour in a continuative way" (p. 73). As far back as 1972, Björkman adopted this term to the educational realm to denote the use of information, backed by evidence from students' work to inform the next step towards the desired state of learning "to reduce uncertainty about the task" (1972, p. 156). Moving away from the notion of merely passing judgement on the student's work (Nicol & Macfarlane-Dick, 2006), Wiliam (2010) poses the question "what next?" (p. 27), implying the need to view learning as a continuum where *new* learning is discovered, builds on and is the result of tweaking *previous* knowledge (Shepard, 2008).

In this context, Forster and Masters (2004) insist that guidance towards the next step can only be provided if there is a clear understanding of the process of learning in the particular domain (Alonzo, 2011; Heritage, Kim, Vendlinski, & Herman, 2009). Yin et al. (2014) differentiate between two types of learning progressions - the sequence students are "expected" (p. 535) to follow at the particular stage in their learning and the "actual" (p. 535) path students follow during their own personal learning experience. Black et al. (2011) emphasise the importance that teachers are well-versed and aware of the way students grasp the small steps towards expertise (see also James et al., 2006). Sadler (1983) advocates against tying down expert teachers to fixed road maps when

helping students reach their goals and supports the National Research Council's (NRC) suggestion that there can be "one or more typical progressions from novice levels toward competence and then expertise" (2001, p. 182).

The close alignment between Assessment for Learning and future learning, together with a clear understanding of how the information that is elicited from this interaction is communicated effectively, are critical to the student's success.

2.2.3.3 Information and Communication

For assessment to be "prospective, rather than [merely] retrospective" (William, 2010, p. 33), rich with information relevant to the learning process, it is reasonable to expect that unless there is a common understanding of what is being communicated, it will be very difficult for students to identify the issues they have problems with and the necessary steps to address them successfully (Black et al., 2003a). Hattie and Timperley (2007) insist that the exchange of "correct information" (p. 91) between the learner and the student is critical to learning. Failure to achieve this, may lead students to practise tasks without a clear understanding of either the appropriate direction towards competence or what the correct answer in the particular field looks like (Hattie, 1999). William (2010) extends this function of assessment and encourages the assessor to look beyond the mere fact of establishing whether learning has taken place or not. The usefulness of the assessment exercise depends on the fact that the information that is communicated should serve

the purpose of equipping all stakeholders who can affect students' learning with the tools to support learning (NRC, 2001).

An issue may arise when writing comments intended to be shared with students or partners who are not conversant with educational terminology. Moreover, the comprehension and interpretation of the written feedback depends on the field of study and also on the fact that students, especially in the early stages of their learning journeys, "are not insiders to the disciplines they study" (Chanock, 2000, p. 97). In making an effort to achieve clarity and in order to empower the learner to utilise feedback, Sadler (1983) not only suggests that there should be a common understanding of the desired knowledge but also insists that an agreement on the meaning of the terminology is reached (Sadler, 1989, 2013a). In this context, Nicol (2010) argues that students need to decode the message correctly. Moreover, Nicol and Macfarlane-Dick (2006) argue strongly against the use of feedback which is "complex and difficult to decipher" (p. 201) because this will prove to be difficult to engage with and therefore, bring about improvements (Nicol, 2007; Pachler et al., 2010).

Clarity is achieved when feedback addresses the particular and specific needs of the student (Gibbs & Simpson, 2004; Hattie & Timperley, 2007) with a clear focus on the necessary steps required to address these needs (Guskey, 2007). General comments on the overall standard of work carry little information on how students can regulate their learning. As a result, students may perceive

such assessment as irrelevant to their needs, with the consequence that not enough attention is given to it.

One tool which may facilitate communication between the teacher and the student is the 'rubric', particularly when it has a formative purpose. As discussed thoroughly in chapter four⁸, the rubric provides an opportunity to compare the student's progress against a set of success criteria, with the intention of informing the next step in learning. This term is often used interchangeably with the term 'marking scheme', which denotes a more summative intention. However, for the purpose of this research study, the term 'rubric' is used within a formative context, which is therefore more concerned with the clarification of the student's learning journey.

2.2.3.4 Timeliness

Black et al. (2003a) suggest that engagement with feedback and consequently, learning, occurs when the teacher's reaction to the student's task, whether oral or written, is immediate. Shute (2008) describes immediate interventions as those that are provided "right after" (p. 163) the student's responses, as against feedback which is given minutes (or more) after, which she described as "delayed" (p.163). The concept of immediacy of feedback is very evident in e-assessment and gaming where responses are made available almost immediately following the student's action. The instantaneous awareness of whether progress is being made, the acknowledgment that success has actually been achieved, and the immediate availability of the next challenge

⁸ Section 4.3.3

are critical factors in the engagement towards success (Cowie & Bell, 1999; Koedinger, Anderson, Hadley, and Mark, 1997; OECD, 2005; Shepard, 2008). This is especially beneficial if technology is integrated within the classroom practices (NRC, 2001) and careful design of the e-assessment is targeted to identify and “diagnose student misconceptions” (Whitelock, 2007, p. 8) within a particular domain. Skinner (1968) attributes the maintenance of students’ engagement to the immediate confirmation of correct responses, thus acting as a reinforcer of the appropriate learning patterns. It may not always be possible to integrate technology within teaching and assessment, but a real effort to alter the learning environment where students can receive feedback as quickly as possible is essential since, as Kulik and Kulik (1988) emphasise, when feedback within the classroom environment is delayed, it is “robbed of its effectiveness” (p. 79). Sadler (1989) draws attention to the fact that timeliness of assessment does not necessarily contribute towards the formative nature of assessment, insisting that this depends on the “purpose and effect” (p. 120) - two characteristics that differentiate between summative and Assessment for Learning.

On the other hand, this does not necessarily disprove the positive effect timeliness of feedback may have on learning - a concept that has been thoroughly backed by research (Carless, 2007b; Gibbs & Simpson, 2004; Guskey, 2007). Dihoff et al. (2004), who carried out an investigation on how learning was affected by feedback timing, strongly argued against a delay in the response to performance in assignments and tests. Their findings showed that immediate feedback resulted “in the greatest increases in retention,

confidence, and ability to identify initially incorrect and correct responses, and the greatest decreases in perseverative incorrect responding” (Dihoff, Brosvic, Epstein, and Cook, p. 229). In my view, this is evident in cases of end-of-year school examinations or formal national examinations in that, including textual feedback in high stakes examinations adds little value to the formative component of assessment. When the learning-task-feedback cycle is stretched extensively, it becomes difficult to use the information effectively - a central characteristic of Assessment for Learning (Shepard, 2008). Providing well timed, useful information creates the right environment for students to avoid practising tasks incorrectly (Hattie, 1999) and contributes to having an effective and efficient learning process (NRC, 2001). This is further confirmed in a later study by Corbett and Anderson (1991), which compared the learning times when feedback was delayed with when the feedback was immediate. The results indicate that, in general, learning time was reduced to a third when immediate responses were given to the students’ work (See Koedinger et al., 1997; Roll, Aleven, McLaren, Koedinger, 2011).

This is particularly significant when the responses are oral (Gibbs & Dunbar-Goddet, 2007), which Carless (2007b) contends are more conducive to learning improvement than textual feedback. The other side of the coin is that teachers tend to allow very short thinking time for students to process and react to the feedback. As early as 1974, Rowe pointed out that in the context of classroom questioning, the fact that the “mean time that teachers waited . . . was only 0.9 seconds” (Black et al., 2003a, p. 32) can be detrimental to learning. This time interval is too short for any processing to occur, especially

when this is seen in a context where the flow of information is continuous - typically from the teacher to the student. Black (2009) insists that teachers ought to delay their own interventions, not only to encourage students to formulate their own thinking but also to allow time for discussion between themselves.

In an interesting analysis of the effect of immediate feedback on learning, Shute (2008) claims that for simple, straightforward instructions, an immediate response is more effective. In contrast, when processing higher-order responses, more time needs to be allowed (Clariana, Wagner, & Roher Murphy, 2000). Hattie and Timperley (2007) insist that when the task requires a certain degree of processing, delayed feedback creates an environment which supports the development of higher-order thinking skills; conversely, when the tasks are easy, with no real need for deep processing, “delay is both unnecessary and undesirable” (p. 98).

When analysing the effect of timing of feedback on learning, another consideration one needs to make is what Kulhavy and Anderson (1972) concretised in the “interference-perseveration hypothesis” (p. 506), in which they argue in favour of delayed feedback to incorrect responses. They claimed that by delaying corrective feedback, the mistakes are forgotten and do not interfere with the acquisition of new, correct information. In this context, Lefevre and Cox (2017), together with Mullet, Butler, Verdin, von Borries, and Marsh (2014) maintain that although students and teachers prefer immediate feedback, “delaying feedback on the homework assignments enhanced the

long-term retention and transfer of learning on exams” (Mullet et al., 2014, p. 227). The main positive effect of delayed feedback is on the transfer of learning which, as Schroth (1995) claims, when the initial learning conditions are more challenging, happens more effectively.

In conclusion, the debate on the effect of feedback timing on learning appears to result in no definite conclusion. There are arguments supporting the school of thought that students can relate to immediate feedback to take corrective steps in their learning. Conversely, those who support delayed feedback argue that by doing so, the student’s attention is drawn to the processing of concepts, hypothesis formation and metacognitive processes. In my view, both stances have their value and can potentially have a positive impact on learning - depending on the outcomes one intends to achieve and the conditions within which learning is taking place. The teacher, through a clear understanding of the research on feedback timing, within the context of their classroom, educational needs of the student, and the subject domain, should be in the prime position to determine the appropriate timing of feedback.

2.2.3.5 Frequency of Feedback

A characteristic that is very closely related to the timing of feedback is the *number of times* that this is provided. This section discusses the extent to which teachers should intervene in the process when students are constructing their knowledge. In certain cases, it may be appropriate for the teacher to intervene by redirecting or confirming the student’s processes in coming to terms with a complex concept. On the other hand, there will be

instances when the teacher needs to step aside from centre stage and let the students struggle in their journey towards comprehension of the task at hand. Wiliam and Thompson (2007) propose a continuum of feedback cycles ranging from “long cycle” (p. 71), which refers to feedback given at regular, monthly or yearly intervals; to “short cycle” (p. 71), which they use to describe assessment interventions embedded during the instruction process. Ramaprasad (1983) advocates strongly against the two extremes of the spectrum: “too frequent or too infrequent feedback is dysfunctional” (p. 7), arguing that a balance needs to be carefully determined. This is consistent with Wiliam (2010), who maintained that interventions should be in line with the intentions and purposes of why the evidence is being collected in the first place. On a similar note, fragmenting the learning process into very small steps could discourage students from seeing the wider context of the subject domain, resulting in a push towards shallow learning and rote learning (NRC, 2001). One could also argue that this is the main problem with poorly designed multiple-choice questions, where the main focus is that of testing the recall of factual details without giving the learners the opportunity to express themselves at a deeper level.

On the other hand, Hattie (1999) claims that the number of times students receive feedback during the school day is very low. He strongly believes that feedback has a definite positive effect on learning and claims that teachers should provide numerous instances of feedback to address any misconceptions students may have and to inform future learning. The need to provide an adequate amount of feedback is supported by other contributors

(e.g. Black and Wiliam, 1998; Pachler et al., 2010; Wiliam, 2010) who share the belief that since learning is a gradual process, interventions to adjust (or confirm) the direction of learning cannot be sporadic and too far in between.

In the context of the discussion about the journey towards expertise presented earlier⁹, the frequency of feedback needs to be consistent with the stage the learner is in. The considerable dependence of the student on the teacher in the initial, vulnerable stages is understandable and one would expect that the teacher's intervention and support would be frequent and specific to the particular content. As the learners develop their expertise and skills of self-assessment, one would expect that the high dependence on the teacher's feedback is weaned off (Mathan & Koedinger, 2005). This in itself requires great skills on the part of the teachers and supports the concept behind this research project which encourages professional development of teachers in Assessment for Learning to bring about a positive impact on student learning.

2.2.3.6 Criteria

Introduction: A Common Understanding

Having an understanding of what constitutes knowledge and being an expert in a particular domain is central to achieving expertise. The teacher, acting as an assessor, breaks down the assignment into smaller manageable components and establishes the criteria of success in these tasks. This is a process that, apart from adding objectivity to the grading process, brings to

⁹ See section 2.2.2.7

light the standards one needs to achieve to become an expert (Maxwell, 2004; Sadler, 2009a, 2014). Sadler, (2010, 2013a) argues that the process of grading requires the teacher to have an implicit understanding of what constitutes good quality work. Making these implicit criteria “explicit” (Sadler, 2009a, p. 175) does not necessarily ensure that students become *aware* of the standards they are meant to achieve, but as Nicol and Macfarlane-Dick (2006) insist, they need to be helped to engage with the success criteria. Furthermore, Ramaprasad (1983), while stressing the practice that “reference levels” (p. 6) are made quantifiable and explicit, argues that “implicit and qualitative” (p. 6) criteria should also be given their due importance. In my view, especially during the early stages of learning when the student requires more direction and ‘hand holding’, it is necessary that the teacher’s criteria for success are shared with the student so as to develop a common understanding of these criteria. By failing to do so, the knowledge that teachers would have accumulated over years of practice, would push them to take things for granted, thereby making assumptions that what has become second nature for them, is so for students as well.

Reliability and Validity

The tacit knowledge and competences of teachers are moulded through their individual experiences which have a direct or indirect impact on the way they relate to the environment and society at large. Consequently, this has a direct bearing on the value they give to particular aspects of the student’s work. Although teachers share a common understanding of the general connotation

of expertise in a particular field, they may assign different components of success varying importance. Whereas one teacher may value presentation of a written task more, another teacher may value more structure and consistency. As a result, even when teachers re-assess the same piece of work, the feedback on the different components of the work may differ (Sadler, 1989, 2013a); hence the importance of “consensus moderation” (Sadler, 2013a, p. 7) between assessors to improve consistency in marking and grading.

To some extent this may be advantageous because it supports the notion that learning is multi-faceted and that students should adopt a wider perspective in achieving such knowledge. In this journey towards acquiring competence in a particular field, a clear direction towards achieving this is important; and this direction is made explicit by commonly understood and accepted standards and criteria which contribute to the validity of assessment by bringing together assessors to assess consistently (Sadler, 1983, 2013a).

Challenges of Criteria

Although the use of criteria contributes towards more consistency in the feedback given, in his key contribution ‘Indeterminacy in the use of preset criteria for assessment and grading’, Sadler (2009a, 2014) urges the cautious implementation of criteria when correcting students’ work. The complexity linked with the implementation of criteria can lead to an incorrect evaluation of students’ work, to the extent that he challenges the process of using criteria as a means of objective grading.

Identifying criteria to give feedback on the various sub-components of assignments and tasks can be very complex. Apart from the fact that some are very difficult to express in a language which can be understood by students (O'Donovan, Price, & Rust, 2004; Sadler, 1983, 2009a, 2014), criteria may lack a distinct and unique boundary (Sadler, 2010) making it difficult to differentiate between them (Sadler, 2009a), and therefore, selecting the appropriate one. Attempting to identify all the relevant criteria, together with the teacher's effort to choose the most appropriate ones, can lead to an endless list of criteria (Sadler, 2009a). To emphasise this, Sadler (1989) drew up a list of 50 different criteria relevant to the judgement of written composition and remarked that if one had to compare them with teachers' actual feedback, one would conclude that "even this list is not exhaustive" (Sadler, 1989, p. 130). Moreover, one would also expect that new criteria emerge during the assessment of work as the teacher engages more with the student's contributions (Sadler, 1983, 2014).

In an attempt to simplify the feedback process and make the use of criteria feasible, teachers tend to select particular ones over the other. Sadler (2009a) questions the legitimacy of preferring one aspect of the student's work over another. This assertion has to be seen in the context of the overall progress of the students in their learning journey. In my opinion, this would be problematic only if teachers stick to their preferences for all the work assigned throughout the whole scholastic year. I subscribe to selecting a number of different criteria from a wider pool, while choosing to focus on various aspects of the student's work. In this way, students would be able to

direct their attention to the individual components of the subject domain in their journey towards building competence.

Another challenge in the implementation of criteria as an Assessment for Learning strategy is that teachers tend to give varying weighting to the selected criteria (Sadler, 1983). The “weighting function” (Sadler, 1983, p. 67) in itself assumes that the criteria contribute to an overall judgement, usually quantitative in nature, of the student’s work. Sadler (2009a) is critical to this approach since, according to him, textual criteria and measurement are not congruent; assumptions are taken regularly, most of the times incorrectly, especially due to the fact that it is a difficult and skilful task to assign a qualitative value to quantitative feedback. Furthermore, in reaching a final judgement, teachers may adopt different principles to bring together the different criteria. Teachers may expect students to attain a minimum level in *all* aspects of the work while others may expect that students achieve the expected standard in at least *one* of the components. Others might consider it to be sufficient if poor performance in one aspect is compensated for by a better achievement in another one. Sadler refers to these methods of grading as “conjunctive”, “disjunctive” (Sadler, 2009a, p. 171) and “compensatory” (Sadler, 1983, p. 67) respectively.

The other side of the coin is that this creates a need for consistency (Harlen, 2005) - teachers having common clear goals, agreed policies and ways of implementing these criteria. This, in itself, is an excellent opportunity for teachers to come together to discuss tangible educational concepts for the

benefit of the students - the foundation of learning 'communities of practice' (Wenger, 2010, 1998). With the right leadership and direction, this challenge can be changed into an opportunity of professional growth, both on an individual basis, and also for the school community.

Summary

In the context where assessment should serve the purpose of bridging the gap in knowledge, one major pitfall is that criteria are used to analyse the performance in the individual aspects of the submitted work at the risk of ignoring "what *else* the learner can do" (Torrance, 2007, p. 292) [emphasis in original], being too analytical, with minimal contribution of learning component of assessment. Like all other assessment methods, the use of criteria should not just be an evaluative and "mechanical process of measurement" (Drummond, 2003, p. 13), but rather a tool which provides information to the learner and the teacher on the next step in the learning journey. The language used and the amount of detail given should not be such that the student is overwhelmed by the information given. In my view, though there is great value in being specific when giving feedback (Torrance, 2007) through "detailed criteria" (Harlen, 2005, p. 213), teachers' feedback does not necessarily have to be a complete, comprehensive and exhaustive analysis of the student's work (Handley and Williams, 2011). Students, especially novice ones, rather than being inundated with information, need enough feedback which they can engage with (O'Donovan et al., 2004; O'Donovan, Price, & Rust, 2001) and adopt in their work to raise their performance (Harlen, 2005).

2.2.3.7 Moving Away from the Self

Feedback and Autonomy

If educational institutions aspire for the learner to be the main focus of their instruction and assessment processes, then it is critical that decisions taken are congruent with this. The effectiveness of the outcomes of such processes is determined by the extent to which they bring about autonomy in learning. Kluger and DeNisi (1996) argue that the evidence to this is demonstrated when learners reach the level of competence where they can regulate the direction of their learning, claiming that Assessment for Learning with this intention can bring about remarkable achievement. Autonomy is evident when learners take ownership of their learning to the extent that they are competent enough to identify and address their own mistakes (Hattie et al., 2007).

The main characteristic of such feedback is one that shifts the focus away from the learner's ability and efforts towards the way the task at hand can be completed to the expected standards. In many learning environments, this entails challenging existing methods of teaching which, as Little (2007) asserts, view students as passive recipients of knowledge with minimal opportunities to contribute to their own learning direction. In agreement, Crooks (1988) contends that an environment conducive to learning "favours task goals over ego goals" (p. 465), with the underlying premise of providing opportunities which support competence and cooperation but at the same time drawing minimal comparisons between peers and disregarding the

intrinsic abilities of the learner (Butler, 1987, 1988, 1993, 2012; Northcote, Williams, Fitzsimmons, & Kilgour, 2014). Becoming autonomous in one's learning does not necessarily mean that one should be independent of the teacher and other learners. Having the ability and choice to determine what to learn and the method of learning does not exclude drawing on the support of others, possibly even to the extent of being dependent on them (Little, 2007). Nicholls (1984) argues that this builds motivation, contributes to improvement on past achievements, as well as increases proficiency. Hattie and Timperley (2007) point out that feedback about the task is more effective when it addresses misconceptions in knowledge rather than when there are gaps in knowledge; in such instances, they argue for the need of additional instruction. Moreover, Gardner and Wood (2009) note that students who do not find tasks particularly difficult are more inclined to make good use of task-centred feedback rather than struggling students who might not have the necessary capacity to process diverse solutions to a problem. Hattie and Timperley (2007) advocate in favour of adapting the feedback according to the needs of the students, suggesting a mix of strategies which depend on the learning context and the particular characteristics of the task.

Messick (1994) takes this a step further and proposes the third component on which assessment should focus - a "construct-centered" (p. 14) type of feedback which accentuates the process or strategies towards achieving mastery and competence. Mislevy, Steinberg, Breyer, Almond, and Johnson (2002) build on Messick's idea and suggest three models which they insist should be coordinated to achieve valid and reliable assessment. These are:

- the “student model” (p. 367), which addresses the proximity of the new knowledge to the existing knowledge,
- the “evidence model” (p. 367), which stresses the fact that learning should, in some way or another, be visible and evident, and
- the “task model” (p. 368), which attempts to identify the tasks required to reveal such evidence.

As discussed earlier, the cognitive processes the learner engages with are as important as the product of learning itself. For example, in the case of a composition of a musical piece or the design of software, the final product would carry evidence on the extent to which the student has grasped the key learning processes in the respective domain (NRC, 2001). Reliable feedback which evaluates the final product but at the same time acknowledges the difficulties which are encountered along the learning journey can bear a deeper and wider effect both on the task at hand and on other tasks which require similar skills and competences.

Hattie and Timperley (2007) extend the functions of feedback to determine the level of independence the learner has achieved and consequently, the motivation to learn. They refer to this as feedback about the “regulation, engagement, and confidence to become more committed to learn” (p. 101). Assessment that is aimed at supporting the student to grasp the processes is more like indicating the direction and providing hints on how to search for further information and explore new strategies (Hattie & Timperley, 2007).

Cooperation and Competition

Hattie and Timperley (2007) contend that schools tend to use assessment as an instigator to address specific and narrowly-scoped tasks, generally with ambiguous instructions on how to do so. Grades and marks, which do not carry much information on how to improve, lend themselves very easily for comparison, especially between peers, and tend to be utilised to exert control over both teachers and students (Barnes et al., 2015). In this context, the Assessment Reform Group (2002) insists that comparisons push the focus of the students' efforts towards getting better grades rather than deep learning. At the other end of the spectrum, Ellis and Reynolds (2013) argue in favour of normative grading which creates the opportunity for students to put their grade in the context of how it compares with the "student results as a whole" (p. 85). The central argument presented here is that comparison with peers is not necessarily unhealthy because it gives the students a better understanding of their progress in a wider context. I do not concur with this view for two main reasons. Firstly, the negative emotions felt by the students who are repeatedly at the bottom of the list are very demotivating and, apart from crushing their self-esteem, gives them little motivation to try to improve (Bernichon, Cook, & Brown, 2003). Secondly, although learning is affected by the environment and social interactions, it is still a personal experience, with each learner finding preferred ways of addressing the challenges ahead.

Although better grades may be interpreted as evidence of improvement and deep learning, this is not necessarily so (Hattie & Timperley, 2007). Students

might choose to cut corners and focus only on the task at hand, ignoring the connections this knowledge has with the bigger picture (Carless, 2011). This undue emphasis on pushing for better grades fosters an environment of competition between peers which, as Black et al. (2003) insist, discourages the sharing and co-creation of knowledge and ideas (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). Rather than being motivated to learn, students will seek merely to get better grades than the peers which, as Butler (1988) acknowledges, has a temporal effect on learning because when the stimulus (pressure to do better than peers) is removed, the motivation is negatively affected (Barnes et al., 2015). Black et al. (2003a) maintain that the lack of motivation to get better grades than the peers can also prevail both in students who regularly find learning easy and in those students who struggle to learn.

Feedback and Praise

Keeping a high level of motivation in learning is critical but, as Hattie and Timperley (2007) point out, care needs to be taken when using praise as a means to motivate students because this does not necessarily lead to improvement. In this context, Butler (1987, 2012) makes a clear distinction between praising the cognitive abilities of the learner and focusing praise at how the task is implemented. Hattie and Timperley (2007) endorse the latter, claiming that this has a much more positive impact on the student's learning since this encourages "self-efficacy" (p. 97) with a direct impact on further improvement. They however insist that though praise can contribute to a

positive public profile (Ashford, Blatt, & VandeWalle, 2003), it needs to convey information related to learning and progress (Zimmerman, 2011), with minimal extrinsic rewards (Deci, Koestner, & Ryan, 1999; Ryan & Deci, 2006), for it to have a positive impact on intrinsic motivation and deep learning.

2.2.3.8 Exemplars

Orsmond, Merry, and Reiling (2002) identified exemplars as powerful ways for students to understand clearly “concrete” (Sadler, 1989, p. 128) standards they are expected to achieve in a “practical and efficient” (p. 127) manner. Sadler (1987) defines exemplars as pieces of work which are “typical of designated levels of quality or competence” (p. 200) which, as Polanyi (1962, p. 106), in his dated yet relevant reflection notes, bring the student closer to the teacher’s expert knowledge:

if he perseveres intelligently, a rich panorama of significant details will be revealed to him He has entered a new world. He still sees only a fraction of what the experts can see, but the pictures are definitely making sense now and so do most of the comments made on them.

Handley and Williams (2011) note that apart from providing students with examples of good practices, relevant “criteria and feedback” (p. 97) ought to be included to inform present and future tasks. Sadler (1983) concurs with this concept and adds that, in order to maintain an environment conducive to expertise and competence, students should also be provided with exemplars of different standards. By doing so, students are urged to be active participants in their own learning, taking ownership of the process towards expertise which, as Harlen (2010a) claims, entails honing the ability to differentiate

between tasks of varying standards. Handley and Williams (2011) are critical of this approach and argue that students, especially novice ones, do not yet have the competence to critically evaluate an assignment of poor standard (Chanock, 2000) and therefore, are not able to decipher the teachers' intention behind the feedback. According to Orsmond et al. (2002) and Nicol and Macfarlane-Dick (2006), exemplars should serve the purpose of making students confident about the journey and destination of their learning journey and that they are moving "along the right lines" (Handley & Williams, 2011, p. 102).

A major pitfall in providing exemplars of good standard is that students may view them as "model answers" (Handley & Williams, 2011, p. 98) - templates to be reproduced both in structure and content. This is especially true in environments which are highly competitive and focus only on the excellent performance in high stakes examinations. Imitation may have its value for beginning and novice learners (for example, art students copying a painting to practise the techniques used by the expert artist) but as students progress towards expertise, they need to be instructed and supported to engage with feedback provided (Gibbs et al., 2004) to them, to their peers (Sadler, 1989) and past students (Handley & Williams, 2011), in the context of the assignment at hand (Orsmond et al., 2002). The development of higher order thinking skills necessitates the critical analysis of various samples of assignments, discussion of the assessment with the teacher (Handley, Price, & Millar, 2008) and the integration of good practices elicited from these good samples into the new tasks (Sadler, 1989).

2.2.3.9 Self- and Peer-Assessment¹⁰

Definitions and Meaning

The need to encourage learners to be less dependent on teachers can be further supported by providing opportunities to students to develop the skill to self-regulate (Schunk, 2003) through self- and peer-assessment of the work. The motivation to sustain learning, even through the challenging phases, comes from a clear understanding of and an active engagement with the goals of the learning journey (Absolum, Flockton, Hattie, Hipkins, & Reid, 2009). The development of a critical mind to evaluate their own work, that of their peers and exemplars provided by their teachers, instils a sense of ownership of their learning (Mason, Harris, & Graham, 2011; Topping, 2009) - both individually and in groups. Boud (1995b) defines self-assessment as “the involvement of students in identifying standards and/or criteria to apply to their work, and making judgements about the extent to which they have met these criteria and standards” (p. 12). In this regard, Andrade and Valtcheva (2009) share the same concept but, in their proposed definition, they introduce the provision that students should revisit their work following the analysis against “explicitly stated goals or criteria” (p. 13). When defining peer-assessment, Topping (2009) extends this notion to the context of collaboration between “equal-status learners” (p. 21), while the proliferation

¹⁰ Due to the similarities in their nature (Boud 1995b), self- and peer-assessment will be discussed together, even though there are certain skills which are specific to each (for example, peer assessment assumes that the learners develop the skills to give and receive feedback).

of technology has given rise to computer-assisted peer assessment (e.g. Bouzidi & Jaillet, 2009; Suen, 2014).

Autonomy in Learning

A key premise for self- and peer-assessment to be successful is that students are instructed on the skills required to identify the critical issues through an engagement with high standards relevant to their task (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006). Absolum et al. (2009) in fact insist that this opportunity should be provided to all young learners in an effort to “take responsibility of their own learning” (Black et al., 2003a, p. 18) and improve learning and achievement through self-regulatory processes (Zimmerman & Schunk, 2004). Although educational institutions may encounter difficulties in implementing peer-assessment (Adachi, Tai, & Dawson, 2018; Lewkowicz & Nunan, 1999), the successful implementation of self and peer-assessment is well backed by research (Andrade, Du, & Wang, 2008; Benson, 2007; Gibbs, 1999; McDonald & Boud, 2003; Ross, Hogaboam-Gray, & Rolheiser, 2002; Tsivitanidou, Zacharia, & Hovardas, 2011) supporting the notion that self- and peer-assessment, while not replacing teachers’ feedback (Black et al., 2003a), can contribute to its formative nature, bringing about positive learning gains to students as young as five years of age (Black & Wiliam, 2010) and students who face additional difficulties to learn (NRC, 2001).

Although Black et al. (2003a) insist that teacher intervention is critical to the success of self- and peer-assessment, Sadler (1989) notes that the main objective of educational institutions is to push learners towards being able to

maintain their learning independently, rather than having adults determining the direction and evaluation of learning (Absolum et al., 2009). Ramaprasad (1983) advocates in favour of the active involvement of the learner, whom he refers to as “the performer” (p. 11), in the analysis and judgement of students’ own work. Students can gradually develop a heightened awareness to the presence of errors in their own work and that of others (Carless, 2005; Hattie & Timperley, 2007) to the extent that their reactions to these errors will be similar to those provided by the teacher (Absolum et al., 2009). An interesting study carried out by Nicol and Macfarlane-Dick (2006) suggests self-assessment is more effective in identifying errors when this is carried out after the student receives feedback either from the peers or teachers. This is supported by Black et al. (2003a) who argue in support of the implementation of peer-assessment, especially if it precedes self-assessment. Furthermore, Bruce (2001) and Andrade et al. (2008) strongly support the practice through which students assess their own work prior to submitting the final version of their work: “If students find they have not met a particular standard, they write themselves a reminder to make improvements when they write their final drafts” (Andrade & Valtcheva, 2009, p. 14). In the early stages of learning, students need to hone the skills required to identify evidence of failure or success with the necessary support from peers and teachers to develop the skill of self-assessment (Absolum et al., 2009; Black & Wiliam, 2010). As students become more at ease with their learning, one would expect that they revisit their work through the drafting-revision-redrafting cycles before submitting the final version.

Resubmission of Work

The triangulation between self-, peer- and teacher-assessment provides an opportunity for increased “overall [assessment] reliability and validity” (Topping, 2009, p. 25). This, in turn, leads to a significant positive effect on the short and long-term (Andrade & Valtcheva, 2009) cognitive and meta-cognitive abilities (Carless, 2007b). The implementation of such practices, either through redrafting or resubmission of the work, depends on the context and learning environment, but as Andrade and Valtcheva (2009) and Absolum et al. (2009) insist, students need to see that the added work they incurred is justifiable and that it leads to real and genuine progress. Otherwise, it would be understandable for them to be reluctant to invest the extra time and energy required to revisit their work and integrate feedback to improve their work - especially if the first version involved a lot of effort on the part of the student (Sadler, 1983). If the work contributes to the student’s global year-assessment, this factor has to be taken into consideration when setting guidelines on which version should be considered as the final grade. I argue that, especially with intrinsically motivated students and if the task is meant to contribute to the final grade, it is the resubmitted work that should count because this adds motivation to take the resubmission process seriously (Andrade & Valtcheva, 2009). Crooks (1988, 2004), however, warns that that the positive effect of feedback on learning is reduced when students are cognisant of the fact that their work will eventually contribute to a final grade. If the nature of the assignment allows it (Nicol & Macfarlane-Dick, 2006), educational institutions should seek to provide students with opportunities to

engage with their work, identify and discuss the “action points” (Nicol & Macfarlane-Dick, 2006, p. 214) they intend to implement in an effort to submit the second version of their work (Boud, 2000).

2.2.3.10 Grades or Comments . . . or Both?

The central argument presented in the above sections point towards a type of assessment that is less judgemental and causes no “harm to the [learner’s] ego” (Carless, 2005, p. 47). While Topping (2009) notes that communication between the student and teacher can be interpreted as being overbearing and domineering, with the risk of a breakdown in effective communication, Butler (1988) argues that teachers’ judgment in the form of grades, can also be interpreted as the reinforcement of an authoritarian relationship between the teacher and the student.

In this regard, Black et al. (2003a) suggest that educational institutions explore ways in which teachers enhance the communication about the steps required to achieve learning gains. They argue that judgements in the form of grades do not carry useful information on how to improve, with the consequence that the assessment process does not contribute much to the student’s progress. Sadler (1983), concurs with this claim stating that although grades may have several functions, they “are action-neutral for the purposes of improvement” (p. 75).

As discussed earlier, the mere inclusion of comments does not necessarily instil interest in learning. Ryan and Deci (2006) advocate against a type of

feedback that is ego-centred and controlling. Kahn (2000) contends that these are characteristics which teachers may associate with traditional assessment methods. In agreement, Butler and Nisan (1986) claim that the nature of such emotions and feelings are the outcome of grades. They join Cauley and McMillan (2010) who argue in favour of assessment in the form of comments focused on the task rather than the self. There are clear indications (Butler, 1988) that comments, especially when these focus on the task, lead to an increased interest in learning compared to when students are provided with grades - and this is true for the different ranges of abilities.

Butler (1988) argues that the extensive emphasis on grades shift the focus of the learning process to try to attain results with the least effort possible at the expense of deep and “divergent learning” (p. 13; see also Boud & Molloy, 2013). Indeed, Shepard (2008) notes that an increase in a mark or grade does not necessarily mean that there is improvement in learning. Sadler (1989) concurs with this assertion and argues that providing quantitative feedback goes against the formative nature of assessment. In view of this, it is a common practice that teachers provide students with a comment as well as giving a grade or a mark. Within the local context, this was upheld as good practice in the context of high-stake examinations (MEE, 2015). This practice is firmly criticised by a number of researchers (Black et al., 2003a; Butler, 1988; Dunstan, 2007) with suggestions to give secondary importance to grading by postponing the publishing of grades only after the students have engaged with and acted upon the qualitative feedback (Gibbs & Simpson, 2001; Northcote et al., 2014; Taras, 2003).

2.2.3.11 Summary

The above discussion is not a comprehensive review of practices which contribute to the formative nature of assessment. Rather, it offers an analysis of key strategies which, when incorporated within the class environment, serve as a check for both the student and the teacher during the learning process itself, with the intention of collecting evidence of learning and informing the next step. These strategies should not be seen in isolation but rather within the classroom environment and wider education context, as well as taking into consideration the difficulties and pressures educators encounter. The awareness of the challenges and possible pitfalls, and awareness of timely and effective intervention strategies to address these difficulties will ensure that any attempt to implement them will be steered in the desired direction to yield the desired outcome.

2.2.4 Challenges in Implementing Assessment for Learning Practices

2.2.4.1 Introduction

As assessment practices address an ever-increasing set of complex outcomes (NRC, 2001), there is a real risk that educational institutions yield to the pressure of keeping their assessment practices detached from teaching and learning (Hattie & Timperley, 2007). Although, as discussed above, the positive implementation of Assessment for Learning is strongly backed up by research, Robinson, Myran, Strauss, and Reed (2014) join other researchers (Biggs, 2012; Furtak et al., 2008; Hattie & Timperley, 2007; Yin et al., 2008) in

voicing their concern that this research is being translated into practice at a very slow pace. Carless (2005) indicates that the complexity related to the running of schools, within a culture of continuous reforms, is a main contributor to this, while Cizek (2010) attributes this incongruence between research and practice to the problems related to the reorganisation of classroom practices. In this context, Elton and Johnston (2002) and Shepard (2000) insist that any transformation within the classroom should take into consideration both the teaching methods as well as the assessment practices.

2.2.4.2 Different Agendas

The need to push for implementing innovative ideas stem from different reasons - mainly due to the different agendas and exigencies of the various departments within the school. Due to the very nature of their work and everyday schedule, school administrators tend to give more value to the overall performance of the school in high stakes national and international examinations while teachers, due to their daily interaction with the students, value the performance of daily assessments as indicators of academic progress (Guskey, 2012). In their quest to score better, especially when they are compared with other schools, leaders opt for aggressive strategies to achieve the required “visible [results] . . . that can be reported to the press” (Linn, 2000, p. 4) in the shortest time possible (Avalos, 2011). This intense stress level could in turn be passed on to students and parents as a desperate attempt to increase achievement and obtain higher grades (Putwain, 2009; Stiggins, 1999). The tension between these two factions may coerce schools

to utilise an episode of assessment to address more than one function - a proposal which Boud (2000) and the NRC (2001) express their concern about:

Every act of assessment we devise or have a role in implementing has more than one purpose. If we do not pay attention to these multiple purposes, we are in danger of inadvertently sabotaging one or more of them. (Boud, 2000, p.160)

the more purposes one attempts to serve with a single assessment, the less well that assessment can serve any given purpose. (NRC, 2001, p. 223)

2.2.4.3 High Stakes Decisions

High stakes examinations are still the main determinants of students' access to further education and employment opportunities (Biggs, 2012; Black & Wiliam, 2005; Havnes & McDowell, 2008; Stobart & Eggen, 2012). While Elmore (2004a) suggests that there are various instances where "the fundamental message that content and performance standards should influence classroom practice has reached teachers in elementary and high schools" (p. 275; see also Guskey, 2007), a number of scholars present counter-arguments against directing teaching and instruction principally to be successful in high-stake examinations. Carless (2007b) and Linn (2000) suggest that one should not assume that a better grade or mark in high-stake examinations is a clear indicator of an efficient learning process, with the ARG (2002) insisting that the focus of classroom instruction can be shifted towards *passing the test* at the expense of effective higher order learning.

This "strong tension" (Harris & Brown, 2009, p. 365) puts schools and teachers under extreme pressure to adjust their teaching and assessment

methods (James & McCormick, 2009) drawing the focus away from the correct implementation of Assessment for Learning practices (Black et al., 2003a). Wiliam, Lee, Harrison, and Black (2004), in fact, insist that there is a great deal of incongruence between the rigorous preparation for high-stake examinations and the development of Assessment for Learning practices, at the detriment of the implementation of the latter. This was the main factor to prompt Black et al. (2003a) to eventually avoid the “pressure years” (p. 19) in their renowned study on professional developing programme on the implementation of Assessment for Learning.

This does not go to say that when a school embarks on a project to implement Assessment for Learning practices, it is jeopardising the students’ achievement in summative examination - Black et al. (2003) insist otherwise:

far from putting at risk the test performances of their students and of their schools, they [Assessment for Learning methods] can improve these performances by better teaching. (p. 26)

Wiliam et al. (2004) support this position and maintain that evidence of deeper learning can be observed even through the analysis of students’ performance in high-stake examinations.

In conclusion, it is reasonable to argue that although the drilling techniques adopted by students in preparation for high-stake examinations rarely involves deep learning, research strongly points to the opposite being true – that deep learning that is frequently attributed to good feedback practices will result in a better performance in high-stake examinations. This will

particularly reassure teachers who are caught between a genuine desire that students engage with the learning process and the legitimate pressure to see them perform well in school and national examinations.

2.2.4.4 The Micro-environment

Introduction: School Culture, Leadership and Policy

Leung (2004) makes an interesting argument in favour of moving away from isolated attempts to implement innovations and stresses the importance of the implementation of infrastructural changes which include “teacher knowledge, assessment frameworks, policy positions, histories of pedagogic and assessment practices, and wider social and educational values.” (p. 26). The micro and macro context within which new ideas are introduced is critical to the success, or otherwise, of their implementation (Gardner, 2010b). This is true for all educational reforms but more so for assessment practices which, as Rowntree (1987) asserts, are at the heart of all educational functions of a school. A great deal of information about the school can be elicited by looking at the policies and practices as well as the core values which the school upholds (Taylor, 2014). The synergy that is created when teachers share a common understanding and conviction on the best assessment practices can have a cascading, positive effect on students’ motivation to do better (ARG, 2002) and encourage students to become engaged in positive learning experiences (Shepard 2008). The role of the school leader is critical to engraining such an authentic and true culture (Hargreaves & Fink, 2005) which goes beyond the mere introduction of new ideas and resources in

schools (Hattie, 1999). Black et al. (2003) identified this as one of the main difficulties their participating teachers faced when implementing new feedback strategies within their classroom. There needs to be congruence between the strategic direction of the school, the agreed policies and the resources available to implement these policies.

Teachers, even the most willing and motivated ones, can be dispirited if faced with repetitive instances of unsuccessful attempts to introduce new ideas to implement Assessment for Learning (Carless 2005). When seen in the context of human nature being somewhat resistant to change (Fullan, 2007; Starr, 2011), together with an attachment to preconceived ideas on how evaluation should be carried out effectively (Black, 2001), and parental pressure to retain a *status quo* (Carless, 2005), it is understandable that new ideas are met with a certain degree of scepticism. To counteract these challenging circumstances, committing resources to implementation (Cizek, 2010) and identifying ways in which these can be efficiently realised (Case, 2007) is critical. These range from physical resources (including technological support (NRC, 2001)), expert support, and setting aside time for professional development, implementation, and reflective discussions.

Time Constraints

As will be discussed in greater detail further on, the engagement of teachers in any innovative approach is central to its success. Unless all efforts are focused on identifying and supporting interventions that are effective in bringing about change at classroom level, such initiatives are doomed to fail

(Hattie, 1999). In the context of the busy classroom environment, teachers can be caught in a rut with little motivation to bring new ideas to the classroom. Bell and Cowie (2001) admit that, in spite of the positive effect that Assessment for Learning may have on the learning process, this brings about added demands on the teacher with the risk of being discarded as “being somewhat impractical, too time-consuming and hence incompatible with the demands of schooling” (Carless, 2007b). I suggest that any effort to optimise Assessment for Learning practices should not be seen as an added burden to the already hectic environment but rather as an alternative, more effective opportunity to bring about a positive impact on students’ learning. Such plans need to be realistic (Shepard 2008) and take into consideration both the classroom pressures and the teachers’ convictions and skills (Robinson et al., 2014). Morris, Lo, Chik, and Chan (2000) warn against complacency and note that failure to align these two factors would lead to a very negative outlook on reform, limiting its impact on learning.

This is further aggravated by the fact that, as Ellis and Reynolds (2013) note, teachers are frustrated when the time and energy they invest in correcting work is not transformed to an enhancement of students’ future work. Dunstan (2007) emphasises this by pointing out that students tend to be more interested in the final grade of their assignment rather than learning from the feedback provided to them to the pitiful extent that “tutors become used to repeating important advice” (p. 63) without expecting any positive outcome.

Lack of Engagement with Feedback

In an attempt to identify the reasons behind such lack of engagement with teachers' feedback, research strongly points towards the failure on the part of students to master the connection between feedback on past work and its function to inform future work (Black & Wiliam, 2009, 2012; Black et al., 2003a; Davis & Neitzel, 2011; Dunstan, 2007; Higgins, Hartley, & Skelton, 2001; Sadler, 1983, 1989; Wiliam, 2010). In line with the above discussion on the strategies to implement Assessment for Learning practices, efforts should be directed at helping students appreciate that the action on the feedback received is a critical step in the cyclical nature of the learning process. Through resubmitting their work, students will be expected to evaluate the feedback and act accordingly.

Complexities of Implementing Assessment

The earlier discussion on the use of criteria as an assessment tool¹¹ has already revealed the difficulties assessors encounter when trying to break down a piece of work into its various components and giving feedback on each of these parts. The act of comprehending and formulating the expected standard of work and communicating it effectively with the student (Biggs, 2012, 1996) is in itself challenging (Sadler, 1989) and requires well-honed skills through professional development.

Moreover, learning and assessment are context-bound (Biggs, 2012) and are influenced by emotional, psychological biases (Cizek, 2010) to the extent that

¹¹ Section 2.2.3.6

the introduction of Assessment for Learning practices may be the most challenging component of educational reforms (Bennett, 2011). The implementation of high-quality formative practices is also affected by the teachers' and students' "prior assessment experiences, epistemological beliefs about the nature of learning, perspectives on motivation and cognitive learning, and the role played by effort and ability" (Robinson et al., 2014, p. 145). Yin, Olson, Olson, Solvin, and Brandon (2015) add another perspective to this list – teachers' engagement with the curriculum and evaluation practices to the extent that, as Biggs (2012) contends, they would be able to describe and explain the various degrees of competence relevant to their subject areas.

When assessments are carried out on a regular basis, further complexities arise when due to "fatigue, boredom, carelessness or capriciousness" (Sadler, 2009a, p. 174), the reliability and validity of evaluations is threatened, diminishing the value of such feedback and the consequent implementation in future assignments. The difficulty in providing an authentic and reliable evaluation, is one of the main contentions of practitioners who prefer summative over formative feedback. In this context, Shepard (2008) acknowledges the ease by which schools fall into the trap of preferring to adopt end-of-term and end-of-year assessments over classroom-based ones.

Summary

In view of the difficulties which teachers and educational institutions may face to implement Assessment for Learning practices, the NRC (2001) maintains

that one should attempt to strike a balance between achieving the ideal standards in assessment and acknowledging the contextual limitations and work towards the *best possible practices*. In my view, learning how to give feedback effectively, like all other types of learning, is a journey - it is always 'work in progress' – setting the general direction and fine tuning the workings along the way. As will be discussed in the following sections, professional development is most successful when there is full engagement of teachers through the implementation of newly acquired knowledge in the classroom context. A clear understanding of the challenges involved in this process is critical but should not be a limiting factor in the implementation of innovative initiatives.

2.2.4.5 The Macro-environment

As much as what happens at grassroots level is affected by the school-wide context practices and policies, schools themselves may be operating in an environment that is not necessarily congruent to efforts to implement authentic Assessment for Learning practices. The extreme pressure to rank even higher in national and international assessments has the inevitable psychological pressure to maintain a positive public profile, to the extent that it suppresses any efforts to introduce effective innovations (Robinson et al., 2014; Shepard 2008). Therefore, as a reaction to the high-stake external testing, schools are coerced to adopt set curricula and fixed content (NRC, 2001) that, more often than not, are detached from the context of learning (Shepard 2008). This pressure seeps down to the classroom and

consequently, teachers feel they have to abide by the school's general direction to avoid being named and shamed should their students not reach the expected level (Cizek, 2010; Harris & Brown, 2009). Black and Wiliam (2004a) aptly describe the internal tension when the classroom exigencies need to be at the mercy to the external pressures and requirements: "teachers seemed to be trapped between their new commitment to formative assessment and the different, often contradictory, demands of the external test system" (p. 45). In this context, Linn (2000) challenges the claim that a good performance in high stakes, external examinations is attributed to the increased learning. Looney (2009) in fact insists that concerted efforts to increase the performance in external examinations draws the focus away from practices which are aimed at teaching for understanding, higher-order manipulation of knowledge, and innovation. The validity of drawing conclusions about the standards of a school based on external examinations is questionable (Kane, Staiger, Grissmer, & Ladd, 2002). Gorard (2010) supports this argument and insists that the mere tweaking of the way results are reported and interpreted can actually have a direct effect on the ranking tables.

Within the local educational context, the DQSE within the Maltese Ministry of Education and Employment (MEE), through the National Curriculum Framework (2012) is laying down the strategy to bring about closer synergy between the SEC¹² examinations and the learning process, insisting that these national-level examinations and assessments are to be "based on a pedagogy

¹² SEC is a national examination, set and administered by the University of Malta and is comparable to the GCSE standard in England.

that is student-centred [and] inquiry-based” (MEE, 2012, p. 12). Any sort of reform which is intended to bring about changes at grassroots level should acknowledge these tensions and adopt a systematic approach of implementation (Carless, 2005). Cizek (2010) points out that the true, somewhat intimate, nature of formative feedback is not compatible with the aims of high-stake examinations and warns against subduing its effectiveness. Boud and Falchikov (2006) also share this concern and advocate in favour of “high level of authenticity” (p. 409) through which educational institutions try to harmonize learning and assessment. The argument they put forward is that Assessment for Learning cannot be disconnected from the contextual nature of learning: “it is the desires of learners, the initiatives they take and the context in which learning takes place that are powerful influences.” (Boud & Falchikov, 2006, p. 402).

2.2.5 Summary

The above discussion identifies and analyses the positive impact Assessment for Learning can have on the learning process. Black et al. (2003a) relied on such strong research backing when implementing programmes of professional development for teachers and contended that there was no need to prove that Assessment for Learning “could produce substantial improvements in the learning of students” (p. 18). Wiliam (2010) insists that, in order to achieve this research-supported improvement on a wider scale, a support system that allows for the development of teachers should be given absolute priority. Any reform or change process requires the engagement of

all stakeholders, not only at an individual level, but also at an organisational level towards an understanding of both the knowledge about Assessment for Learning (Absolum et al., 2009; Heritage, 2007) and on methods which can be transformed into good practice (Brookhart, 2011; Erickson, 2007), built on a clear understanding of curricular issues relevant to the subject area (Yin et al., 2015). The next section discusses the factors which affect the implementation through sustained professional development (Shepard 2008) and explores the extent to which classroom assessment practices lead to improvement in student learning and achievement.

2.3 Professional Development of Teachers

This study set out to explore the challenges, understandings and attitudes which teachers negotiate when implementing Assessment for Learning practices, and how participation in a professional development programme can address such issues. Therefore, in view of the focus which this research study sets on the professional development of teachers, the following sections present a discussion on factors which are central to the nature and implementation of such programmes, particularly within the context of Assessment for Learning practices.

2.3.1 Introduction - The Meaning of Professional Development

Research strongly supports the position that the quality of teachers is one of the main determinants of student achievement (Darling-Hammond, 2000; Hanushek & Rivkin, 2006). As early as, 1982, Bolam envisaged a link between

professional development of teachers and the upskilling of their “knowledge, skills and attitudes” (Bolam, 2000, p. 272) in order to be able to enhance the students’ educational process. King (2014) also shares the same viewpoint that while professional development has a direct effect on the quality of teachers, its ultimate objective is to bring about a change in classroom practices and therefore, in students’ learning. For this to be achieved, as an integral component of a professional development programme, teachers reflect on their practices “systematically” (Glatthorn, Boschee, & Whitehead, 2009, p. 289) so that, as Villegas-Reimers (2003) contends, teachers gradually develop their practice from ‘knowing what and how’ towards competence in “knowing why . . . and when” (Villegas-Reimers, 2003, p. 8). This entails a shift from excessive emphasis on students’ marks and grades towards a focus on the learning journey. The correlation between professional development and learning, according to Blank (2013) is significant and through a well-planned, varied professional development programme, extending over a long period of time, could eventually bring about improved “student achievement” (2013, p. 53) in the respective subject area.

The idea that professional development programmes move away from the one-shot concept is strongly supported by a number of researchers who propose a common set of criteria which ensure a long-lasting positive contribution to the student’s learning experience. Amongst others, these include well-thought-out programmes which are proximal, related, and relevant to the respective classroom context. Such experiences also engage teachers as active and professional participants in a collaborative journey

towards expertise, focused on the content being taught, and which strike a balance between intensity and duration (for example Blank, 2013; Dadds, 2014; Garet et al., 2001; Yoon, Dunstan, Lee, & Shapley, 2008). Consistent with this, Villegas-Reimers (2003) views professional development as a process which accompanies educators throughout the whole duration of their professional work, starting from pre-service training, through the different stages of their career until retirement. To stress the intimate relationship between teachers' practice and development, Clarke and Hollingsworth (2002) make reference to the term "growth" (p. 958), which builds on the notion that encapsulates the meaning of the characteristics listed above, while at the same time gives the sense of change which is the result of deep and inner changes in teachers' competences.

Avalos (2011) admits that this is an arduous journey which requires sensitivity to the respective teachers' and other stakeholders' levels of engagement as well as the contexts within which assessment, teaching, and learning are taking place. This, together with other factors affecting the implementation of professional development programmes in schools, the impact on teachers' practices and consequently, on the student's learning and achievements, will be discussed in further detail in the next sections.

2.3.2 A Case for Professional Development

2.3.2.1 Introduction

At this early stage of the discussion, it is pertinent to consider the significance of adopting the term 'professional development' rather than 'professional learning' in this thesis. I share the justifications proposed by Gardner, Harlen, Hayward and Stobart (2011) and Harlen (2010b) for the preference of the term 'professional learning' over 'professional development'. According to them, the term highlights the importance of active engagement and deeper involvement on behalf of the participating teachers. Moreover, Harlen (2010b) stresses that the principles which support authentic student learning should also be applied to teachers as they engage with their own learning journeys (see also Easton, 2008). As will be discussed further on, as much as possible, the programme and suggested Assessment for Learning strategies are not meant to be presented as yet another novel idea but rather as an opportunity for reflection on practice. In view of this, and since within the Maltese educational context the term 'professional development' is more commonly used, for the purpose of this study, this term was adopted to sustain and support this intention.

The past few decades have seen an ongoing emphasis on the effectiveness of professional development of teachers within the context of school reforms and ultimately on student learning. Darling-Hammond (2000), in an analysis of how teacher quality, in terms of preparation and certification, relates to student achievement, identifies a strong correlation between the two. She

argues that this correlation is in fact to be more of a determining factor than other variables such as budgetary issues, salaries, and the number of students in class. It is pertinent to consider that Desimone, Smith, and Frisvold (2007) note that formal certification has “weak links with teaching practice and student achievement” (p. 112) but there is a significant correlation between high-quality professional development and learning. Furthermore, if such formal certification is closely related to the subject area which the teacher is currently teaching, then, as Darling-Hammond (2000) claims, this correlation is stronger. In the context of this research study, as will be discussed in more detail later, this has a direct implication on the design of the professional development programme and the selection of the participating teachers.

Fullan (2011) views the continuous learning and development of teachers as a link between the school’s strategic plans for improvement and the actual improvements that occur at the grassroots. Robinson et al. (2014) acknowledge this intimate relationship and, in a context of bringing about improvements in the classroom assessment practices, suggests a series of factors which are critical to sustaining this link, including the need to transform research-based knowledge into best practice. By being active participants of their own learning (Garet, Porter, Desimone, Birman, & Yoon, 2001), teachers can come to appreciate “the cognitive and motivational theories underlying formative assessment” (Shepard, 2008, p. 284), which as Black and Wiliam (1998) argue, serves to give research a context and therefore, makes it more constructive.

Although professional development programmes within schools can take different forms (Guskey, 2002b), to be truly effective and “sustained over several years” (Supovitz, Mayer, & Kahle, 2000, p. 331), these cannot be merely *ad hoc*, isolated attempts. This is supported by Black et al. (2003a) who insist on a well-defined and thought-out plan involving the setting of a road-map based on the identified needs of the school, providing support along the learning journey, and carrying out regular evaluation within a set timeframe and communication strategy (Black et al., 2011). Fullan (2011), while sharing the same view of professional development being a journey of learning, stresses that school leadership should play a critical and active role to motivate teachers along the journey. In agreement, Kati Haycock, during her interview with Sparks (2000), insists that implementing a supportive environment can bring about real and evident enrichment in instruction, learning and achievement. Black and Wiliam (2010), reflecting on their professional development project on Assessment for Learning, admit that failing to plan for and provide sustained support to teachers was a major pitfall.

Research strongly supports the triangulation between teacher professional development, improvement in teacher efficacy, and student learning (see Villegas-Reimers, 2003). Although Garet et al. (2008) challenge this cause-effect approach, other researchers put forward arguments which contest these contentions. For example, Yoon et al. (2008) see that improved instruction as a direct consequence of improved “knowledge, skills, and motivation” (p. 3) will bring about better attainments. Black et al. (2011) take

this a step further and sustain progress can *only* be brought about by investing profoundly (King, 2014) in teacher training in an effort to create “formal . . . [and] informal learning communities among teachers” (Desimone, 2009, p. 182). This does not only apply to novice teachers. Experienced teachers can also challenge their prior conceptions on assessment and especially on how this contributes to the way students learn and experience a cognitive shift towards new understandings (Darling-Hammond, 2000).

2.3.2.2 Deep-seated Transformation

Introduction

Cranton and King (2003) insist that, to be truly transformative, professional development should urge educators to reflect critically and examine their habitual methods, as well as the purposes behind such practices, in an effort to explore new perspectives. True teacher transformation, as Taylor (2007) notes, is congruent with the concept of autonomy and a holistic development of the educator. Sterling (2003) contends that such a transformation helps the educator, both individually and collectively, to develop the capacity to bring new ideas into fruition. Earlier, Sterling (2001), in the context of fostering a sustainable environment, strongly argued in favour of bringing the ownership of learning closer to the learners themselves:

If we want people to have the capacity and will to contribute to civil society, then they have to feel ownership of their learning - it has to be meaningful, engaging and participative, rather than functional, passive and prescriptive. (2001, p. 26-27)

Sterling (2001) describes a three-staged process which learners experience as they negotiate new knowledge, skills and competences. The author contends that the highest level of learning, which he terms as “transformation” (Sterling, 2001, p. 78) is the result of the development through a series of lower-order learning that is, *accommodation and reformation*. Learners achieve this third-order level of learning only when, through a critical reflective process, they build the capacity to move away from simply adjusting the new knowledge to their new uncertain circumstances. In this context, Laiken (2002) insists that professional development, supported by professional conversations between adults, does not only address work-related challenges but could bring about transformation both on a personal and organisational level. This argument finds support in literature which highlights the intimate correlation between the engagement in reflective analysis of workplace practices and emancipatory transformative learning (Laiken, 2006; Taylor, 2007). In such circumstances, the learners are encouraged to challenge the pre-established, possibly widely accepted, views on education which merely view it as the acquisition of new knowledge or addressing the immediate needs of the learners (Cranton, 2006).

The next section gives a brief overview of the different theoretical developments, with special emphasis on Mezirow’s contributions, whose work on adult education has given rise to new ways of viewing it within a context of experiential learning.

Transformative Learning

One of the most significant contributions to adult transformative learning was made by Jack Mezirow who focused on the challenges and changes which women in the early 1970s returning to formal education experienced following an extensive break. His studies and writings influenced future research on *andragogy* (Knowles, Holton, & Swanson, 2015) to the extent that they are referred to in almost all texts published on adult learning.

Mezirow, in his renowned text 'Transformative Dimensions of Adult Learning' (1991), acknowledges that the development of his theory was distinctly influenced by a number of key scholars, namely Habermas, Freire and Kuhn. Kuhn (1996) described his concept of a *paradigm* as a major, significant and common understanding which, within a particular period, affects the assumptions and perspectives of practitioners. This notion was embedded in Mezirow's theory within the context of a *frame of reference* which he identifies as "articulated, theory-based, collectively held meaning perspective" (Mezirow, 1991, p. 46).

The influence of Freire's (1970) critical outlook on the traditional mode of teaching is evident in Mezirow's disorienting dilemmas and the subsequent critical reflective phases leading to the perspective transformation phase. These phases form part of a series of ten phases in the process of transformative learning identified by Mezirow¹³. A central concept of transformative learning is a deep, authentic shift in one's outlook and the

¹³ See Appendix D

capacity to alter one's actions based on these new perspectives. Mezirow (2006) insists that transformed learners should be in a position to defend their actions through rational arguments based on their own convictions rather than merely reproducing other people's contentions. This necessitates a reflective predisposition on behalf of the learners to be conscious of their previous and current frames of mind and take actions accordingly (Boehnert, 2012). This supports Mezirow's perspective on the process of transformative learning being one which involves the learner "becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation" (Mezirow, 2000, p. 4). Processes which require such profound challenges to the learners' "thinking, beliefs, attitudes and actions" (Mezirow, 2009, p. 18) can be difficult and arduous journeys beyond their comfort zone (Laiken, 2006). Patricia Cranton acknowledges such difficulty by describing transformative learning as "probably the most complex and difficult experience from the learner's point of view, and the most challenging for the educator" (Cranton, 1994, p. 21).

Through this transformative process, the learner is urged to avoid trying to mould traditional concepts into new educational practices, a process which Sterling (2001) labels as *accommodation* or merely a logical development of ideas (Hernandez, 2015). In fact, literature strongly affirms that true transformation can only be achieved by critically reflecting on the limitations of one's current assumptions (Hernandez, 2015; Kitchenham, 2008; Taylor, 2007; Wood, 2007) and taking ownership of the learning process (Gardner et al., 2011; Kegan, 2000) and consequently, gaining "greater control over our

lives as socially responsible, clear-thinking decision makers” (Mezirow, 2000, p. 8).

One key difference between young and mature learners is the experiences adults acquire, both with respect to the content and to the process of learning (Kegan, 2000). Mezirow (2000) insists that, through critical reflection on their personal past experiences rather than on others’, learners construct their own beliefs, values and convictions. Through a gradual, weaning process (Grow, 1991), adult learners will develop the capacity to challenge their personal assumptions (Wood, 2007), developed through their years of experience, in an effort to formulate new perspectives and adopt relevant practices (Boehnert, 2012; Mezirow, 2000). In this regard, Boehnert (2012) argues strongly against superficial discussions about failing systems, which, as discussed earlier, Sterling (2001) notes, lead only to lower-level learning.

Literature draws our attention to the pitfalls of adopting critical reflective practices as a means to achieve transformative learning. In his review of literature on transformative learning theory spanning over six years, Edward Taylor (2007) urged that researchers should more rigorous when claiming that critical reflection among their participants is particularly insightful. Similarly, while concurring with Taylor’s view on the significance of critical reflection on transformative learning, Hernandez (2015) observes that a correlation can be attributed only when they lead to tangible and significant changes in mindset.

Transformation and Belief Systems

The way learners give meaning to new knowledge depends on the extent to which this challenges their pre-conceived frameworks, both individually and collectively developed. On a simple level, one could visualise the process of learning as one of comparing and channelling new experiences through existing “belief systems” (Wood, 2007, p. 10). Perspectives which fall within learners’ “frames of references” (Mezirow, 2006, p. 26) strengthen the relevance of previously acquired knowledge. On the other hand, when this categorisation of meaning fails, or as Mezirow pertinently refers to it as encountering “problematic frames of reference” (2006, p. 26), the learner either develops new dependable “habit of mind . . . [or] points of view” (Mezirow, 2000, p. 17) or else chooses to dismiss the new experiences altogether (Mezirow, 2006).

Overcoming the anxieties related to challenging ingrained convictions and practices (Boehnert, 2012; Mezirow, 2000; Taylor, 2007), is a major difficulty which undermines the assimilation of new perspectives (Mezirow, 2006). Transformation may only take place when learners allow themselves to mould personal and external experiences in the construction of new meanings (Kegan, 2000). Within the context of an authentic and deep-seated growth process, Mezirow (2006) asserts that this bears an effect on learners by making them “more inclusive, discriminating, open, reflective and emotionally able to change” (p. 26). One cannot expect such a change in mindset through dealing with issues superficially. As Kegan (2000) emphasises, deeply

transformed learners not only develop the capacity to engage with new experiences, but also change in the *processes* of engagement: “reforming our meaning-forming” (p. 52).

Transformative changes are often the result of a major event in one’s life (Mezirow, 2009), dissatisfaction with an existing model, or a series of minor experiences which, over time, have the cumulative effect of bringing about crisis in one’s beliefs (Mezirow, 2006). Mezirow (1978) identified “a disorienting dilemma” (1978, p. 7) as the first of a series of phases one goes through in one’s journey towards personal transformation through a process of reflective actions (Mezirow, 2000).

In his critical comparison between *informative* and *transformative* learning, Robert Kegan (2000) emphasises the emotional component of uncertainty, stating that this involves more than merely complying with existing methods of learning. Transformative learning, according to Berger (2004), is a dynamic, alternating movement within the limits of one’s learning comfort zone, which she refers to as the “edge of knowing” (p. 338). Loucks-Horsley, Stiles, Mundry, Love, and Hewson (2010) relate this to the critical notion of shifting to focus on student learning by inviting teachers to question how the newly acquired understanding would affect their actions in class. Berger (2004) claims that operating at these limits, though of vital importance to the transformative nature of gaining new insights and experiences, is a sensitive stage and difficult to manage. In the context of the professional development experience of teachers as they explore Assessment for Learning practices within their

classrooms, this requires a trusting relationship between the teachers and the person who is providing the professional development. Such trusting relationships allow teachers to consider stretching out of the comfort of existing practices (Taylor, 2007) to make their assessment of students' work more meaningful and formative in nature.

Research strongly suggests that this process is not some magical journey with guaranteed and predictable outcomes. Conversely, Wood (2007), drawing on Merriam (2004), observes that not all learners, even if there is development in their beliefs and practices, achieve truly a transformational change. In this context, Merriam (2004) argues that for learners to reach a "more mature, more autonomous, more 'developed' level of thinking" (p. 61), a honed ability of cognitive processing is critical. It may not be enough for adult learners to show willingness to engage with a transformative process, or merely participate and develop a new understanding (Taylor, 2007), but as Gravett (2004) argues, other factors need to come into play, mainly a framework of support and collaboration by the school leadership and by peers that is sustained over time. The centrality of support to authentic transformational change of educators will be explored further in the following sections.

2.3.2.3 Impact on the Teacher

Overview

In any process of school reform, teachers are positioned right at the heart of the process intended to bring about improved learning. In my opinion, it

would be pointless to try to push for changes unless teachers are not only engaged with process but more importantly, “master the innovation skilfully” (Yin et al., 2015, p. 58). More specifically, this upskilling needs to be focused on the way students move through the learning sequence in the respective subject areas and how authentic assessment practices could yield pertinent information on intervention strategies to support improvement (NRC, 2001). Other factors can have varying effects on this improvement process (see Hattie, 2007) but as Darling-Hammond (2000) notes, this would be useless if the quality of the teaching complement is not of high-standard. Supovitz and Turner (2000) point out that such improved quality of teaching and instruction is the link between professional development and gains in student learning. Improvement is not to be taken for granted, merely as a consequence of the years of service spent in the classroom while teaching and assessment practices are kept at a shallow level (Baker, Gersten, Dimino, & Griffiths, 2004).

“yes, teachers make the difference, but only teachers who teach in certain ways” (Hattie, 1999, p. 12). Effective professional development programmes specifically address the need to strengthen both teacher knowledge and classroom practices (Yoon et al., 2008). More specific to the implementation of Assessment for Learning programmes, Robinson et al. (2014) confirm such a sustained enrichment in knowledge and practice. In this context, Yin et al. (2015) provide further support while claiming that their participating students strongly show evidence of significant increase when comparing teachers’ self-efficacy in the application of Assessment for Learning practices

at pre-test and post-test phases. According to Dellinger, Bobbett, Oliver, and Ellett (2008), self-efficacy is concerned with the individual's belief in his or her own ability to reach set objectives, and manifests itself by "proficient performance [which] is partly guided by higher-order self-regulatory skills" (Bandura, 2006, p. 308). The effective implementation of this heightened awareness of one's skills in the regular life within the classroom (Hirsch, 2005; Joyce & Showers, 2002) requires teachers to be able to adjust their teaching practices to address the specific learning circumstances of the students. Taking ownership (Engstrom & Danielson, 2006) and becoming leaders of their own professional learning has a direct impact on self-regulatory competencies (Nicol & Macfarlane-Dick, 2006), resulting in an increased chance of reaching the set objectives (Hopkins, 1990). Avalos (2011) notes that such professional development, especially when it is very much related to everyday classroom experiences (Day, 1999), can bring about a cyclical process by imparting an increased level of satisfaction and positive outlook towards professional development programmes. By engaging with the hearts and minds of teachers (Day & Sachs, 2004), Guskey (2002b) insists that professional development can instil higher motivation which compels teachers be reflective and teach beyond the mere statutory obligations imposed by the curriculum (Black et al., 2003a, p. 24): "[the teachers'] new methods were forcing them to think afresh about their beliefs about learning, and about the integration of formative practices into their whole approach to teaching."

Teachers as Experts on Assessment

DeLuca and Klinger (2010) discuss the term “assessment literacy” to describe the process towards developing a clear understanding of “the theoretical and philosophical underpinnings” (p. 419) of assessment as a means of gauging students’ levels of learning and make changes to methods of instruction and teaching accordingly. Fullan (2007) maintains that this involves the development of a high level of expertise on behalf of the teachers, which as Sadler (1989) insists, includes the ability to make “sound qualitative judgements” (p. 126) which are intimately related to the respective classroom context. More recently, Sadler (2010) has noted that this level of expertise is honed over years of practice which would enable them to adapt past knowledge to new situations. The NRC (2001) in fact notes that such judgements are not the result of the mere bringing together of unrelated pieces of information, but rather the skilful interpretation, and consequent intervention of evidence drawn from the student’s work. Ellis and Reynolds (2013) remark that by doing so, teachers would be showing evidence of their academic competence which is “directly applied to the learning of individual students” (p. 37).

The progression towards competence in assessment practices occurs in small but deliberate and constant consideration of the assessment objectives (NRC, 2001), students’ work, and relevant assessment criteria (Sadler, 1983). Due to the complexities of the learning environment and assessment practices, there is no one hard and fast way of assessing quality and bringing the students’

level closer to the expected standard (Ramaprasad, 1983). Yin et al. (2015) advocate that this can only be achieved if teachers are given the opportunities to expand their competencies through high quality professional development. They maintain that even the most promising initiative to bring about positive change can be overlooked if the teachers do not receive adequate development opportunities.

Bell and Cowie (2001) noted that the teachers they were working with on the implementation of Assessment for Learning practices found it useful to be able to articulate and discuss ideas and activities with their peers. The authors aptly describe this as “making the tacit, explicit” (Bell & Cowie, 2001, p. 134) as a means of active participation in the teachers’ own professional development. The verbalisation, and consequent clarification of ideas between teachers, can have a spill-over effect in the classroom. Teachers could become more sensitive to students’ difficulties in understanding feedback about their work and avoid assuming that they are fully aware of the required remedial steps (Hounsell et al., 2008). In this regard, Black and Wiliam (2009) advocate for explicit proficiency in Assessment for Learning knowledge to the extent that teachers are able to make prompt decisions and adjustments to their instruction.

Poskitt (2014) extends the ability to make lucid arguments in favour of Assessment for Learning practices to the environments which go beyond the school contexts. The pressures to bring about political reforms, which may not necessarily be conducive to learning, necessitates that professional

development supports teachers in a process which Poskitt (2014) refers to as the “marketisation of education” (p. 485). In agreement, Hargreaves (2000) strongly supports this notion and urges educators to engage in conversations to influence public opinion and policy makers.

Creating a Professional Learning Community

Schools choose to embark on reform programmes for various reasons which are not necessarily driven by an eagerness to bring about improved student learning. Poskitt (2014) cites “economics or particular ideologies” (p. 546) as two such agencies while Elmore and McLaughlin (1988) warn against implementing strategic plans just for the sake of mere conformity either with the governing authorities or with other schools. Unless reforms take into account the teachers’ critical contribution to the process, both at an individual and collective level, such initiatives are doomed to be unsuccessful and fail to affect the activities at grassroots level, that is, the classroom (Elmore, 2004b) or, at best, bring about superficial changes with little effect on learning (Joyce, Bennett, & Rolheiser-Bennett, 1990). The active participation, collaboration and involvement of teachers has proven to have a positive effect on student achievement (Lomos, Hofman, & Bosker, 2011; Vescio, Ross, & Adams, 2008; Williams, 2013) and is a critical link between school wide reforms and the changes they are set out to achieve (Avalos, 2011). Professional development opportunities within a collegial environment (Fullan, 2007) are key to sustain reform processes which, due to the very nature of the change process, will invariably have an impact on the human relationships and interactions

between the staff members (Little, 2001). Mushayikwa and Lubben (2009) maintain that when the “institution and the individual are in mutually supportive relationships” (2009, p. 377), there is a deeper sense of ownership of the institution’s strategic plans. Teachers are therefore motivated to support the institution’s efforts towards the successful implementation of such plans. This environment, as Korthagen (2010) notes, supports teachers in their professional development through the co-creation of educational and pedagogical meanings (p. 104) and the bringing closer of theory to practice (Poskitt, 2014). Stevenson (2008) broadens the discussion on the benefits of collaboration by emphasising the “multiplier effect on teacher development” (p. 352) maintaining that the “benefits grow exponentially as the quantity and type of collaboration increases” (p. 352). Absolum et al. (2009) extend this concept even further to also include parents and other educational stakeholders when striving to explore and clarify how the information that can be elicited from the assessment practices can be truly integrated with the student’s learning.

2.3.2.4 Impact on Student Learning

Research and influential scholars strongly point towards a substantial increase in student learning and achievement as a result of high quality professional development programmes, to the extent that, as early as 1992, Hanushek affirms that student achievement is very strongly related to the quality of teachers, arguing that this variance can reach up to a difference of “one full year of standardized achievement” (Hanushek, 1992, p. 113). More

recently, Blank and de las Alas (2009), through their meta-analysis of research studies on the effect of professional development programmes, have concluded that students of teachers who participate in professional development programmes are bound to show evidence of higher achievement when compared to students of teachers who do not.

Further support that high-quality professional development can bring about changes in teaching practices comes from a longitudinal study spread over a three-year period carried out by Desimone, Porter, Garet, Yoon, and Birman (2002). Although they could not establish a clear correlation between professional development and enhanced student achievement, significant positive improvements in the teachers' instructional practices were identified. On the other hand, Fishman, Marx, Best, and Tal (2003), while confirming "substantial improvements in teacher learning" (p. 655), also established an increase in student learning when analysing the pre-test and post-test results of their study.

Most research studies in the field make direct reference to professional development that is of high quality and has the characteristics discussed later on in this chapter. In this context, Joyce and Showers (2002) maintain that one should not expect significant growth through "minor variations on curriculum, instruction, or social climate" (p. 11), notwithstanding the efforts and resources invested in such reforms. Moreover, Darling-Hammond (2000), when discussing "subject matter expertise" (p. 449), notes that the way the professional development is developed is critical to getting the best returns

on the programme. She cites an earlier study (Monk, 1994) which identified a direct correlation between subject expertise and student achievement (see also Borko, 2004), and showed that the gains in terms of student achievement reach a plateau once the teacher's competences exceed the learning needs required at the respective level.

Guskey (2002a) interestingly sustains that pre-planning of professional development programmes is critical to their success especially due to the fact that since most programmes take place "in real-world settings" (p. 50), a definite conclusion of the effectiveness of the professional development programme would be difficult to establish. This calls for a clear understanding of the components of high-quality professional development which, as Black et al. (2003a) note, under the right conditions, could bridge the divide between theory and practice.

2.3.2.5 Impact on Practices

The myriad of skills required to administer assessment in schools makes the process a complicated one (Price, Carroll, O'Donovan, & Rust, 2011). Although schools may be aware of such complexities, these are usually overlooked by adopting a fragmented or an over-simplistic approach (Price et al., 2011; Sadler, 1983). Ramaprasad (1983) acknowledges this intricate nature of assessment and maintains that qualitative feedback presents even further complexities due to the difficulty in quantifying and comparing against set standards.

Research strongly supports initiatives which are intended to increase the teachers' competencies in administering feedback which has the potential of bringing about real and authentic gains in learning. Black et al. (2003a) report that the teachers they were carrying out the research with were more judicious in their assessment once they were cognizant that this could affect student learning positively. Bringing relevant research conclusions and experiences from other schools closer to teachers addresses misconceptions they may have on the implementation process of Assessment for Learning. For example, amongst other factors, Hattie and Timperley (2007) recount how teachers were mistakenly using praise as a means of raising achievement. The ability to transform the information about the gap in learning to feedback which affects learning (Ramaprasad, 1983) is in itself an arduous task which goes far beyond a simplistic, superficial approach to Assessment for Learning. Yin et al. (2008) insist that such attempts do not "disconfirm the effectiveness of formative assessment" (p. 354) but rather should stimulate attempts to implement such practices correctly.

William (2010) sustains this contention by arguing that, in view of the fact that there is ample evidence that confirms the correlation between the implementation of Assessment for Learning, and learning, one should consider how such knowledge can be effectively disseminated to the other learning environments.

As stated earlier¹⁴, it is critical that the communication of feedback about students' work is implemented correctly because, as Nicol and Macfarlane-Dick (2006) argue, failure to do so might have a negative, or at best, minimal impact (Carless, 2007b) on the students' understanding of the standard they are expected to achieve. This in turn can have a negative effect on the students' motivation, self-esteem and eventually on the standard of work they produce (Hattie & Timperley, 2007).

There seems to be a common acknowledgment of the need that educators show clear evidence of competence in the administration of Assessment for Learning practices in schools because this can have a considerable influence on the student's performance and achievement. As will be discussed in the next section, this supports the notion that high-quality, well designed professional development programmes can not only support the individual teachers within their own classrooms but, on a wider scale, can also inform the implementation of the schools' strategic plans.

2.3.2.6 Summary

The notion that the primary focus of professional development is that of, directly or indirectly, bringing about a positive effect on student learning is supported by various instances in literature. An analysis of the review carried out by Vescio et al. (2008) further supports this due to their identification of a correlation between the schools' commitment to student learning and the actual improvement, which Poskitt (2005) identifies as the sole purpose of

¹⁴ See Section 2.2.3.3

professional development programmes. Later on, Poskitt (2014) in her evaluation of the “Assessment to Learn” project, identified improvement in student learning as one of its key criteria of success.

2.3.3 Implementing Professional Development Programmes

2.3.3.1 Introduction – Closer Link between Theory and Practice

Within the educational context, any tensions between the knowledge gathered through research and practice within the classroom are detrimental to the learning itself (Clarke & Hollingsworth, 2002). Guskey (2002b) clearly specifies 3 major pillars of an effective professional development programme and claims a direct link between attempts to change the culture within the school and enhanced learning outcomes. In agreement, Villegas-Reimers (2003) criticises instances when training providers disregard the particular context and culture of the school. The complexity of programmes which bring together the diverse needs of the various stakeholders should not be underestimated, both at design phase and at implementation phase. Failure to do so will threaten the effectiveness of such programmes in terms of improved student learning and achievements (Wayne, Yoon, Zhu, Cronen, & Garet, 2008). Integration, as well as the provision of support and assistance, (Blank & de las Alas, 2009) are in fact amongst a set of suggestions Guskey (1995) makes for successful implementation and is particularly effective when the participating teachers are actively focused on enhanced teaching and learning methods (Robinson et al., 2014).

As discussed in more detail later on in this section, professional development initiatives are most effective when teachers, either individually or in groups, “are empowered to make decisions around curriculum and evaluation” (Darling-Hammond, Wei, and Orphanos, 2009, p. 17) of learning. Under such circumstances, one would be ensuring a contextual validity and sensitivity to the particular learning environment of the respective school (Villegas-Reimers, 2003). In fact, the author continues to argue that traditional, one-shot, irrelevant courses are not the ideal mode of delivery (Villegas-Reimers, 2003). Moreover, Garet et al. (2001) identifies the “form . . . [and] duration of the activity” (p. 919) as two of three critical elements in the design of professional development programmes (see also Department for Education, 2016¹⁵). Yoon et al. (2008) summarizes that for professional development to bring about learning gains, “it must be of high quality in its theory of action, planning, design, and implementation” (p. 3).

2.3.3.2 Teacher Support

Introduction

The various facets of teacher development, training, and learning adds complexity to the nature of the programme itself. Not only are the points of departure of the individual learning journey unique, but also the paths each teacher follows may be different (Black et al., 2003a). Moreover, as Villegas-Reimers (2003) points out, the journey, more often than not, is not a simple trajectory towards the objective of the professional development programme.

¹⁵ This refers to the United Kingdom Department for Education

Conversely, she maintains that teachers are compelled to revisit issues and concepts systematically as they apply new or enhanced ideas in their teaching. Commitment to this complex process is challenging to maintain especially if adequate support is not provided. Joyce et al. (1990) stresses that initial commitment and motivation, while high, are not a guaranteed indicator of long-term commitment. As deeper awareness and competence increases, there will be an increased confidence in the experimental methods, especially if there are perceivable improvements in student achievement. The complexity of such a process, especially in the area of professional development on the implementation of assessment practices, results in a difficulty in establishing a clear correlation between the participation in professional development programmes, improvement in teachers' assessment practices, and student learning (Borko, 2004; Garet et al., 2001; Poskitt, 2014; Wayne et al., 2008; Yoon, Dunstan, Scarloss, & Shapley, 2007). Garet et al. (2001) maintain that professional development programmes "such as study groups or mentoring and coaching" (p. 920) are conducive to producing more positive outcomes, since they push teachers away from being passive recipients of information towards "mediating processes of reflection and enaction" (Clarke & Hollingsworth, 2002, p. 951). An intriguing outlook presented by Avalos (2011) is that teachers play a dual role in schools' efforts to bring about reform. Teachers are the recipients of the knowledge shared during the programme and therefore the primary beneficiaries of such efforts. However, they also serve as channels through which such reforms could bear a positive outcome on student learning and achievement. Teachers are pivotal

to the successful implementation and therefore, one should give due consideration to their contribution to the change process; as Christie (2009) aptly remarks, “we cannot ignore that fact that 99% of staff are already working with kids” (p. 461). Once teachers build their own understanding of the change process, including the need to change and how this reform fits within the bigger picture of student achievement, their motivation and, consequently, the likelihood of implementation increases (Joyce & Showers, 2002). This concurs with Hirsch’s assertion that the most effective programmes of reform are those which are specifically focused on the “individual beliefs” (Hirsch, 2005, p. 43) and convictions of teachers through a deep and thorough reflective process (Clarke & Hollingsworth, 2002)¹⁶. In the context of this research study and in view of the fact that assessment forms a substantial component of the learning process in school, Popham (2009) not only emphasises the importance that teachers are assessment-literate, but puts forward the challenge to identify the deficit in the respective teachers’ awareness on assessment and therefore, the *types* of assessments which need to be focused upon during professional development programmes. Drawing on the support from the key researchers Black and Wiliam (1998), he asserts “that teachers who want to be optimally effective ought to be learning about the essentials of classroom assessment” (Popham, 2009, p. 11). Such programmes should be honed to fit within the teachers’ styles of learning, which is heavily affected by the fact that most teachers spend most of the day working directly with children. In view of this, teachers are more inclined to engage with professional development programmes which offer tangible

¹⁶ See Section 2.2.1.1, sub-Section ‘Conceptions of Assessment’

suggestions on how their *own* practice could be improved (Black & Wiliam, 2003b). Yin et al. (2008) concur with this assertion and suggest that teachers are provided with real-life examples of how Assessment for Learning practices are implemented, possibly through the “extensive use of video . . . [to] get a more and better sense of it.” (p. 356).

As with any type of reform, and especially since the implementation of Assessment for Learning practices requires the tweaking of core classroom practices, this could be a lengthy (Black & Wiliam, 2010) and arduous process which requires careful planning and implementation.

Towards Collaborative Programmes

The very nature of educational institutions, and the fact that teachers tend to share the same physical space with other peers with opportunities to share ideas and concerns on educational matters, fosters a culture which supports a collegial approach to professional development (Darling-Hammond & Falk, 2013). This collaborative approach to development can extend beyond the teaching complement to include the wider learning community, including parents, students, and school leaders. Apart from giving rise to opportunities for constructive educational discourse (Robinson et al., 2014), teachers who share the same students can benefit from programmes which allow for discussion about the common needs of their students (Garet et al., 2001). This is supported by a study carried out by Engstrom and Danielson (2006) who identified collegiality between teachers as a critical factor contributing to the effectiveness of professional development programmes.

Through longitudinal analyses of school reforms over time, Bolam et al. (2005) observe that by fostering a collaborative approach, school communities promote an environment where changes are sustained for longer periods than when efforts are made in isolation and teachers work separately. This clearly suggests that for deeply-rooted changes, including reforms in assessment practices, one should strive at bringing teachers to work collectively (Fullan, 2007) to build what DeLuca and Klinger (2010) aptly refer to as an “assessment literate” (p. 436) community.

This “collaborative involvement” (Poskitt, 2014, p. 544) requires genuine willingness on behalf of all stakeholders. Avalos (2011) notes that the impact this bears on the engagement with the reviewing process of Assessment for Learning practices is not necessarily related to the years of teaching experience, but rather on the individuals’ openness to new initiatives, their peers’ contributions as well as collaborators external to the school community who, as Villegas-Reimers (2003) insists, have a responsibility to share their acquired expertise with practitioners. Tapping into the knowledge accumulated through researching educational institutions in different contexts and environments is an enriching experience which can influence classroom implementation and consequently, student achievement (Blank & de las Alas, 2009). In agreement, Joyce and Showers (2002) observe that teachers who benefit from the continuing support of experts, especially through coaching and companionship, implement reforms better than those who just receive pre-employment training.

Coaching

When support is intimately linked with the teacher's needs and classroom summative and Assessment for Learning practices (Allen, Wichterle Ort, & Schmidt, 2009), a collaborative environment, through the development of a common frame of mind and vision, is created between the support provider and teacher (Joyce & Showers, 2002). These "meaningful learning conversations" (Garvey, Stokes, & Megginson, 2014, p. 112), which are often likely to happen within the school day (Garet et al., 2001), have proven to be very effective means of sustaining improvement over time, with Joyce and Showers (2002) noting that when coaching, including peer-coaching and mentoring, were an integral component of the development programme, there was a significant increase in their effectiveness. Yin et al. (2015) claim that through coaching on Assessment for Learning practices, teachers develop a strong feeling of ability, with an increased chance of modelling their methods on the coach's behaviour, especially when adopting a companionship approach rather than a judgement and evaluative approach (Davis & Neitzel, 2011). As a result, as Darling-Hammond et al. (2009) note, teachers are "more likely to enact the desired teaching practices and apply them more appropriately than are teachers receiving more traditional professional development" (p. 12).

2.3.3.3 Engagement of Teachers

Emotional Engagement

Complex reforms, such as the implementation of Assessment for Learning practices in schools, are not mechanical processes comparable to upgrading a new machinery in a manufacturing plant. Various instances in literature (for example Carless, 2005; Evans, L., 2014; King, 2014) acknowledge the centrality of the teachers' active and dynamic involvement, both through their intellectual contribution and also through a deeper, emotional espousal with the whole process. Carless (2005) goes to the extent of sustaining that advancements are not possible "without actively engaging the hearts and minds of teachers" (p. 40). When confronted with a need for change, teachers may have various alternatives available to them and they will only consider those which they deem to be effective within their local, classroom environment. Wolf (1978), in a dated yet still relevant remark, points out that "if the participants don't like the treatment then they may avoid it, or run away, or complain loudly . . . no matter how potentially effective and efficient it might be" (p. 206).

Conversely, as engaged teachers work themselves through the proposed changes, they will progressively mould their understandings, convictions and consequently, their practices as they align them to their contexts. Day (1999) stresses that teachers seek motivation in the conviction that the proposed changes will bring about improved outcomes and a real difference in the learning of the students they teach – a "sense of purpose" (Gu & Day, 2007) in

the teachers' work. The learning loop is closed by providing teachers with evidence of the positive outcomes which these new practices have on the students' motivation to learn. Moreover, basing their argument on the social cognitive theory, Goddard and Goddard (2001) link individual and collective commitment to the acknowledged capacity of achieving something worthwhile – that of bringing about learning gains. Guskey (2002b) and Clarke and Hollingsworth (2002) share similar convictions with Leithwood, Harris, and Hopkins (2008), asserting that this is a very strong indicator of effective implementation. Bringing these two concepts together, it is evident that school leaders wishing to bring about sustained learning gains, not only need to foster an environment in which the teachers can reap the results of their added work but also, through the necessary support mechanisms (Riley, 2000), increase the internal capacity of the teachers, to the extent that they *believe* that they can in fact bring about positive changes. This argument will be discussed further in the next section.

In the context of educational measurement, Guskey (2007) takes the discussion a step further by emphasising that it is the “meaningfulness and relevance” (p. 25) of student achievements rather than the achievements themselves that have a stronger impact on teachers' motivation. The reassurance that teachers can bring about a positive impact on the students' life is a strong motivational factor, which ties in with the claim made earlier in this section that one should address the teachers' involvement at a far deeper level than just on the intellectual level.

In one of his distinguished contributions, “The Fifth Discipline”, Senge (1993) discusses the importance that the core values and purposes of schools are identified and clear to all stakeholder and that reforms are aligned accordingly. Bennett (2011), in the context of the implementation of Assessment for Learning practices, suggests that this can be achieved by bringing together educators to clarify the principles and processes involved and to avoid what Black et al. (2003a) refer to as merely another reform teachers are asked to implement. Through participation in assessment design, teachers will be more inclined to own the process (Yin et al., 2008), and implement the strategies proposed (Yin et al., 2015).

Professional Engagement

By giving due credit to the knowledge and experience teachers have gained through prior training and practice in assessment and student learning, professional development programme developers would be laying the right foundations for new initiatives to grow (Robinson et al., 2014). In the context of the above discussions which stressed the importance that teachers are active and reflective participants of their own professional development, Clarke and Hollingsworth (2002) insist that teachers should be given real, authentic opportunities through which they demonstrate their professionalism, framing their development within their classroom context. Pseudo-participation programmes, through which initiatives are presented as professional development concepts to be developed collectively but in actual fact have their outcomes set from the outset, are not congruent with true

professional involvement of teachers. The difficulty may arise in reaching a consensus between all teachers on the real professional needs of the teaching faculty especially since, due to the very nature of their work, teachers may have difficulties in appreciating the wider context (Black & Wiliam, 2010). Teachers must be enticed to consider new initiatives or adjust existing practices within their classroom. For teachers to develop mastery, they need to be given the opportunity to practise these new initiatives so that their attitudes, beliefs and understandings (Fullan, 2007) will start to change gradually. While preserving their dignity as professional practitioners (Clarke & Hollingsworth, 2002) by promoting opportunities where teachers can “design and implement experiences and opportunities that help in their growth” (Villegas-Reimers, 2003, p. 141), Black and Wiliam (2010) insist that teachers should not be expected to implement conceptual ideas about assessment unless concrete support, such as examples of good practice, is provided.

Such backing is not only limited to human resourcing but, as Yin et al. (2008) insist, teachers should be provided with “tremendous support” (p. 356) to implement assessment reforms with their students. While Borko (2004) advocates for opportunities where ideas and concepts are discussed and developed collectively, one needs to acknowledge the difficulty in cutting off the ‘external noise’ which hampers creative thinking and as Burget (2000) suggests, set aside time for professional development that is protected. This will ensure that engagement is more profound; she refers to this as “mental

space” (p. 7) and puts the onus on the school administrators for providing such opportunities.

2.3.3.4 Role of School Leadership

Teachers might be faced with instances where, on one hand they are compelled to involve themselves in new school initiatives and reforms, but at the same time are not provided with adequate time allocations (Borko, 2004). Teachers tend to view this as a lack of support on behalf of school leaders to the change process (Robinson et al., 2014). Leithwood et al. (2008) note that developing staff performance is a central function of school leadership, which therefore ought to create the right environment within which this can occur (Huffman & Jacobson, 2003). This assertion is corroborated by Black et al. (2003a) who contend that while teachers should play a critical role in concretising assessment reforms within the classroom context, school administrators have the leadership responsibility of instigating and managing such initiatives. Black et al. (2003a) suggest that this would be achieved if school leaders, apart from providing teachers with adequate time to reflect on the grading practices, act as critical friends to unlearn old practices and adopt more formative practices. Timperley, Wilson, Barrar, and Fung (2007) see a clear link between the teachers’ development and “active school leadership” (p. xxvii) which, amongst other factors, seeks to foster an environment conducive to learning through support mechanisms which encourage professional learning and “increase the collective efficacy of a school” (Goddard & Goddard, 2001, p. 816).

2.3.3.5 Programme Design

If one had to view professional development programmes as long-term journeys towards a set goal, as teachers leave and others join the school, one would appreciate the importance of having a shared commitment which can be sustained over time. The difficulty arises when the initial efforts and motivation die off before the planned changes become an integral part of the school culture. The interdependence between the teacher's individual professional growth and the development of a group culture (Garet, Porter, Desimone, Birman, & Yoon, 2001) is a critical factor in the success of such programmes. As stated above, Avalos (2011), while addressing the wider aspect of school development, insists that one should keep in mind that such progress is achieved through the development of the teachers within their local context. One can view professional development as the development of the parts which then form part of the bigger whole.

In order to achieve an increased level of teacher knowledge, skills, and competences, Desimone (2009) identified a number of critical factors, including, active participation of teachers, both individually and collectively, as well as coherence of the programme which Yin et al. (2015) define as "the extent to which the professional development is consistent with [the educational] standards" (p. 43). Moreover, as Gersten, Dimino, Jayanthi, Kim, and Santoro (2010) as well as Garet et al. (2001) insist, the design of the professional development programmes bear a distinct effect on the validity of these programmes and argue in favour of ones which are intimately related

and relevant to the school context over isolated attempts which usually take the form of formal, externally run (Robinson et al., 2014), “one-shot workshops” (Darling-Hammond et al., 2009, p. 9). Since these are heavily dependent on an information-transmission model, such traditional programmes have long been criticised for not providing enough opportunities for the participating teachers to engage actively (Avalos, 2011; Clarke & Hollingsworth, 2002; Garet et al., 2001; Yin, 2005) and therefore, with minimal positive effect on student achievement (Joyce & Showers, 2002).

Conversely, research supports types of professional development programmes which acknowledge “ecological validity” (Robinson et al., 2014, p. 143) and are therefore relevant to the realities of classroom practice (Ganser, 2000; Thompson & William, 2008; Villegas-Reimers, 2003). Through a review of 16 studies which investigated the relationship between teacher professional development and student achievement, Blank and de las Alas (2009) identified a set of factors which provide strong support for professional collaboration both with the leading expert and, more importantly, between peer-professionals, on issues which are related to teaching, learning and the development of assessment practices. The focus of such programmes is that of creating an environment which supports the transfer of the newly acquired knowledge to the particular and specific classroom context (Robinson et al., 2014). Joyce and Showers (2002) assert that even if the acquisition of knowledge is the main purpose of these programmes, lecture-based sessions should be avoided altogether. They support their argument by comparing different modes of programmes with

the level of teacher engagement and skill-acquisition, claiming that there is a substantial, quantifiable improvement in teacher knowledge and skill:

Theory or demonstration alone results in effect sizes for skill of around 0.5 of a standard deviation for refining existing skills and even lower for new skills. When demonstrations and practice are added, the effect size rises to about 1.18 in the average study. When coaching is added to the theory, demonstration, and practice treatment, skill continues to rise. (Joyce & Showers, 2002, p. 76)

These models of programmes ensure an environment where the content is not only adapted to the needs of a particular educational institution, but also, as will be discussed further in the next section, allow for fine tuning of the programme and implementation, depending on the new realities and opportunities which the programme itself may provoke.

2.3.3.6 Content of Professional Development Programmes

Villegas-Reimers (2003) suggests that teachers can have a direct say in the focus of professional development programmes by identifying either new areas of interest or practices which they would like to improve upon. In both instances, the significance of professional development lies in how closely linked the perceived development needs are to the institution's goals in student achievement (Joyce & Showers, 2002). More specifically, as Borko (2004) argues, professional development programmes should focus on developing a deep understanding not only of the subject matter but, more importantly, on how seemingly unconnected concepts are brought together in the building of new knowledge. This notion is supported by various leading scholars who analysed the effectiveness of different professional development

models (see Blank & de las Alas, 2009; Kennedy, 1998; Yin et al., 2015). The central argument in favour of enhanced effectiveness of student learning and achievement is that, in order for teachers to be able to support students along their learning progression in the respective subject matter, they themselves have to master the ways in which students learn. The more effective professional development programmes, identified by the extent to which they left a positive impact on student learning, were the ones which focused less on the delivery of information and more on the process of how learning occurs.

In this context, Yin et al. (2008) identified the difficulties some teachers have encountered in giving constructive feedback to lead students along their learning progression. They insist that teachers should not only be trained in understanding how students learn but also on the type of feedback they should provide to help students bridge the gaps in their learning. In agreement, Kennedy (1998), suggests that teachers are trained at identifying evidence of when students are struggling in their learning. Moreover, NRC (2001) argues that for educational assessment practices to have a tangible positive impact on student learning, professional development programmes should be sensitive to the various stages students are at in their learning journey as well as the myriad of paths towards reaching educational goals. In contexts where summative assessments tend to feature prominently, Black and Wiliam (2010) suggest that schools identify ways in which more useful, constructive information could be elicited from formal examinations in an attempt to make more efficient use of the school resources these require.

In summary, professional development which addresses the deep understanding of the pedagogical concepts can foster an environment which is conducive to positive gains in learning achievement. Although the teacher's personal engagement with the development process is critical to its implementation, the communal nature of educational organisations offer an excellent opportunity for the development of learning communities and collaborative relationships which support the implementation of the desired reforms.

2.3.3.7 School Context – Internal and External Factors

The complexity of reforms in schools are further exacerbated by various factors, both internal and external to the organisation. Moreover, the particular predisposition for change, may vary within the different teachers or groups of teachers within the same school (King, 2014; Poskitt, 2014). As Borko (2004) notes, a clear analysis of such factors is critical to any attempt to implement changes through teacher development. Since such programmes are focused on the individual teacher's beliefs and practices, as Carless (2005) maintains, the teacher's personal views and educational philosophies should also be taken into consideration. In an effort to create a coherent programme, sensitive to such complexities, Shephard (2008) suggests that efforts to implement changes in Assessment for Learning practices are integrated within the current classroom practices rather than promoting them as stand-alone-suggestions for improvement. In agreement, Anfara, Caskey, and Carpenter (2012) emphasise the importance of embedding reform initiatives

as part of the wider school context due to the fact that improvement is very often directly and indirectly linked with changes in other areas Guskey (2002a). As a result, he stresses that attributing the effect of change to one particular initiative is virtually impossible.

This brings about inevitable challenges when national policies and demands for reform do not take into consideration the particular needs and contexts of the different schools (Poskitt, 2014). This lack of harmonisation, as Villegas-Reimers (2003) sustains, results in the failure of reforms to bring about effective and positive changes at classroom level. Guskey (2002a) contends that such failures should not be automatically attributed to the quality of the programme or the teacher's disposition to learning but instead, one should critically analyse the organisational mechanisms which are set up to support such reforms. The extent to which internal and external factors influence the effectiveness of professional development programmes is considerable (Hopkins, 1990) and could affect the different stages of the processes ranging from the initial, motivational and engagement stages right through to the implementation phases, when new techniques are put into practice (Clarke & Hollingsworth, 2002).

Research suggests that the school environment not only encourages professional development but, more importantly, supports it, to the extent that there is real integration between teacher learning and classroom experience (Borko, 2004). Guskey (2002a) maintains that failure to sustain a reasonable level of organisational support will jeopardise the successful

implementation which, as Joyce and Showers (2002) insist, most teachers can achieve when provided with the right support. Goddard and Goddard (2001) quantify the effect of *collective efficacy* on *individual efficacy* and claim that the former is “the only significant predictor of teacher efficacy differences among schools” (p.815). In support to this argument, Joyce and Calhoun (2010) as well as Avalos (2011) claim that well-organised and structured schools foster a more positive ethos and healthy professional relationships which in turn, leads to a better disposition for change. Although dated, Joyce et al.’s (1990) assertion that the social context is critical to the success of reforms is still pertinent to current contexts. In the right environment, change practices create a need for new initiatives to be implemented to the extent that the school will become a growing learning organisation that is ever “dissatisfied with the status quo” (Bass, 2000, p. 20).

Black and Wiliam (2003b), while noting that the success of their study was due to the fact that their team were very strong in the relevant subject areas, express their concern that most schools do not have the internal capacity to provide the support required for the successful implementation of reforms. Throughout their project, the participating schools were provided with the right support in the implementation of Assessment for Learning practices. This, as Yoon et al. (2008) assert, is one of the key strategies for successful implementation, arguing in favour of removing “barriers to new practices [such] as lack of time for preparation and instruction, limited materials and human resources” (Yoon et al., 2008, p. 4), which would limit the opportunities for sharing knowledge and ideas, especially since some

innovations may require extended periods of time to assimilate and integrate in everyday classroom learning (Robinson et al., 2014).

2.4 Chapter Conclusion

Through a critical review of literature on the formative nature of feedback and assessment and how professional development of teachers can impact Assessment for Learning practices, the groundwork for the study reported in this thesis has been laid. The core factors which could bear an authentic, real change in the students' learning have been discussed in the context of the transformation of educators as they explore, both individually and collectively, ways to support, through feedback rich in information that can inform and improve the students' understanding of their own learning. As long as student learning remains at the heart of the professional programme (Guskey, 2012), such outcomes are achievable (Black et al., 2003a). This thesis extends the existing knowledgebase and builds an understanding of the impact of a professional development programme focusing on assessment for learning and, subsequently, on student learning, within the context of a Maltese educational institution.

Chapter 3 – Methods and Methodology

3.1 Chapter Introduction

In the previous chapter, the effect of the professional development of teachers, with a special emphasis on Assessment for Learning practices, was discussed within the context of previous research studies and literature contributions. The purpose of this chapter is to draw the reader's focus (Kilbourn, 2006) to the methods and methodology compatible with this research study in view of the theories reviewed in Chapter 2. Crotty (1998) differentiates between the 'methods' employed, which he defines as the actual tools and techniques used to investigate the focus of research, and the 'methodology'. The latter serves the purpose of justifying specific methods which are identified and selected through the identification of a clear relationship with the purpose of the research study, as made explicit through the research questions.

3.1.1 Purpose and Focus of the Study

As discussed in Chapter **Error! Reference source not found.**, the research interest in professional development of teachers and the implementation of Assessment for Learning practices has developed as a reaction to what I perceived as unfavourable comments of teachers about professional development programmes in general and on initiatives to shift away from an excessive dependence on the summative component of assessment. This resistance to reform assessment practices is not a phenomenon unique to Malta but is one documented in various studies in different countries (Carless, 2005; Morris et al., 2000). While the concept of *good* practices tends to vary

over time, as Black and Wiliam (2003b) insist, initiatives to effectively transform schools should evolve around and focus on the teachers' practices which emanate from the value they give to such reform initiatives (Creswell, 2007). When planning development strategies, Guskey (2002a) cautions against arbitrarily subscribing to the novelties in education, occasionally pushed by financial considerations rather than by their additional contribution to learning.

The study reported in this thesis is not an attempt to inform large-scale practices and policies, but rather presents a systematic analysis of how teachers negotiate their ways through the challenges of implementing initiatives identified through an exposure to theories and literature implemented in varying scenarios. The methodology adopted builds on Black and Wiliam's (2003b) assertion that highly analytical, small scale studies, though more difficult to carry out, can yield richer data, which however lack generalisability. Patton (2002) furthers this argument by claiming that research requires that analysis is "conducted systematically and empirically through careful data collection and thoughtful analysis" (p. 10).

Furthermore, this study does not attempt to investigate the extent to which a greater focus on Assessment for Learning bears an effect on student learning. This has already been thoroughly analysed and researched, with a critical review of the literature supporting this being presented in section 2.2.2. This has provided the basis of one of the research problems which were identified very early in my research journey: if literature strongly points towards the

positive impact of Assessment for Learning as a means of student improvement, why are such practices not widely implemented across all levels within the local educational context? This hinges on my conviction (Clough & Nutbrown, 2012) that learning is a consequence of the sharing of knowledge between the different partners, including between the student and the teacher; assessment which has the formative characteristics described in section 2.2 does justice to this purpose. It also builds on the belief that by engaging with theory and literature through professional development initiatives, teachers would be in the prime position to bridge the theory-practice gap¹⁷.

3.1.2 Research Questions

This section will present and discuss the research questions which, as Reiter, Stewart, and Bruce (2011) observe, are critical in laying the foundations and setting the direction and scope of the whole project. In essence, the main and subsidiary questions for this research study are:

- What challenges, understandings and attitudes do teachers need to negotiate when implementing Assessment for Learning practices within a particular learning community?
- In the context of participating in a professional development programme on Assessment for Learning strategies, what factors contribute to addressing these challenges, understandings and attitudes?

¹⁷ See section 2.3.3.1

These research questions encapsulate a number of assumptions which have been discussed in the previous chapter and which will be explored further in this chapter. For example, the term ‘participation’ suggests that teachers are actively engaged with their own development and provides the basis for the ontological position of social constructivism. This will be discussed further in the context of the theoretical framework in section 3.2. It also suggests, that for an authentic, long-lasting bridging between theory and practice to happen, the engagement with theory cannot be a one-shot attempt but rather needs to span a number of weeks during which the participants allow themselves to challenge deep-rooted understandings, attitudes and as a result, practices, which may have developed over their years of practice. The terms ‘understanding’ and ‘attitude’ suggest that the professional development programme is intended to address both the cognitive as well as the affective domain of learning and teaching. As Holmes, Gardner, and Galanouli assert, such “ ‘hearts and minds’ issues” (2007, p. 398) should be addressed at the very early stages of any professional development programme. The literature strongly supports the notion that the emotional response to internal and external stimuli is critical to the way a person approaches and negotiates with new experiences¹⁸. The relevance of professional development programmes should be such that they not only address the implementation of reforms at a cognitive level but, equally importantly, offer opportunities to enable the participants to manage the new contexts – especially through peer interventions, support and collaboration (Fullan, 2008).

¹⁸ See section 2.3.3.3

The research questions also shed light on the type of the professional development programme. The nature of this study has set the boundaries which give credibility to the outcomes. The number of participants allows for rich and deep data to be collected; in line with the characteristics of qualitative research¹⁹. In addition, all participants are employed with one local College, which, though governed by the local educational authorities, has developed its own culture and practices. Consequently, as will be discussed further²⁰, this limits the generalisability of the study both with regard to other schools and also to the same College but in different epochs.

The literature review chapter, more specifically sections 2.2.4 and **Error! Reference source not found.**, discusses the difficulties teachers face when negotiating with the transformative process of adapting newly acquired skills and knowledge to create alternative ways of thinking and practice – a process commonly referred to as ‘paradigm shift’. A clear awareness and understanding of these challenges is central to the purpose of this study because one cannot disassociate deep transformation from the consequent stress and risk due to the resultant uncertainties; one could also argue that a person should not expect growth, both on a personal and professional level, unless one experiences a certain level of healthy stress associated with the new challenges and exploration of new grounds as well as the change of practices as a result of this shift in mindset.

¹⁹ See section 3.2.5

²⁰ See section 3.2.5.9

These questions have been built on Moustakas' (1994) assertion that through the careful selection of every single word, there is a clear outline of the purpose of the study, establishing an evident link with the methods employed to generate and analyse the data, as well as setting the confines of the study (Merriam, 2009; Trafford & Leshem, 2008).

3.1.3 Overview of the Chapter

While this introductory section sets the methodological background of the study, the next sections provide a more detailed overview of the pertinent methodological considerations. Section 3.2 presents the theoretical framework that was adopted. It presents the ontological and epistemological positions underpinning this study, with a detailed discussion on social constructivism and how this study positions itself within the phenomenological perspective. Further to briefly comparing qualitative and quantitative methodologies, this section presents arguments for the preference of a qualitative approach over a more positivist, quantitative approach. Building on this detailed discussion about the theoretical framework, section 3.3 describes the process of how the research was implemented, together with a justification of the tools selected to generate and analyse data. The final sections of the chapter also include a discussion about the processes which were adopted to ensure the trustworthiness of this qualitative study, as well as the ethical implications relevant to the research.

3.2 Theoretical Framework

3.2.1 Introduction

Vinz (2015) suggests that research is positioned within existing theories and knowledge relevant to the subject area and bridges with other researchers' work. This connection, which Merriam defines as the "theoretical framework" (2005, p. 70), also serves the purpose of diffusing the "conceptual and operational" (Imenda, 2014, p. 187) tensions between practice and theory. Furthermore, Imenda contends that if researchers fail to view their research through a "theoretical lens" (Creswell, 2009, p. 176), the study will lack direction and therefore, a purposeful structure around which the study is oriented (Merriam, 2009), guided and supported (Maxwell, 2013). Such paradigms, which Smith and Liehr (2008) define as "schools of shared assumptions, values and views" (p. 6), each with their own philosophical perspectives (Maxwell, 2013), have a bearing on the decisions the researcher makes through the entire process (Mertens, 2010), including the research methodology adopted (Creswell, 2007).

The theoretical framework discussed in the following sections exposes the way the ontological and epistemological positions coherently relate (Trafford & Leshem, 2008) to the conceptual framework of the study through which the relevant methodologies and methods for data generation and analysis were identified and implemented. With the intention of answering the two research questions, this section will outline the approaches taken while seeking to understand experiences through a direct engagement with the participants.

3.2.2 Phenomenological Approach

Phenomenology was formally introduced to the qualitative research paradigm by Edmund Husserl (1859-1938) who eventually became known as the founder of this philosophical method (Moran, 2000; Moustakas, 1994). In his renowned text, 'Phenomenological Research Methods', Moustakas (1994) contends that phenomenological investigations can bring about an understanding of the essence of one's experience.

Since phenomenology places the understanding and interpretation of the participant's experience at the centre of the research process (Groenewald, 2004), I adopted this approach as a means to answer the two research questions. While acknowledging and, as much as is possible restricting, my own personal biases which I bring to this study, I attempted to delve deeper beyond what is taken for granted and towards gaining insights of what Groenewald (2004) describes as "contents of personal consciousness" (p. 43). This study is concerned with the lived experiences of the participating teachers as they engage with strategies which are typically associated with Assessment for Learning within their teaching environment. Lester (1999) suggests that if one intends to primarily explore and interpret the lived experiences of actors, then the qualitative research should be informed by a phenomenological approach. As stated earlier, phenomenology also requires such analysis to be free, bracketed, from preconceptions and biases. However, as Giorgi (2006, 2008) strongly asserts, a total disregard of past experiences and knowledge is difficult, if not practically impossible, to achieve. He

continues to argue that an awareness and expression of such preconceptions, a process employed in this research study, does not necessarily guarantee that the analysis phase is free from such biases. On the other hand, this method helps the researcher maintain vigilance throughout the analysis process to restrain from contaminating the participants' experiences with his or her positions. It is for this reason that my viewpoints on assessment for learning were shared in the introductory and literature review chapter of this dissertation, thus making it clear from the outset how my own particular 'frame' was central to the focus and design of the study reported in this thesis.

3.2.3 Ontology and Epistemology

Although research can rarely be categorised within one single paradigm (Bryman, 2012), by taking into account the purpose of the research and the respective research question, one draws upon the predominant philosophy when positioning one's study. One major defining consideration which determines the very nature of knowledge is the ontology of the study, which sets out to construe whether reality exists irrespective of the human environment or whether this reality is socially and subjectively constructed by the participating individuals (Bryman, 2012; Creswell, 2007; Lincoln & Guba, 1985). These two broad categories, which will be discussed and compared with other ontological positions, are commonly referred to as objectivism and constructivism. Leading from and very closely linked to the ontological stances of a particular study is the epistemology which Maynard (1994) affirms provides the "philosophical grounding" (p. 10) to frame the

quest for new knowledge within the confines imposed by the discipline (Bryman, 2012). Although research can be positioned within various epistemological orientations (Merriam, 2009), two distinctive broad categories are the positivist and interpretive forms of research. Positivism assumes that knowledge is objective and is not affected by the interventions of individuals. On the other hand, when researchers adopt an interpretivist approach, the interactions between the individual, the context, and reality become critical to the research design (Patton, 2002). The meaning attributed to such interactions is *generated* rather than *identified* and *collected* (Crotty, 1998), which leads to an acknowledgment that reality, and hence the understanding of such reality, is multi-faceted (Creswell, 2007).

In the context of the focus of this research study, as outlined in the research questions above and the critical review of literature on the engagement of teachers in the process of implementing Assessment for Learning practices within their learning environment²¹, the ontological and epistemological positions which encapsulate this research study are constructivism and interpretivism respectively. Crotty (1998) notes that, due to the different definitions and meanings attributed to the terminology used in research literature, and due to the fact that it is difficult to identify the dividing line between ontology and epistemology, he omits ontology from the social research process insisting that “ontological issues and epistemological issues tend to emerge together” (Crotty, 1998, p. 10). Aware of the challenge to break down a holistic and coherent research process into distinct dimensions and

²¹ See Sections 2.3.3.2 and 2.3.3.

then recreating the relevant linkages, the labels referred to above, and discussed in more detail below, should therefore be merely considered as a way of structuring the discussion into a meaningful and logical manner.

3.2.3.1 Constructivism

The outcomes of professional development programmes are heavily dependent on the participants in the programme, as well as the contexts within which such programmes are delivered and, ultimately, implemented. Creswell (2007) attributes this to the fact that meaning is developed not only through the interaction of the individual with knowledge and reality but also through the interaction with peers, as well as the present and past contexts (Mertens, 2010); he refers to this paradigm as “social constructivism” (Creswell, 2007, p. 21). The fluid nature of these interactions necessitates that the researcher tries to understand the individuals’ points of view and how these, together with their experiences, build their own reality. This, in turn, determines the way the researcher operates within the research environment, in that one should strive at increasing the proximity both with the context and the participants as much as possible (Creswell, 2007). There is no “absolute truth” (Maxwell, 2013) which is ready to be discovered but rather, diverse meanings which the researcher and participants collectively construct about a common experience (Creswell, 2007). This imposes an ethical consideration with regard to the power relationship between the researcher and participants, as well as on the handling and manipulation of the processed data. Section 3.4 discusses this in more detail.

A further implication which arises from the constructivist paradigm is the uniqueness of the participants' and researcher's experience and of the meaning that is attributed to such individual experiences. An assumption that is closely linked with constructivism is that such interpretations are also shaped by the researcher's and participants' prior experiences. Retrospectively, the "historical and cultural" (Creswell, 2007, p. 21) contexts have a direct bearing on the present subjective meaning of reality. However, as Bryman (2012) notes, due to the unpredictable nature of the context, human behaviour, and human interactions, one cannot assume that these multiple realities remain unchanged over time.

This contrasts greatly with objectivism which encompasses the beliefs that reality exists irrespective of the social players. The role such position imposes on research is to study the social world (Lincoln & Guba, 1985) in much the same way as a scientist would test the universal, natural laws (Charmaz, 2014; Crotty, 1998; Mertens, 2010). The objectivists claim that the existence of reality and its meaning are universal and value-free, with a direct implication on the generalisability to different contexts. Clearly, this has direct implications on the research design because the objectivist gives far lesser consideration to the participants than the constructivist researcher. In striving to acquire knowledge, in other words, the epistemological approach, the objectivist adopts a positivist stance which asserts that knowledge can be identified through the systematic collection of facts. At the other end of the epistemological spectrum, the constructivist attempts to build a close

relationship with the research context and depends on the interpretation of the subjective, socially constructed reality.

3.2.3.2 Interpretivism

Lester (1999) contends that approaching research through a phenomenological lens requires that the respective participants' conceptions, experiences, and points of view are considered critical to an understanding and interpretation of "subjective experiences" (p. 1). The interpretive approach is very often associated with Max Weber (1864-1920) who claimed that, rather than trying to establish a clear cause-and-effect relationship, social scientists need to embark on a journey to achieve an interpretative understanding through an internal perspective (Gerth & Wright Mills, 2009). He summarises this process in the concept of *Verstehen*, a German term which he referred to as the contextual construction of meaning about a particular reality and the "intentions and goals of the individual" (Holloway and Galvin, 2017, p. 25). In contrast with its positivist counterpart (Bryman, 2012), an interpretive approach considers the individual participating in the research as central to the same research (Cohen, Manion, & Morrison, 2007). Moreover, as Creswell (2007) notes, the researcher is required to be in touch with and respect the context within which the participants operate. This is central to the interpretive approach since, should researchers fail to do so, they would also be failing to grasp the true "meanings [which] are constructed by human beings as they engage with the world they are interpreting" (Crotty, 1998, p. 43). In agreement van Manen, (2014) asserts that it is the role of interpretive

researchers to try to understand phenomena through engagement with the meanings attributed to them by the research participants within the particular cultural and contextual environments.

This contrasts with positivist research, which is consistent with an objectivist ontology and which attempts to disregard the diverging perspectives (Lincoln & Guba, 1985) of each individual and to uncover objective data and attribute a general, universal theory (Charmaz, 2014; Creswell, 2007): “to test theories and to provide material for the development of laws” (Bryman, 2012, p. 27).

The contrasting philosophical positions discussed above give an overview of the relationship between theory and research. The issues raised bear a direct influence on the way in which social research is conducted (Bryman, 2012; Guba & Lincoln, 1994) to the extent that, as Mertens (2010) insists, they impinge directly on each and every stage of the research design. The next section provides a discussion on the implementation of the theoretical framework which forms the basis of this research study.

3.2.4 Implications for this Research

The strength of a particular social research design lies in the coherence between the relevant existing theories and the different components of the research design (Maxwell, 2013). In order to ensure consistency in this study and also as a means of structuring this discussion, a set of characteristics which Lincoln and Guba (1985) attribute to naturalistic research have been adopted. The critical relevance of these characteristics is justifiable for this

research study for two main reasons, namely “their logical dependence on the axioms that undergird the paradigm . . . [and] their coherence and interdependence” (Lincoln & Guba, 1985, p. 39). Lincoln and Guba (1985) assert that there is a strong connection between the identified fourteen characteristics to the extent that the validity of each one is heavily dependent on the justification of the other properties. In this section, the practical implications of some of these fourteen characteristics are discussed jointly. In such cases, these are listed together, under common sections but maintaining the original enumeration.

3.2.4.1 Natural Setting

- Characteristic 1: the research is carried out “in the natural setting or context of the entity” (Lincoln & Guba, 1985, p. 39).

This study sets out to investigate the transformational process of teachers as they participate in a professional development programme on Assessment for Learning. The critical importance of understanding the teachers’ strategies as they negotiate with the programme necessitates the design and implementation to be embedded within the context of the participating College. This is not an off-the-shelf programme but rather a constructed attempt aimed at bringing about a greater awareness of the critical characteristics of Assessment for Learning²², together with the

²² See Section 2.2.2

strategies available for implementation²³ within the participants' contexts and respective challenges²⁴.

The data generation, through two sets of semi-structured one-to-one interviews²⁵, together with group sessions²⁶, will provide a holistic perspective and understanding, not only on the issues which emerge but also on the relevant environmental conditions. This implies a critical reliance on first-hand experiences of the participants (Creswell, 2007) rather than depending heavily on indirect methods of data generation (Wiersma, 2000) which could add an extra layer of possible bias.

The term 'natural' implies that this research study will explore the reality of the participants as they operate in their ordinary circumstances, with a commitment to avoid atypical settings which would make the study "ecologically invalid" (Bryman, 2012, p. 48) - there should be a deliberate effort to avoid "manipulation of variables, simulation, or externally imposed structure on the situation" (Wiersma, 2000, p. 239). This in itself presents a challenge for the researcher because as Merriam (2009) notes, one could question the skills of researchers to avoid imposing their biases and pre-assumptions on the research. Drawing upon such difficulties, a discussion on the steps I implemented to allow for free expression of ideas

²³ See Section 2.2.3

²⁴ See Section 2.2.4

²⁵ See sections 3.5.7 and 3.5.9

²⁶ See section 3.5.8

and therefore, minimize interference from my end, may be found in the section entitled 'The Researcher's Level of Involvement'²⁷.

3.2.4.2 Human as a Primary Data-Gathering Instrument

- Characteristic 2: the researcher uses "him- or herself as well as other humans as the primary data-gathering instrument" (Lincoln & Guba, 1985, p. 39).

Patton (2002), while discussing the participation of the researcher as a "continuum that varies from complete immersion in the setting as full participant to complete separation from the setting as spectator" (p. 265), insists that the researcher's active involvement is in fact critical to qualitative research. In order to fully comprehend the intricacies of the *natural* context of the macro- and micro-environment of this research study, I am the only researcher involved, not only as the facilitator of the professional development programme, but also at the data generation and analysis stage. Ensuing from a constructivist philosophy, an extensive immersion in the research allows me to react to the unexpected realities which may arise and therefore, adjust the data collection methods accordingly (Lincoln & Guba, 1985).

An additional, non-human means of data collection may compromise a holistic understanding of the empirical, social world. By assuming the role of a qualitative researcher, through an active engagement with the participants, I put myself in a better position to capture the participants'

²⁷ Section 3.5.2

paradigms, possible shifts in these paradigms, and experiences as they occurred (Corbin & Strauss, 2008).

3.2.4.3 Tacit Knowledge

- Characteristic 3: value is given to the “legitimation of tacit (intuitive, felt) knowledge in addition to propositional knowledge (knowledge expressible in language form)” (Lincoln & Guba, 1985, p. 40).

A constructivist ontology calls for a particular consideration to intuitions and sights which result from a heightened awareness to the subtleties as teachers engage with new meanings of Assessment for Learning characteristics and their implementation within their classrooms. This is sustained through familiarity with the theoretical concepts of the research as well as with the school realities of the participating teachers. As McCracken (1988) asserts, this intimacy allows researchers to develop “a fineness of touch and delicacy of insight” (p. 32) with their investigation.

Linked very closely to this, Taylor, Bogdan, and DeVault (2016) extend this notion to the data analysis stage as well, and while acknowledging the challenges that this may present, they propose a number of suggestions to circumvent such difficulties. These include a thorough understanding of, and engagement with the textual data through repeated reading and the keeping of a permanent record of the intuitions formed during data analysis stage (Taylor et al., 2016) in an effort to develop a more

comprehensive understanding of the research area (Clough & Nutbrown, 2012; Creswell, 2009).

3.2.4.4 Qualitative Approaches

- Characteristic 4: the researcher adopts “qualitative methods over quantitative (although not exclusively)” (Lincoln & Guba, 1985, p. 40).

In contrast with quantitative methodologies, qualitative research is usually less interested in the quantification (Moustakas, 1994) and grouping of data about reality that is fixed and ready to be discovered (Bryman, 2012). In agreement with Kothari (2004), my particular interest as a qualitative researcher is to understand more closely the factors which affect teachers’ engagement with Assessment for Learning concepts and practices through the discovery of “underlying motives and desires” (Kothari, 2004, p. 3) as they collectively construct and interpret new realities (Merriam, 2009). This puts a responsibility on the qualitative researcher to approach research with an open mind, and as much as possible, set aside any existing assumptions and prejudices especially due to the emergent nature of the research (Merriam, 2009) which may be relevant to particular context and conditions (Bryman, 2012). In order to achieve this, prior to making contact with the research participants, in line with Miles and Huberman (1994) and Miles, Huberman, & Saldaña (2014), I articulated my beliefs and preconceived ideas which came into form through my own experience both as a teacher and, later on, as part of various senior management teams. Through this process, I unearthed my

cultural, personal and professional biases which would otherwise bear an effect on the participants' construction of their own understandings as well as on the interpretation of the data. Although it is difficult, if not impossible, for researchers to bracket themselves completely²⁸, I believe that by doing so, the meanings which participants attribute to their experiences, as much as possible, will limit their contamination with my personal biases.

As will be discussed in more detail later on in the next chapter²⁹, a distinctive property of the methods adopted in this qualitative research is the holistic view of the teachers' experiences and the avoidance of fragmenting into smaller components (Moustakas, 1994; Taylor et al., 2016). As participants construct new personal and collective experiences, the historical and present realities (Tracy, 2013) become fully integrated and it would be virtually impossible to anatomise such experiences and analyse such components independently. Therefore, although the process of analysis involves the identification of common, seemingly distinctive themes (Creswell, 2007; Moustakas, 1994), these are not to be considered as independent issues which can be interpreted in isolation but rather an interconnected web of shared "themes, categories, typologies, concepts, tentative hypotheses, and even theory" (Merriam, 2009, p. 16).

²⁸ See section 4.2.2

²⁹ See section 4.2

3.2.4.5 Purposeful Sampling

- Characteristic 5: the researcher “is likely to eschew random or representative sampling in favour of purposive or theoretical sampling” (Lincoln & Guba, 1985, p. 40).

Consistent with one of the main interests of this research study, that is, to provide a *deep* understanding of the teachers’ engagement with Assessment for Learning concepts and practices, apart from adhering to the ethical principles outlined in section 3.4, the choice of the participating teachers was guided by the following criteria:

- Participants in this study should have an expressed seminal interest in developing a deeper understanding of how Assessment for Learning practices can influence their own teaching methods. A willingness to change is critical to embarking on a potentially transformative process which is central to this research study.
- In view of the social constructivist approach of this study, the selected participants need to be willing and available to share and construct their insights along with their peers.
- The participating teachers need to show an openness to challenge their current assessment rationale and reflect on possible ways of improving their professional practices.

This methodological purposiveness (Richards & Morse, 2013) ensures a coherent relationship between all aspects of the research design. The main source of data, that is, the participating teachers, needs to be

selected carefully so that the intended outcomes of the study, as expressed by the research questions, are achieved.

3.2.4.6 Inductive and Responsive Approaches

- Characteristic 6: the researcher “prefers inductive (to deductive) data analysis” (Lincoln & Guba, 1985, p. 40).
- Characteristic 7: the researcher seeks to have “the guiding substantive theory emerge from . . . the data” (Lincoln & Guba, 1985, p. 41).
- Characteristic 8: the research design should be responsive to the unpredictable circumstances and allowed “to emerge (flow, cascade, unfold) rather than to construct it preordinately (a priori)” (Lincoln & Guba, 1985, p. 41).

Developing a credible understanding of the complex nature of professional learning and the consequent implementation of Assessment for Learning practices requires the adoption of an inductive approach, whereby the researcher starts from the gathering of relevant data and moves on to theorising as the study develops (Mertens, 2010). Within the context of this research study, and as discussed in further detail in section 3.2.3, this approach is preferred over the deductive method which is often associated with scientific investigation. Researchers adopting a deductive methodology select a theory or hypothesis relevant to the research area and attempt to test whether it applies to the context of their study or not.

Maxwell (2013) develops this argument further and asserts that an inductive approach requires the final text of the research questions to be determined right at the start of the study. He argues that the research questions, and therefore the focus of the study, are fine-tuned as the researcher engages both with the theoretical knowledge, as well as the data generated through the different phases of the research. This has in fact been the case of this particular study in which the research questions were submitted to various stages of revision and were finally “the *result* of an interactive design process” (Maxwell, 2013, p. 73) [emphasis in original].

3.2.4.7 Member Checking

- Characteristic 9: the researcher prefers “to negotiate meanings and interpretations with the [participating] human sources” (Lincoln & Guba, 1985, p. 41).

A review of literature proposes that the teacher’s individual perception of a phenomenon is central to any transformative and significant change implemented within the classroom. Moreover, as Krathwohl (2009) asserts, “Qualitative research is especially helpful when it provides us with someone’s perceptions of a situation that permits us to *understand* his or her behavior” (p. 238) [emphasis in original].

Credibility, which Bryman (2012) defines as “how believable are the findings” (p. 49), through an authentic evaluation of the data (Clough &

Nutbrown, 2012), is achieved when I, as the researcher, construct the meaning of reality in collaboration with the participating teachers. Moreover, in agreement with the emphasis Shenton (2004) places on the authenticity of the researcher's interpretation, the data collected is presented to the participants to ensure that their intentions were in fact captured. This "single most important" (Maxwell, 2013, p.126) step is taken to ensure that the researcher's viewpoint and biases do not alter the participants' true interpretation of their experiences.

The participants' contribution to the construction of emerging hypotheses is also central to the qualitative realm since it ensures relevance to the College context. The teachers' prolonged engagement with their practicing environment is difficult to replicate in other contexts, even if a researcher tries to achieve this by immersing him or herself extensively in the field (Mertens, 2010; Taylor et al., 2016).

3.2.4.8 Contextual, Thick Description

- Characteristic 10: the findings, analyses and discussions are presented through a "thick description" reporting which is preferred over "the scientific or technical" mode (Lincoln & Guba, 1985, p. 41).
- Characteristic 12: the implications of the research are very much tied to the context and as a result, the researcher is "likely to be tentative (hesitant) about making broad application of the findings" (Lincoln & Guba, 1985, p. 42).

In the context of interpretative studies, Denzin (2001) discusses ‘thick’ and ‘thin’ descriptions as contrasting means of sharing experiences - “In interpretative studies, thick descriptions . . . are deep, dense, detailed accounts [while] . . . thin descriptions, in contrast lack detail and simply report facts” (2001, p. 98). The notion of a ‘thick description’ as a means of understanding culture was discussed at length by Geertz (1973)³⁰. A central concept pervading in literature on qualitative studies is the ability of any reader, who would not necessarily be involved in the study, through a detailed description (Bryman, 2012; Cohen et al. 2007; Merriam, 2009), to be able to engage with the research context and experiences. He or she would therefore be in a position to form a thorough understanding of the essence of the research study (Moustakas, 1994) and form his or her own interpretations: “if we cannot expect others to replicate our account, the best we can do is explain how we arrived at our results” (Dey, 1993, p. 259). As discussed earlier, the experiences of teachers, as they negotiate with new understandings, is too deep and complex not to be portrayed holistically (Clough & Nutbrown, 2012; Moustakas, 1994), giving a feel of the “participants’ lived experiences of, thoughts about and feelings for a situation” (Cohen et al., 2007, p. 254). To this end, in agreement with Merriam (2009), the analysis of the findings of this research study is supported by my own field notes and evidence through direct excerpts from the participants’ contributions.

³⁰ Clifford Geertz notes that he adopted the term from the philosopher Gilbert Ryle (1949).

Another aspect related to a detailed articulation is that of *transferability* of findings to other research contexts (Merriam, 2009). This research study adopts the position taken by Clough and Nutbrown (2012), who assert that it is often the case that deep level investigation may be sacrificed if we want to achieve generalisability. Guba and Lincoln (1989) borrow the concept of external validity from the postpositive approach to research while noting that this depends on the relative similarities between the two research contexts:

“The constructivist does not provide the confidence limits of the study. Rather, what he or she does is to provide as complete a data base as humanly possible in order to facilitate transferability judgements on the part of others who may wish to apply the study to their own situations (or situation in which they have an interest)” (Guba & Lincoln, 1989, p. 242).

Linked with this is the responsibility of the researcher to provide “sufficient descriptive data [for other researchers] to make . . . similarity judgements possible” (Lincoln & Guba, 1985, p. 298).

The uniqueness of the context of this qualitative research study is a result of the present and historical culture and ethos of the College, the internal and external environment influences on the teachers at the particular time when the research is carried out, as well as the myriad personalities of the participating teachers. Such uniqueness, while adding richness to the existing body of knowledge, limits greatly the ecological validity of this study (Crooks, 1988). In this context, Moustakas (1984) insists that the writer is required to dig deeper and go beyond what is apparent. In other

words, the reporting is not just a detailed atomic recount of events and actions but rather an attempt to portray the below-the-surface experiences, meanings and intentions.

3.2.4.9 Bounded Design

- Characteristic 11: the research is more adapted to interpretation of data that is carried out “idiographically (in terms of the particulars of the case) rather than nomothetically (in terms of lawlike generalisations)” (Lincoln & Guba, 1985, p. 42).
- Characteristic 13: the research is typically delineated by clear boundaries “on the basis of the emergent focus” (Lincoln & Guba, 1985, p. 42).

These two characteristics of qualitative research are closely linked to the notion of the limited transferability discussed above. Nonetheless, in some respects, the College where this research study is carried out is similar to other local educational institutions; for example, most schools in Malta prepare their students to sit for national Benchmark Assessments³¹ and Secondary Education Certificate (SEC) examinations³², and are therefore somewhat constrained in the curricula they offer. The commonalities between educational institutions, albeit to a limited extent, may help the reader relate and transfer the finding to his or her own unique environment. Such distinctiveness arises through the varied

³¹ At the end of early school (also referred to as primary school), students sit for an examination in Mathematics, Maltese and English. The performance in these benchmark assessments determines the track (set) which students will be assigned to in middle and senior school (also referred to collectively as secondary school).

³² The Secondary Education Certificates are 16+ examinations set by the University of Malta and are comparable to the GCSEs set in the UK. The performance in these examinations determines the transition to non-compulsory post-secondary education.

interpretations of the internal and external factors which impinge of school life. Solvason (2005) discusses this in terms of the ethos and culture which embody the “spirit, climate, ambience” (p. 85) of the school (See also Allder, 1993).

Due to the bounded nature of this research study, and as a result its uniqueness, the meanings attributed to the findings may be fully understood when they are analysed with an awareness of the context of the participating College.

3.2.4.10 Trustworthiness

- Characteristic 14: the researcher seeks to find alternatives to “conventional trustworthiness criteria (internal and external validity, reliability, and objectivity) [which are deemed] inconsistent with the axioms and procedures of naturalistic inquiry” (Lincoln & Guba, 1985, p. 42).

The relevance of validity and reliability, as they apply to quantitative research, is different to qualitative approaches especially in the context of the preoccupation of adopting the right measurement techniques (Bryman, 2012) to achieve the set objectives of the study. In qualitative research, the concern of quantifying findings is not as pronounced as it is in quantitative research and therefore, as some scholars note (for example Cohen et al., 2007), other methods of confirming the authenticity (Bryman, 2012; Merriam, 2009) and faithfulness (Clough & Nutbrown,

2012) of the qualitative studies need to be considered. As an alternative, Lincoln and Guba (1985) suggest the criterion of 'trustworthiness' and draw a comparison between the four facets of trustworthiness with the criteria commonly associated with quantitative research:

Credibility. Lincoln and Guba (1985) parallel credibility with internal validity. Schwandt (2007) stresses that a credible study is one where the researcher's account correctly reflects the participants' views, meanings and interpretation, and that this can be supported by the data generated (Cohen et al., 2007). This research study adopts three of Lincoln and Guba's (1986) suggested techniques to ensure credibility, namely prolonged engagement and persistent observation, different methods of collecting data, as well as member checking (p. 18-19). As a researcher, my involvement with the participants was spread over one academic year. This allowed for the identification of the essence of the context and experiences as discussed earlier in this section. To avoid reliance on limited sources of data, to add strength to the findings and eventual conclusion (Mertens, 2010), and to add richness to the data (Mason, 2002), more than one method of data collection (Cohen et al., 2007) was implemented in this study. This served the purpose of looking at data from different angles (Neuman, 2007) and also to gather data in different contexts in order to provide a more comprehensive picture of reality (Groenewald, 2004). Through group sessions and individual semi-structured interviews my intention was to engage in an extended journey to develop an understanding, that as much as possible, reflects the reality

of the participants as they engage with Assessment for Learning practices. Moreover, in agreement with Cohen et al. (2007), and in coherence with one of the main purposes of the study (that is, to understand the transformation of teachers through their participation in a professional development programme), these methods of data collection are spread over the duration of the study. This enables me as the researcher to grasp the various stages of participant transformation over time.

One other technique suggested by Lincoln and Guba (1986) and which was adopted in this research study is member checking, or what Bryman (2012) refers to as “respondent validation” (p. 390). Lincoln and Guba (1985) assert that this is “the most crucial technique for establishing credibility” (p. 314). Creswell and Miller (2000) note that the participants’ involvement in the confirmation of the data and the researchers’ interpretations adds to the credibility of the study.

Transferability. Lincoln and Guba (1985) parallel transferability with external validity. This was discussed already in the context of providing enough information to the reader through a thick description so that a comparison could be made based on the similarity to other studies.

Dependability. Lincoln and Guba (1985) parallel dependability with reliability. Schwandt (2007) insists that peer researchers should have a high degree of confidence that the account truly mirrors the real natural context of the study (Cohen et al., 2007). Dependability contrasts with reliability, which is very often associated with the quantitative realm and

which is linked with the replicability of the findings, even in different contexts. To achieve this high level of dependability, an auditing approach (Bryman, 2012) was adopted through the keeping of all records relevant to the research design, including personal notes and interview scripts. Merriam (2009) also suggests that a detailed description of how the data was collected and analysed is included in the research script.

Confirmability. Lincoln and Guba (1985) parallel confirmability with objectivity. Due to historical experiences, especially in the context of this particular research study, the researcher cannot be entirely objective when carrying out qualitative research (Bryman, 2012). However, through the awareness, isolation, and articulation of personal biases (as discussed previously), the researcher needs to provide the reassurance that he or she acted in good faith and that the personal convictions, as much as possible, do not impinge on the interpretations of the participants' realities.

Another technique common to phenomenological designs is 'bracketing', which Merriam (2009) defines as the setting aside of "prior beliefs about a phenomenon . . . as not to interfere with seeing or intuiting the elements or structure of the phenomenon" (p. 25). This will be discussed in more detail in the following section.

3.3 Research Approach

3.3.1 Introduction

Within the context of the characteristics of qualitative research discussed in section 3.2.5, the design of this study is such that it addresses attempts to generate rich and meaningful information which address the main and subsidiary research questions (Blaxter, Hughes & Tight, 2010; Trafford & Leshem, 2008). This necessitates an approach which puts the participants' views and perspectives at the heart of the data generation and analysis processes (Creswell, 2007). This section lays down the strategy (Fullan, 2007) of how the participating College and teachers were invited to take part in this research study with a concluding discussion on the relevant ethical considerations. Such a plan is designed with a full awareness of the unpredictability of research studies in education, especially due to the fact that, as Yin et al. (2008) maintain, there are many variables beyond the researcher's control which may impinge directly or indirectly on the study.

3.3.2 Identifying the Participating Teachers

The rationale of criteria for identifying potential participating teachers was based on the purposes of this research study, as well on key issues which were raised by renowned scholars. Since a purposeful sampling strategy was adopted (Leedy & Ormrod, 2015), I am aware that this does not necessarily represent the population of teachers in Malta, especially since each learning environment has different internal and external variables which impinge on these contexts. However, on the other hand, the criteria for selecting the

participants do not lead to a very dissimilar sample of what one would expect to find in the wider teaching population. This approach was deliberately adopted so that the findings would not be completely irrelevant to other learning environments. In agreement with Merriam (2009), the nature of the sample was such that the generated data would enable me to develop a deep understanding of the participants' transformation, in coherence with the purposes of this study, as outlined in the research questions.

Creswell (2007), Boyd (2001), and Lincoln and Guba (1985), in their discussion on the suggested number of participants, maintain that since the researcher is more interested in the depth of the experiences, approximately ten participants should generate enough information till saturation is reached. Undoubtedly, this also depends on the nature and frequency of the methods used. In agreement, Krueger and Casey (2015) and Marczyk, DeMatteo and Festinger, (2005) maintain that the number of participants should be between five and ten, while Leedy and Ormrod (2015) suggest a sample size of between five and twenty-five because this allows for the generation of varied points of view while at the same time allowing enough time for all participants to be able to express themselves. Another consideration in the identification of prospective participants and schools is Black et al.'s (2003a) suggestion to choose year groups which do not have additional pressures of high-stake examinations. They were proposing this in the context of their study through which they were introducing formative assessment practices, a process which would be hindered if faced with these additional obstacles.

Drawing upon these insights, what follows is a list of criteria which I drew up in order to identify potential research participants:

- Eight teachers were invited to participate in this study. This number was chosen to yield sufficiently rich data and at the same time allow for attrition which might occur during the course of the project. Moreover, during the focused group discussions, this number allows participants to express themselves uninhibitedly, allowing enough time to debate without having to rush through their argument.
- During their participation in the study, I hoped that the teachers would ideally share common subject areas to encourage discussion and sharing of ideas. Apart from avoiding additional difficulties in implementing formative assessment practices due to multiple-subject teaching (Black et al., 2003a), this would facilitate the peer support due to a commonality in the issues and challenges teachers may encounter as they engage with Assessment for Learning concepts. If, due to the availability of teachers willing to participate in the study, this was not possible, I could consider identifying a limited number of subject areas without compromising the richness and depth of the participants' contributions. Furthermore, the individuals invited to participate in this study were from a wider pool of teachers who teach subjects similar to those taught in other schools in Malta. As stated earlier in this section, the research context is not very dissimilar to other school environments; thus facilitating transferability, albeit limited.

- The educational institution where this study was carried out prepares students between MQF³³ Level 1 up to Level 7. The first three years of this progression are considered as a foundation stage, where the students (aged 16 years and over) are given the opportunity to develop the knowledge, skills and competences which they may not have fully acquired during their compulsory secondary school years (5 to 16 years). The formative nature of these levels and the efforts to curtail undue dependence on the summative component of assessment provide the right environment for identifying the participants in this research study. If this is not possible, the invited participants would ideally be teaching at levels which are not principally concerned with final evaluation and certification.
- Awareness and pre-knowledge of concepts associated with formative assessment and relevant experience in this area is not a criterion for participation. The reasons for this are twofold. Firstly, individuals who have gone through pre-teaching training would have been exposed to the notion and possible implementation strategies of formative assessment. Therefore, differentiating between the levels of participant preparedness would be difficult, if not impossible to achieve. Secondly, although this research context is a bounded one, having a sample which is typical of the population of teachers would facilitate some limited transferability.
- The teachers' general attitude towards learning, their outlook on professional development and their participation in College life is

³³ The Malta Qualifications Framework (MQF) is mainly based on the European Qualifications Framework (EQF) and serves as a comparison tool between local and foreign qualifications (NCFHE, 2016).

considered. This ensures that the participating teachers share a genuine interest in the learning of the students they teach and are willing to explore initiatives which may leave a positive impact on the students' learning.

- For logistical purposes, during the data generation phase, the identified participants were free from teaching commitments on Wednesday afternoons.
- In line with the ethical considerations discussed below, the teachers were asked to freely express their consent to participate in this study.

3.3.3 Identifying the Participating School

3.3.3.1 Criteria and Identification Process

Due to the nature of the study, the choice of the educational institution in which to carry out the research study was not critical. The central tenet of this study was not the particular characteristics of a specific school but rather the teachers and more specifically, how they related to their participation in a programme focused on Assessment for Learning practices. The rationale guiding the selection of the participating College was that this does not vary greatly from the other local educational contexts:

- The College had already given consideration to the effect of assessment on students' learning and how practices could be improved to enhance learning. Within the wider, Maltese context, this has been a common strategic action point for a number of schools due to the fact that it is one

of the set standards which are audited by the Directorate of Quality Assurance and Standards in Education³⁴: “The school’s assessment policy and practices sustain quality development at classroom and school levels through both formative and summative assessment.” (Quality Assurance Department, 2016, p. 3).

- The Senior Management Team shows a willingness to allow teachers within their responsibility to engage with initiatives with special emphasis on those related to this research study. This is to ensure that the teachers are not faced with additional challenges but are free to use their professional judgement to improve student learning.

From the various schools which could be possible candidates for participation, through discussions with the respective SMTs, two educational institutions were identified as suitable options. Following further logistical considerations, one was invited and agreed to be involved - Malta College of Arts, Science and Technology (MCAST).

3.3.3.2 MCAST – An Overview

MCAST is the main state-owned, post-compulsory educational institution offering Vocational Educational Training (VET) from MQF Level 1 to 7. Since its re-establishment in 2001, MCAST has grown considerably both in the number of students and in the range of courses in different areas. The number of registered full-time students in the academic year 2016-17 was 6,725, while

³⁴ The Quality Assurance Department within the Directorate for Quality and Standards in Education is responsible for regular inspections and reviews of all licensed primary and secondary schools in Malta.

part-time registrations added a further 3,000 (Registrar’s Office, personal communication, March 15, 2018). This increased participation in VET addresses the national strategic need to bridge the skills-gap, which is mainly the result of the scarcity of human resources and rapidly changing labour market needs - a direct consequence of Malta’s size (MEE, 2015). Moreover, in line with the Government’s strategy to reduce the number of school dropouts after completing compulsory schooling (MEE, 2012), MCAST has recently been involved in the introduction of Vocational qualifications in the compulsory educational sector.

The 147 courses (MCAST, 2016) are offered across six institutes which, together with the campus on the neighbouring island of Gozo³⁵, provide the operational services to three Colleges. These focus on the design of the curricula and programmes at the various MQF levels as shown schematically below:

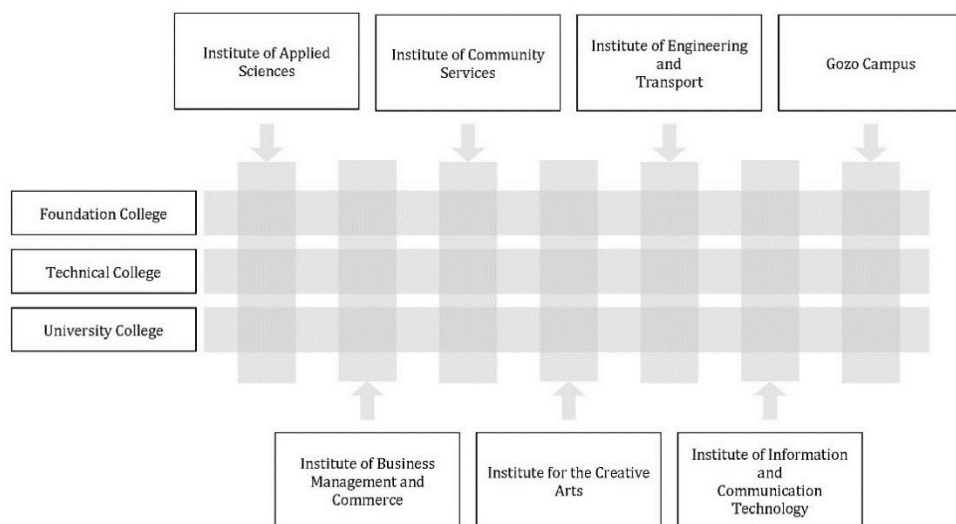


Figure 3:1 – Colleges and Institutes within MCAST

³⁵ The campus on the smaller island of Gozo runs a selection of courses offered within the different institutes in Malta.

Apart from these, the University College has recently launched the first two courses at Master level in line with MCAST's strategy to provide a complete academic path.

The entry requirements are dependent on the courses, MQF levels, as well as the area of specialisation. Courses at Level 1 do not normally require any passes at SEC levels, while students wishing to enrol at Level 2 are typically asked to present a confirmation that they have completed compulsory education successfully. Students at these levels are enrolled in classes which offer revision of the basic concepts which are typically covered in compulsory secondary schooling. At the same time, students are gradually introduced to the vocational subjects so that at the higher levels, most of the units are aimed at preparing students for their eventual employment in industry. This intentional focus on the key skills subjects in the early years ensures that, as students advance through the higher levels and become employable, they are adequately equipped to fulfil the needs of the labour market. The pool of key skills subjects which are offered to students across all levels include English, Mathematics, Maltese, Science, Information Technology, Individual and Social Responsibility, and Entrepreneurship. Upon the presentation of a basic European Computer Driving Licence (ECDL) certificate³⁶, students will be exempted from attending Level 3 Information Technology classes.

Students wishing to pursue a course at Level 3 are required to present the Secondary School Certificate and Profile (SSC&P), a certificate confirming that

³⁶ In recent years, most secondary schools have opted to offer ECDL as part of their curriculum.

they have completed compulsory secondary education together with a pass at SEC level. Alternatively, an additional pass at SEC level can be presented instead of the SSC&P. Students completing Level 2 at MCAST are also eligible to apply for any course at Level 3 offered by the respective institute.

Students who do not attain a SEC pass in English, Mathematics, and Maltese are asked to sit for an Initial Assessment Test (IAT). This serves as a key indicator of whether the student would require additional assistance in any of these subjects. Moreover, since the learning community is an international one, students who were never exposed to the Maltese language, in addition to their main programme, are offered Maltese as a Foreign Language at two levels, one for absolute beginners and another one which is a continuation of the beginner's course. Apart from providing the necessary local language skills, this course is especially intended to help in the integration of international students within the local culture.

Levels 4 and 6 are also possible entry routes into vocational education. Students who, through compulsory secondary education, attain a certain number of SEC passes, are eligible to skip the lower levels of MCAST and pursue courses either at Advanced Diploma level, that is Level 4, or at degree level, that is Level 6. As an integral part of most vocational courses at these levels, students are required to go on work placements or internships related to their respective area of studies. This ensures that students are not only exposed to the academic aspects of their learning but are also given the necessary skills and competences required by the local industries.

MCAST is a self-accrediting educational institution, as defined by Subsidiary Legislation 327.433³⁷ (The House of Representatives, 2012) and therefore, all programmes designed and delivered within the College are required to fall within the regulatory parameters as set out by the National Commission for Further and Higher Education (NCHFE). This is the official regulatory body which oversees the standards of the qualifications in Malta as detailed in Article 64 of the Education Act. As a direct consequence of this legal obligation, all programmes of study offered at MCAST are based on learning outcomes and on a credit system, thus facilitating referencing to the National and European Qualifications Framework (NCHFE, 2016). All Level 1 to Level 4 courses are accredited through the European Credit System for Vocational Education and Training (ECVET), while for the higher levels, the European Credit Transfer and Accumulation System (ECTS) has been adopted. The number of credits assigned to the courses vary according to the nature of the course and the respective MQF Level, ranging from 40 credits at Level 1 to 240 credits at Level 6³⁸. In view of the fact that each credit (both ECVET and ECTS) is equivalent to a workload of 25 hours, these standardised credit systems give “an estimation of the time an individual typically needs to complete all learning activities such as lectures, seminars, projects, practical work, work placements and individual study required to achieve the defined learning outcomes in formal learning environments” (NCHFE, 2016, p. 32).

³⁷ Also referred to as ‘Further and higher education (licensing, accreditation and quality assurance) regulations’.

³⁸ The typical credit value for MCAST degree courses is 120.

3.3.3.3 Assessment Processes at MCAST

The assessment processes are clearly guided by regulations which are endorsed by the Council of Institutes (COI)³⁹ following discussions with all the interested stakeholders. One such document of particular relevance to this research study is 'Assignments, Assessments and Appeals Policies and Procedures for Levels 1, 2, 3, 4 and 5' (MCAST, 2015). This document specifies that a variety of methods should be used to assess student learning and that all such methods should correspond to the learning outcomes and relevant grading criteria listed in the respective subject syllabus. These regulations also specify that as part of the assessment process, apart from grading the student's work, feedback is given to indicate "what has been achieved or not achieved and possible areas for development" (MCAST, 2015, Point 3.12). Students who fail one or more subjects are allowed the opportunity to reattempt the assessment which then usually takes the form of a one time-constrained assignment attempted under the supervision of MCAST personnel. In the context of this research study, although these regulations put an emphasis on grading and the establishing of whether the student has achieved at least a "minimum amount of knowledge or learning . . . to satisfy the prescribed unit criteria" (MCAST, 2015, Point 3.15), they allow lecturers⁴⁰ to explore methods of utilising assessment and feedback to affect learning. As

³⁹ The Council of Institutes is one of the governing bodies of the College, established by virtue of the Education Act, Chapter 327, Article 91 and is responsible for guiding the College on issues related to educational and professional matters.

⁴⁰ The term 'lecturer' is commonly used within MCAST to refer to the individuals delivering teaching sessions. For the purpose of this research study, since all participants were involved in modes of teaching which are typical to schools, the terms 'lecturer' and 'teacher' are used interchangeably.

stated above, this has been one of the main criteria in identifying possible participating schools.

More recently, the Foundation College issued a document, 'Assessment Guidelines for Foundation College Levels 1, 2, 3', (MCAST, 2016) outlining three assessment models as part of a strategy to standardise such processes across the Foundation College levels. The rationale behind these guidelines is that of ensuring a balance in the percentage weighting of the different types of assessment methods for a particular assignment. Moreover, they are intended to encourage participation in class by awarding a maximum of ten percentile points over and above and distinct from the marks attained for academic achievement. Again, although there is a considerable focus on the summative component of assessment, these are initiatives aimed at providing feedback to students both throughout the completion of their work and also once the work is submitted.

3.3.3.4 Professional Development at MCAST

With an aim to promote life-long learning and further specialisations, MCAST supports its staff members both through the provision of study leave as well as through financial schemes. Moreover, due to the vocational mission of the College, most of the recruits, while equipped with strong industrial experience, may lack pedagogical training⁴¹. In view of this, the Vocational Teacher Training Unit (VTTU) within MCAST offers a part-time programme to

⁴¹ In Malta, the main provider of teacher training is Faculty of Education within the University of Malta through the Masters in Teaching and Learning.

all staff holding a full-time lecturing post, focusing on the critical areas of teaching and learning, including the purposes and uses of assessment. Participation and completion of this course are now an obligation for all newly recruited lecturers and a contractual requirement for progression.

3.3.3.5 Gaining Access to the Research Field

I identified three gatekeepers, namely the MCAST Principal and CEO, the Vice-Principal who oversees all research initiatives within the College, and the MCAST Research Ethics Committee. Following an informal indication that I could proceed with the study at MCAST, my next stage was to seek formal approval from the Principal and permission to access the field for research purposes. In this request I made it clear that, due to the particular organisational structure and vocational mission of MCAST, it would be impossible to shield its identity from anyone who is familiar with Malta's educational context. Therefore, changing the name of the institution to protect its anonymity would be ineffective. On the other hand, as a measure to protect the identity of the participating teachers, their names were replaced by pseudonyms. This approach was outlined in the formal approval request letter to the Principal.

3.4 Ethical Considerations

Once this formal permission to access the College was granted, the next step was to request endorsement from the MCAST Research Ethics Committee⁴². This addressed two obligations relevant to this research study. Firstly,

⁴² Appendix A

according to MCAST regulations, all studies carried out within the College are reviewed and sanctioned by this committee prior to the commencement of the field work. Secondly, this committee has the legal authority to assess the ethical issues with regard to research studies and endorse accordingly. Therefore, approval for research that is granted by this committee carries local recognition.

Following this, I applied for ethical approval from The University of Sheffield⁴³ which assured that I was aware of my responsibilities as a researcher with respect to the participating individuals and College. What follows is a discussion on the specific ethical issues which were taken into consideration.

3.4.1 Informed Consent

The free participation of individuals is critical to this study and deliberate steps were taken to ensure that the consent given by participants was in the context of being fully informed about the study and the expectations of them. Drew, Hardman, and Hosp (2008) assert that such consent requires that the participants have the capacity to freely choose whether to participate or not when presented with a complete picture (Cohen et al., 2007) of the research context. This also involves a clear understanding that consent is not permanent, may be renewed (Brinkmann, 2013), and that participants may withdraw at any stage without “counteracting potential undue influence” (Kvale, 1996, p. 112). The information sheet, which also included a consent form⁴⁴, was given to all participants prior to the commencement of the data

⁴³ Appendix B

⁴⁴ Appendix C

generation stage. The participants were asked to read the document at their convenience and once signed, return it to me.

3.4.2 Role Clarification

The initial identification of possible participants was such that it ensured teachers would not see me as a person of authority within MCAST. As stated earlier, the College in Malta is made up of six institutes, each headed by separate directors. During the time of this study, being responsible for the running of one of the institutes could have created a conflict between my role as a researcher and my responsibilities as a Director of an Institute. In order to address this issue, the following steps were taken:

- the participating teachers were employed in a separate department to the institute I was responsible for so that I was not their line manager;
- in my initial discussions with the teachers it was stressed that, in line with the research questions, that the purpose of the study was to *understand* their engagement with professional development and Assessment for Learning practices without any form of evaluation or judgement on their present or future performance;
- before consenting to participating, my role as a researcher was explained and it was made clear that this would not impinge in anyway on their appraisal, which is carried out by the Quality and Assurance Department, headed by a separate director;
- the participants were reminded that, even after giving their consent, they would have the opportunity of viewing any data relevant to them and they

would be able to amend or remove any sections which they felt could be harmful to their personal or professional reputation.

3.4.3 Confidentiality, Anonymity, and Privacy

The protection of the participants was further assured through the replacement of their names with pseudonyms. This was necessary because the number of participants is a small component of a much larger body of teachers within the Learning Support Unit (LSU). As stated above, they were made aware that the data collected, as well as relevant transcripts would be available for them to read and, if necessary, revised. These transcripts were later forwarded to the participants as a means of confirming their responses. To further ensure anonymity, the respective subject each language teacher taught was not specified in this dissertation. The nature of the subject was not a critical issue which was being investigated in this study and therefore, this precautionary step, while protecting the identity of the three language teachers, would not bear any repercussions on the eventual findings and interpretations. This was especially important since there was only one participating teacher teaching one particular language. On the other hand, due to the fact that there were four participating Mathematics teachers, this additional layer of confidentiality was not necessary.

3.4.4 Approaching the Participants

Once all the necessary authorisations were in hand, an email was sent to nine full-time teachers working within LSU to introduce myself and the research

study and invite them to an introductory meeting. The objectives of this session were to:

- give an overview of the research study,
- clarify my role and expectations as the researcher,
- clarify the role and desired commitment of the participating teachers,
- discuss and distribute the information and consent letter to the participants,
- outline the logistics of the professional development sessions,
- formally invite the teachers to participate in the study, and
- distribute the 'participant profile form'.

Four out of the nine teachers agreed to attend the introductory meeting while another four, although interested in the professional development programme could not attend the meeting and therefore, separate meetings were held with these teachers. One teacher declined the invitation due to other personal and work commitments.

3.5 Data Generation

3.5.1 Introduction

The purpose of this section is to provide a detailed description of the methods which were implemented to generate data. This should provide a clear account and justification of the steps which were adopted towards understanding how the participants engage with the context in which they operate (Richards & Morse, 2013), both on a cognitive and on an emotional

level. In line with Richards (2014), this account seeks to provide a convincing justification of the decisions taken by me, as the main researcher. The reader is provided with enough information that he or she can eventually construct a clear understanding of the processes involved in the data collection stages (Merriam, 2009). The nature of this study evolved around the characteristic nature of qualitative research (Bryman, 2012) which necessitates a distinct focus on the participants' work in their actual and natural environment. In their interventions, the participants were prompted to relate their reactions to their own classroom environment while expressing their concerns, hopes, beliefs, and perceptions to what was being proposed during the group sessions and one-to-one interviews (Groenewald, 2004). One of the dilemmas this imposed on the researcher was that to avoid undue manipulation of the research context (Wiersma, 2000) while at the same time, having a direct influence on the topics and delivery of the professional development programme. As Lincoln and Guba (1989) warn, the naturalistic researcher should be constantly aware of "the powerful pressure for completely open negotiations in light of the need to honor respondents' emic construction" (p. 231-232). This will be discussed in more detail in the following sections.

3.5.2 The Researcher's Level of Involvement

One of the early decisions which had to be taken was my level of involvement, both in the design and delivery of the professional development programme, and also in the stages where data was generated, collected, and analysed. I opted to be the sole researcher involved in this study and excluded any other

direct or indirect intervention with the participants in terms of study design. This decision was heavily influenced by my need to be fully immersed in the whole research process and to be able to note and record any changes which would have otherwise gone unnoticed, a notion which Patton (2002) addresses by asserting that in “qualitative inquiry, the researcher is the instrument” (p. 14). This point of view is shared by Lincoln and Guba (1985) who, in view of the complexities of the naturalist paradigm, claim that it is very difficult to have a data collection tool which adapts to unforeseen intricacies typical of such type of research. They insist that this can only be achieved when the data collection instrument is a “human” (Lincoln & Guba, 1985, p. 39). My direct involvement in the entire process allowed me to relate to the research in a holistic manner, moving away from the more positivist approach which supports the notion of fragmenting reality into smaller components and treating them separately. On the other hand, constructivism taps into the extent to which the participants’ points of view fit within the “larger and, often, hidden structures, networks, situations, and relationships” (Charmaz, 2014, p. 240). This also allowed me to develop an approach which was inductive (Merriam, 2009) and sensitive to the subtleties (Bryman, 2012) as the participants shared their views and opinions during the in-depth one-to-one interviews and the multiple group sessions (Creswell, 2007). One of my central intentions was that the participants and myself would collaborate to identify the critical issues relevant to this research study (Reiter et al., 2011). This further confirmed the significance, with all the related difficulties, of the

decision that I would be the only person to interact with the research participants throughout the data generation phases.

One of the conflicts I had to address prior to the commencement of the group sessions was that of negotiating the apparently conflicting roles of an advocate of the implementation of Assessment for Learning practices and that of trying to create the right environment where the participants could express themselves freely as they engaged with arguments put forward by me. I was concerned that the participants, out of loyalty to me as the researcher and in order to ensure the 'success' of my study, would express agreement without necessarily challenging their own convictions and without relating them to their everyday practice. This would certainly have defied the purpose which this research study set out to achieve. This issue was tackled in two main ways. Firstly, before each interview and group session, the participants, apart from being encouraged to express themselves freely and being ensured that confidentiality was guaranteed, were reminded that the main purpose of this study was not to gauge how effective the professional development programme was, or how well I led the sessions, but rather it aimed to focus on the way they negotiated any perceived challenges when considering the implementation of Assessment for Learning practices within their own teaching environments. Secondly, during the group discussions which were an integral part of the sessions and which followed my exposition of Assessment for Learning strategies, I tried to keep a low profile, even physically, by sitting down and pushing myself slightly out of the circle. I kept my interventions during the discussions to a minimum to allow for the

debates to be led by the participants themselves (Lester, 1999). My role was one of ensuring that the discussions did not stray vastly off-topic, to ask probing questions to direct the exchanges towards the research questions of this study, and to introduce new issues and provoke responses when the conversation reached saturation. Since the format of the sessions, including my role, were not that of a typical focus group, in the text of this thesis, I refer to these as 'group sessions' rather than 'focus groups'. This is intended to convey an accurate understanding of the session dynamics, free of any connotations linked with the term 'focus group' as a method of data generation.

3.5.3 Thick Description

As discussed earlier⁴⁵, the account should contain sufficient detail to convey the experience of the researcher and participants to the reader. Research strongly supports the notion of 'thick description', which Geertz (1973) explores by referring to Gilbert Ryle's (1971) two renowned lectures published in *Collected Papers*. Geertz maintains that a rich account of the setting and context within which the research is carried out goes beyond the mere description of events but rather explores these through the lens of the context, history, environment, behaviours, and attitudes (Denzin, 2001).

Thick description evokes emotionality and self-feelings. It inserts history into experience. It establishes the significance of an experience, or the sequence of events, for the person or persons in question. In thick description, the voices, feelings, actions, and meanings of interacting individuals are heard. (Denzin, 2001, p. 100)

⁴⁵ See Section 3.2.1.5

It is with this purpose in mind that section 3.3.3 gives a detailed description of the participating College. Furthermore, the next section provides some background information about each participant, using pseudonyms, based on the information gathered prior to the first set of interviews.

3.5.4 Background Information about the Participants

Following their consent to participate in the research study, the teachers were separately asked for factual and biographical data which would serve to locate their experiences within the scope of this study. Some details, though interesting and useful for the purpose of building a better picture of the setting, have been omitted to ensure confidentiality and anonymity.

3.5.4.1 Laura

Laura is a language teacher at the College where this study is being carried out. She is a graduate of the University of Malta with a Bachelor in Education and a Masters in an area very much related to the subject she teaches at MCAST. The academic year during which Laura participated in the study was her tenth year of teaching, some of which were spent teaching the language within the Secondary sector. Laura is very meticulous in her work and takes genuine pleasure when she observes that her students show evidence of learning. She is a reflective teacher, committing herself to explore ways to improve her teaching year after year. She highly values her own professional development and this urged her to participate in this research study.

3.5.4.2 Iris

Iris is a language teacher, graduating with a degree in Education at the University of Malta. She also has a Masters degree in an area which is not related to the subject she teaches at MCAST. She takes sincere interest in the well-being of her students especially those who are vulnerable and come from challenging environments. During the year of participation in the study, Iris had 16 years of experience in teaching the same language, albeit at different levels. Iris appears to be a very determined and assertive person. She is a firm believer that, as much as possible, she gives more importance to feedback in the form of written and verbal comments rather than merely grading and awarding marks. One of her strategies is to delay showing the marks to students, to reinforce the fact that she gives more value to the progress of her students than simple evaluation of the students' tasks.

3.5.4.3 Dunstan

Dunstan is a teacher of Mathematics with an education degree in the subject conferred by the University of Malta. At the time of the study, he was reading for a Masters in Education. He has six years of experience in teaching Mathematics at different levels at MCAST. Although he is aware of the challenges certain learning environments present, he commits himself to exploring ways of reaching out to all the students he is responsible for. Dunstan is a self-reflective practitioner, open to explore new areas of professional development – a characteristic which urged him to eagerly accept to participate in this research study.

3.5.4.4 Daniel

Daniel is also a Mathematics teacher with 9 years of experience. He feels very comfortable with supporting students who have difficulty in the subject and does so by creating an environment where, rather than 'spoon-feeding' the correct answer, he directs students towards learning through inquisitive questioning as well as through peer support. Daniel is a firm believer that students who struggle in the subject should be supported and encouraged by first focusing on anything positive in the student's work and then moving on to explain the areas of difficulty.

3.5.4.5 Jacob

Jacob holds a degree in Education and when participating in the research study, had been a practising Mathematics teacher for the last 6 years. Together with other peers, he was assigned specific duties within his department; this put him in a prime position to be able to take a 'bird's eye view' of the teaching and assessment processes. This was the main motivational factor which compelled him to volunteer to participate in this study and explore alternative methods and purposes of assessment. Moreover, due to these additional responsibilities, Jacob is in a position to influence decision makers on issues related to teaching and learning.

3.5.4.6 Jodi

Jodi is the fourth participant who teaches Mathematics at various levels within MCAST. Following the completion of the degree in Education at the University

of Malta, Jodi taught Mathematics in a number of different schools, after which she was employed at MCAST. The academic year of participation in this study was her fifth year of teaching. A striking trait in her teaching was her extensive use of questioning in her lessons. This was also evident in most of the examples she brought to the group sessions and in her contributions when discussing the formative nature of this strategy. It was an area which she identified as being positively affected through her participation in this research study.

3.5.4.7 Mariah

At the time of participation, Mariah had more than eighteen years of language teaching experience, most of which were in local secondary schools. Apart from holding a degree in Education, she successfully completed a Masters degree in an area related to the language she teaches. She seems to be a pragmatic person, open to new ideas in teaching and learning whilst at the same time recognising the difficulties and dilemmas linked with their implementation with her classroom environment. Mariah's contributions to the group discussions were heavily based on her professional practice as well as her personal experience of the education of her own children. She was critical and vocal in her interventions which helped the group explore alternative views of the issues being discussed.

3.5.5 Choice of Data Generation and Collection Methods

The data generation and collection phase was an integral part of a whole coherent process which, as Yin (2009) notes, follows a “logical sequence that connects the empirical data to a study’s initial research questions and, ultimately, to its conclusions” (p. 26). Two sets of individual qualitative interviews and group sessions were identified as the most appropriate methods to yield relevant data which could effectively address the purpose of the study as outlined by the research questions (Maxwell, 2009). Initially, other research methods were tentatively considered as means to collect relevant data namely, classroom teacher observation, analysis of students’ work and participant observation as they operate within the classroom (Bryman, 2012). However, since the focus of this study was specifically on the interaction between the teacher as a participant and the implementation of Assessment for Learning practices, it was decided that sets of one-to-one pre- and post-programme (Guskey, 2002a) semi-structured phenomenological interviews would be carried out to provide relevant information on the participants’ engagement during the nine group sessions on the strategies of Assessment for Learning (Cohen et al., 2007, Kvale, 1996).

The interviews and group sessions were held in the Maltese language because this was the preferred language of all participants. As a result, the participants were comfortable to express themselves, hence providing social cues such as body language and intonation which, as Opdenakker (2006) notes, provide additional insights which go beyond the participants’ verbal responses. With

the teachers' consent, the interviews and group sessions were audio recorded. These were then transcribed verbatim, making side-note of the non-verbal communication, including very long pauses and gestures. The texts were translated into English and documented in smaller sections based either on the length of the comment, the contributor or the particular issue being discussed. To assist in retrieval, each excerpt was given a reference code while also taking note of the specific point on the audio recording timeline where it was taken from. This was especially useful during the analysis phase when it was sometimes necessary to refer to the recordings and personal notes to ensure that the respective participant's contributions were interpreted correctly. This was carried out for each set of interviews and group sessions for a total of twenty-three transcript documents. It is pertinent to note that, as much as possible, depending on the available time, the first stage of the transcription process was carried out immediately after the session itself. Apart from the fact that this helped me in remembering and making note of the non-verbal communication, it allowed me to detect emerging themes which could influence the direction of the subsequent sessions (Bryman, 2012).

3.5.6 The Pilot Study

The pilot study entailed going through the process of the introductory meeting as discussed below, outlining the key issues relevant to participating in the study as well as carrying out a pre-programme interview. This was conducted with a staff member within the institute I was responsible for but who did not

eventually participate in the research study. The pilot was carried out to ensure that there was no ambiguity in the information and consent letter as well as in the interviewing questions. The interview also served the purpose of refreshing and honing my interviewing skills (Kvale, 1996). In strong agreement with this, Merriam (2009) contends that:

Pilot interviews are crucial for trying out your questions. Not only do you get some practice in interviewing, but you also quickly learn which questions are confusing and need rewording, which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place (Merriam, 2009, p. 95).

Following the pilot interview, the necessary refinements were implemented based upon the feedback received and my self-reflection.

3.5.7 The First Set of Interviews

The initial stages in the design of first set of semi-structured interviews were aimed at identifying key questions to capture the participants' understanding of the subject matter (Cohen et al., 2007) as well as issues relevant to the main and subsidiary research questions. In view of the fact that phenomenological research strongly advocates the use of open-ended interviews to elicit the world view of the interviewees (Bryman, 2012; Cohen et al., 2007; Creswell, 2007; McCracken, 1988; Silverman, 2014), the one-to-one sessions took the format of semi-structured interviews with the prepared questions serving as prompts to ensure the flow of the conversations (Merriam, 2009). In order to achieve this, the participants were free to "roam freely" (Wragg, 2002, p. 149) as they construct and express their own unique understanding of their world

(Creswell, 2007; Silverman, 2014). Moreover, as Bryman (2012) suggests, in the roles of the researcher and interviewer, I allowed myself to depart from the pre-planned guides, delving deeply into issues which were deemed relevant and important. Capturing the essence of the participants' experience (Merriam, 2009) went beyond the mere capturing of data (Cohen et al., 2009) which is typically more identified with the positivist approach.

Initially, the intention was to print the set of questions on flash cards but, following the pilot interview, I realised that flipping through the cards distracted me from focusing on the participants' contribution and hindered the flow of the interview. In the end, I printed the set of questions on one page, occasionally referring to them, mainly as an aide memoir, as the discussion developed.

Discussing the conducting of interviews within the context of social research, Cohen et al. (2009), stress that when the interviewer asks for clarification or prompts the interviewee (Bryman, 2012), this is done in an ethical manner. By doing so, the researcher would be avoiding situations where the participant feels uneasy due to the presumed lack of knowledge on the matter. Merriam (2009) insists that, for a successful interview, one should avoid direct confrontations and arguments but rather seek to comprehend what the interviewee deems as meaningful and noteworthy (Bryman, 2012). To achieve this, in my introduction of each interview, I outlined the purpose of my research study and insisted that, while there is no right or wrong answer or opinion, my main interest was more on the way they perceive their reality

rather than conducting a cognitive examination on assessment. Moreover, while I clarified my bias on the formative nature of assessment, I urged the participants to express their views freely stressing that this was critical to the success of my study. The first question:

What would you like to achieve through this professional development programme on assessment?

apart from serving as a means to understand their expectations of the group sessions, served as an introductory question to set the participants at ease by creating a non-threatening environment. The question which followed:

Can you talk about the main type of assessments which you make use of in your practice?

was set to build an understanding of the participants current assessment practices and the issues related to such practices. This question was specifically asked before the question:

What comes to mind when you hear the terms 'formative assessment', 'Assessment for Learning', 'Continuous Assessment' and 'summative assessment'?

to reduce the chances that the participants reply through textbook definitions of these different types of assessments. Other questions, for example,

During the past academic year, have you had the opportunity to share success criteria for a particular piece of work with your students?

What are your views on students assessing their own or their friend's work?

Have you ever had the opportunity of discussing with your students a complete exemplar of a what a good piece of work would look like?

explored the participants' conceptualisation and implementation of a number of strategies typically associated with Assessment for Learning. The responses to these questions provided an insight into each of the participants' worldview on Assessment for Learning prior to the professional development programme. This in turn was instrumental on two counts. Firstly, it provided me, as the researcher, with a baseline to possibly to compare with once the professional development programme was over. Secondly, it helped me build a clearer understanding of the professional development programme from the participants' point of view within the contexts of their past and present experiences⁴⁶. As a result, I was in a better position to fine-tune the planning of the group sessions content accordingly.

Another set of related questions was particularly aimed at provoking a discussion related to the main research question which contextualises the study within the teachers' environment:

⁴⁶ See Section 3.2.3

If you had to identify ways how to implement your assessment practices differently, what difficulties would you expect to encounter? Are these difficulties likely to stop you from implementing the changes? What possible solutions can you think of to address these difficulties?

An understanding of the complex participants' working environment, (Creswell, 2009) as it emerges from the meaning they give to their realities (Bryman, 2012; Cohen et al., 2007; Merriam, 2009), is a key characteristic of social research which strives towards building a comprehensive conceptualisation of such experiences (Clough & Nutbrown, 2012).

It is important to note that the exact wording and sequence of the questions varied according to the development of the respective interview and also because the interviews were held in the Maltese language. These served more of a guide to induce and direct the conversation between the researcher and the interviewee (Bryman, 2012; Edwards & Holland, 2013).

3.5.8 The Professional Development Programme

This section brings together the critical aspects of the teachers' engagement in their own professional development, which are discussed in the literature review section⁴⁷. The programme was designed in such a way which strikes a balance between setting an agenda which focuses on exploration and consideration of the theories and implementation of Assessment for Learning

⁴⁷ Namely section 2.3.3

practices while at the same time allowing adequate space for the participants' engagement and, as a result, involving them in the development of the programme. Therefore, at an early stage of the research design, it was decided that the overall content and overall direction of the programme would be developed and delivered by me, while the participating teachers would be given the opportunity to direct the group session discussions, with limited interventions from my end. This will be discussed further in the sections which follow.

3.5.8.1 Programme Design

The content of the programme focused on the main aspects of Assessment for Learning which were identified through the literature review. As a way to develop the sessions, both in content and in sequential structure, I used the seven strategies outlined by Chappuis (2015) as reference. This choice was guided by two major reasons. Firstly, the text provided a sequential development of the main principles of Assessment for Learning which could be adapted to the participants' context. Secondly, and more determining to the final structure, teacher training programmes which are delivered nationally adopt a similar design; thus, facilitating professional conversations with other teachers working in other schools.

Once the strategic direction and content of the programme was established, the focus shifted on how the discussion is made relevant to the participants' contexts within the wider perspective of MCAST. Guskey (2002a) strongly stresses the relevance of the particular characteristics of teaching and

learning context within which the newly discovered ideas will be implemented. He cautions against the indiscriminate adoption of “universal ‘best practices’” (Guskey, 2002a, p. 51) without due consideration of the context. This is also related to the concern which teachers might have that the positive implications of Assessment for Learning, which are strongly supported through research, may not be relevant in their classrooms (Avalos, 2011; Black et al., 2003a; Villegas-Reimers, 2003). In agreement, Gardner et al. (2011) claim that the process of trying out “ready-made approaches” (p. 108) may lead to a lack of a clear understanding of the key principles behind the implementation of new assessment for learning ideas and practices. In view of this, I developed the programme with a clear appreciation of the participants’ professionalism (Black et al., 2003a) and of their valid contributions which they make to the particular topic being discussed. In coherence with one of the principles of Assessment for Learning, the focus is shifted away from which tasks they need to employ and towards an exposure to alternative ideas which the teachers could consider within their own classroom environments.

3.5.8.2 Programme Implementation

This section focuses on the implementation of the bespoke professional development programme within the context of the theories discussed in the literature review chapter, section 2.3.

The number of sessions held was conditioned by the theoretical content related to Assessment for Learning, as well as on the practical limitations

associated with participating in a study on a voluntary basis. Originally, I had planned that the whole programme would consist of fourteen sessions of ninety minutes each but as the academic year progressed, it was evident that fitting all these sessions would have been too stressful on the participants, with the risk of attrition. Ultimately, nine sessions were held, tackling the different strategies reviewed by Chappuis (2015) and which will be discussed later in this section. In general, these nine sessions were held every fortnight on Wednesday afternoons. However, due to restrictions imposed by the academic calendar of MCAST, together with the heavy workloads typical of the examination periods, the programme spanned over seven months – between November 2016 and May 2017. All participants participated in the study for its duration with no one choosing to withdraw from the study and attendance by all was very regular. Ahern and Le Brocque (2005) suggest that attrition is related to the extent to which the participants are treated with “the highest level of respect and consideration” (p. 64). Moreover, in this particular research study, this consistent commitment may have been because the teachers considered this experience as being more of collaborative learning opportunity rather than the more passive participation in someone else’s research study. This was evident in the responses in the second set of interviews (to be discussed later), which were held once the programme was over and consistent with the theoretical background discussed earlier⁴⁸.

Each of the nine sessions had two major components, which often merged seamlessly, depending on the topic and participants’ engagement. In

⁴⁸ Section 2.3.3.3

consonance with the theories discussed in section 2.3.2.3, more specifically, in sub-section 'Teachers as experts on assessment', I presented theoretical background on the strategies on Assessment for Learning, using Chappuis (2015) as the main text to give structure to the sessions. Although all participants were experienced teachers with professional certification in education, this addressed the need to create a common understanding of the various facets of Assessment for Learning, which in turn formed the basis of the discussions which took place during the sessions. Moreover, as the Department for Education in England and Wales (DfE, 2016) in a report which sets out the standards for professional development of teachers maintains, programmes would be more effective if participants are exposed to high-quality research studies and varied resources. Evidence from other contexts serves to reassure teachers that any alternative practices which they may consider in their teaching is backed by the experience, knowledge and expertise of other practitioners.

One of the early dilemmas I had to address was to determine the extent to which I should intervene during the group discussions. As indicated earlier, these sessions served for two main purposes, that of providing the participants with a professional learning opportunity on Assessment for Learning while at the same time providing robust and meaningful data to address the research questions. As a result, I had to strike a balance between the role of the promoter of Assessment for Learning strategies and that of a moderator who, as Bryman (2012) contends, should interfere as little as possible and "err on the side of minimal intervention" (p. 509). This was not

easy to achieve but since many times I listened to and transcribed the audio recordings in-between sessions, has helped me identify my shortcomings and hone the skill of playing the dual roles.

In this context, the sessions had many characteristics of a typical focus group namely that of having a number of selected members hold an in-depth discussion around a specific topic (Bryman, 2012; Marczyk et al., 2005). Moreover, this selected method of data generation shares the same constructivist perspective (Merriam, 2009) as a focus group which strives to attain high quality data that is constructed through the interactions of the group members. On the other hand, my role within the group was not that of a typical impartial moderator as noted by Krueger and Casey (2015):

Once the moderator begins to explain or defend, it changes the dynamics of the discussion, and the moderator becomes the expert rather than the participants being the experts. Professional group moderators have a distinct advantage in this respect because they are emotionally detached from the topic in study (2015, p. 105).

In view of this, for the sake of clarity, in the context of this research study, the term 'group session' was preferred over the term 'focus group'. This would avoid attributing characteristics which are typical of focus groups to this study but which do not apply to the data generation methods implemented.

3.5.8.3 Programme Structure

This section focuses on the way the groups sessions as part of the professional development programme were structured. As stated earlier⁴⁹, apart from the

⁴⁹ Section 3.4.4

first introductory meeting, there were a total of nine sessions which provided the theoretical background relevant to Assessment for Learning. It is also important to stress that although the second part of each session was specifically dedicated to the sharing of practices, views and ideas, the participants were encouraged to intervene whenever they felt the need to do so.

Session 1 was entitled 'The Meaning of Assessment'. During this session, a comparison between Continuous Assessment, Summative Assessment, Diagnostic Assessment and Assessment for Learning was presented. The participants were invited to reflect on the different purposes and properties of each type of assessment by stressing that, as Nitko and Brookhart (2014) insist that such types are categorised by the *decisions* which are taken as a result of the assessment. Prior to making time for an open exchange of ideas, findings from past research studies which emphasised the positive effect of the implementation of Assessment for Learning has on student learning was presented.

Sessions 2 and 3 addressed the implementation of *Learning Intentions* as a strategy to direct the teaching and learning processes, with a special emphasis on what students should know, be able to do and attribute value as a consequence of instruction (Chappuis, 2015; Nitko & Brookhart, 2014). During the third session, a series of examples of learning intentions was shared with the participants. In coherence with the discussion on exemplars⁵⁰,

⁵⁰ See Section 2.2.3.8

only examples of well-constructed learning intentions were presented for discussion during the group sessions. The concluding part of session three was a practical activity during which the participants were asked to construct learning intentions relevant to the subjects they teach and which were based on the characteristics discussed earlier.

During the following group session, professional conversations evolved around the implementation of rubrics as a tool for Assessment for Learning. Apart from presenting theoretical background and findings from previous studies, a considerable amount of time was spent on clarifying the distinction between 'marking schemes', for scoring purposes and 'rubrics' as a learning tool within the context of providing focused and informative feedback. This was important mainly due to the fact that lecturers at MCAST are urged to draw up marking schemes to add objectivity and transparency to their grading and it is very common that the two terms are used interchangeably.

The main theme of sessions five and six was the communication of feedback about the student's tasks, with special attention given to the adoption of principles which previous studies have proved to have a considerable positive impact on the student's learning. One of the key texts referred to was John Hattie's (2009) acclaimed meta-analytical study, *Visible Learning*. These principles were also discussed in the context of the implementation of rubrics, by proposing an additional column in the matrices in which the teacher could include suggestions on how the student can improve on the particular component of learning.

The last three sessions were dedicated to revisiting the strategies and characteristics of Assessment for Learning, designating most of the time available for real-life cases and hands-on practice related to languages and mathematics, these being the two subject areas of the seven participants. This provided an opportunity to view the strategies not as distinct and isolated methods or techniques but rather as a comprehensive approach towards assessment (Boud, 2000). Since, as mentioned earlier, the duration of the programme was shorter than originally planned, other approaches, such as self- and peer-assessment, were also integrated within these three sessions.

3.5.9 The Second Set of Interviews

Once the group sessions were over, a second set of semi-structured interviews were held to delve deeper in the issues raised during the previous sessions and which were relevant to the purpose of this research study. At the beginning of each of the seven interviews, which were held separately with all participants in June 2017, when the group sessions had come to an end, I explained that the purpose was not that of gauging what the participants have learnt and the extent to which their understanding on Assessment for Learning complies with the theory presented in the sessions. I made reference to the scope of this research study which focuses particularly on the teachers' engagement with the implementation of assessment practices through the participation in a professional development programme. Similar to the first set of interviews and group sessions, these interviews were audio recorded and transcribed verbatim.

One aspect in which the second set of interviews was different to the first was that, due to the unique way each participant engaged with the various strategies discussed during the group sessions, there was no fixed sequence of questions common to all interviews. Giving considerable importance to the participants' point of view, my role was that of creating an environment where they could express themselves freely on issues which they deemed important. My interventions were guided by emergent themes from previous sessions as well as particular points which the respective participant had raised previously (Seidman, 2013).

For this reason, the next section, rather than offer a discussion on the purpose of the different interview questions, contains a general review of the focal points common to most interviews. It is important to note that not all issues were discussed by *each* lecturer because this depended on the importance each participant attributed to the respective issue.

3.5.9.1 Project-Based Assignment

One practice which was identified by the participants as possibly conducive to the formative nature of assessment was one which was commonly referred to as the 'project-based assignment'. For all subject units at MQF Level 3⁵¹, it was required that lecturers assign a class-based assignment spread over a number of lessons, depending on the quantity and nature of the tasks being assessed. Since the students were expected to work on this assignment under supervision, the lecturers were required to collect the work at the end of each

⁵¹ By means of the referencing process at European level, the MQF Level 3 is equivalent to EQF Level 3 (NCHFE, 2016)

lesson. This necessitated that the students' work was graded after each lecture and, if required, the student is given a correct version of the answer to be able to continue working on the subsequent task.

During the interviews, the participants had the opportunity to describe how their outlook on this project-based assignment was affected in view of the discussed strategy of allowing students to revisit their work once they receive information on how to improve. Discussions evolved around whether grading was really necessary at each stage of this extended task and how well constructed feedback contributed to considerable improvement in the student's work when the lecturers opted to move away from the suggested guidelines.

3.5.9.2 Envisaged and Experienced Constraints

As anticipated, the participants expressed their concerns about factors which could impinge negatively on the implementation of assessment for learning practices within their teaching environments. In this context, one question which was asked of all participants was aimed at exploring the extent to which they consider the implementation of such practices as an added burden to their work. Through these interviews I tried to inquire into understanding any possible reluctance on behalf of the participants to move away or adjust their existing teaching practices. The factor of limited time was also explored in connection with the lecturers' participation in a professional development programme extended over a number of weeks.

3.5.9.3 Programme Feedback

With special reference to the subsidiary research question⁵², I guided the interview to elicit the participants' viewpoint on issues related to the group sessions. I purposely attempted to explore the extent to which the sessions left an impact on their understanding and attitudes towards Assessment for Learning and how this could affect their current and future classroom practices. In line with the main research question⁵³, the interviews were aimed at exploring the teacher's engagement at a cognitive and affective level, always within the context of their work and personal circumstances. During the interviews, the participants were also invited to share their critical opinion on the structure, content and delivery of the group sessions as well as on the group size and composition.

3.5.9.4 Programme Feedforward

Although within the boundaries of this research study, it is not necessary to extend the professional development programme further⁵⁴, international research strongly supports extended programmes spanning over two or three years. Therefore, in an attempt to give this study a stronger contribution to practice by identify critical components of what the participants considers as good practices, I prompted the teachers to express their views on the scope of extending the programme to another year. They were given the opportunity

⁵² In the context of participating in a professional development programme on Assessment for Learning strategies, what factors contribute to addressing these challenges, understandings and attitudes?

⁵³ What challenges, understandings and attitudes do teachers need to negotiate when implementing assessment for learning practices within a particular learning community?

⁵⁴ See Section 2.3.1

to suggest the structure, content and running of the sessions, the role of the programme coordinator as well as their potential participation. In order to avoid mere hypothetical scenarios, the participants were urged to contextualise their contributions within their actual personal and professional realities.

3.5.10 The Research Journal

In parallel with the preparation and transcription phases of the two sets of interviews and the groups sessions, I kept a research journal in which I recorded my reflections on any issues which I felt were relevant to the research study. These included my observations on the contributions made by the participants as well as actions which I thought were noteworthy during the transcription stages (Maxwell, 2013). Since the data generation and transcribing phases spanned a whole academic year, this journal was particularly useful to keep track of my experiences, insights, thoughts and feelings which I could later incorporate in the data analysis phase.

3.6 Chapter Conclusion

The chapter has discussed the methodology for this phenomenological study with a special focus on how constructivism and interpretivism impinged on the research design. The participating teachers and College were introduced to provide a clearer understanding of the context within which the study was carried out. A detailed account of the methods used to generate data, namely semi-structured interviews and group sessions was also given. My level of

involvement in the research process especially during the nine professional development sessions was presented in an effort to portray a more comprehensive overview of the data generation phase.

The following chapter presents an in-depth account of the data analysis processes and a critical discussion of the themes which emerged from such analysis.

Chapter 4 – Data Analysis and Interpretation

4.1 Chapter Introduction

Following a discussion of the methodology and methods implemented to collect qualitative data, this chapter addresses the ways in which this information, relevant to the research study, was analysed and interpreted. The purpose of such analysis, as Cohen et al. (2007) note, serves to engage with the research context, within a specific space and time, to “yield insight and understanding of people’s behaviour” (p. 23).

In order to achieve a deep level of realisation, Ryan and Bernard (2003) insist that the analysis process should eventually lead to developing any identified themes into theoretical models, in other words theorising the data (Merriam, 2009). This entails looking for the critical aspects of the generated data which are relevant to and address the research questions (Merriam, 2009). While the researcher radically (Clough & Nutbrown, 2012) and systematically sifts through these essential features of the data and analyses them from different angles (Moustakas, 1994), relationships between the data are constructed, helping the researcher add new meaning to his or her experience.

Acknowledging the fact that, as Cohen et al. (2007) observe, qualitative analysis heavily depends on a personal and intimate engagement with the data, the conclusions which are drawn cannot claim the absoluteness that can be claimed by positivist paradigm. On this issue, Dey (1993) insists that “there is no single set of categories waiting to be discovered” (p.117) but rather

multiple ways of looking through the data. Contrary to the deductive approach, this research engages with the data while attempting to identify and construct themes common across the units of data (Creswell, 2009; Polkinghorne, 1989). In agreement, Merriam (2009) insists that qualitative analysis is a comparative process through which data is broken down into smaller units and are regrouped according to the interpretation attributed by the researcher. Such analysis subscribes to the interpretive qualitative analysis process as outlined by Miles and Huberman (1994) with a particular focus on understanding what the data mean for the people involved (Miles, et al., 2014; Patton, 2002).

One of the pitfalls which qualitative research needs to attend to is that of approaching the themes independently without the due consideration of the wider, holistic context. Groenewald (2004), in fact, strongly contends that he prefers the term 'explicitation of data' (p. 49) over 'data analysis' as a way to maintain a holistic sense of the participants' realities and a means to counteract the "tendency for analysis to atomize and fragment the data" (Cohen et al., 2007, p. 282). I concur with Richard Hycner's dated, yet valid suggestion to write personal notes, in the form of short paragraphs, of each interview and group session right after transcribing the respective audio recording. Through this process, while incorporating tentatively emergent themes, "a sense of the whole" (Hycner, 1985, p. 291) is maintained. Closely linked with this are the risks associated with setting categories at the very early stages of analysis and tagging data to them without giving due consideration of other themes which might emerge later on along the process

(Groenewald, 2004). This is especially significant when, as in the case of the second set of interviews in this research study, transcription of previous sessions and the early stages of theme identification were carried out prior to the final interviews. As the term implies, the emergent themes are derived through the analysis of data and not vice-versa.

4.2 Analysis Process

This research study adopts an interpretative phenomenological approach based on Smith and Osborn (2004) by seeking “to explore/understand/make sense of the subjective meanings of events/experiences/states of the individual participants themselves” (p. 229). Brocki and Wearden (2006), while acknowledging a gradual evolution from a ‘description’ to an ‘interpretation’ of the participants’ realities, in agreement with Giorgi (2008), contend that such method of analysis is not highly prescriptive, and therefore, avoids defining the exact steps to be followed. However, it puts the responsibility on the researcher to strive to understand the experience as it really is and avoid taking anything for granted (van Manen, 2014). Giorgi (2006) discusses the validity of observations, making a clear distinction between reality and its perception, urging the researcher to focus on the participants’ perception of their world and avoid claims that this is in fact the reality as it really exists. Therefore, as Moustakas (1994) maintains, this study does not question whether the participants’ recounts of experiences truly reflect reality, but rather builds on the perspective of their world.

In an effort to limit prejudging the participants' viewpoints (Patton, 2002), Moustakas (1994), while acknowledging an influence by Edmund Husserl's works, affirms that the phenomenological researcher should, as much as possible, avoid approaching analysis with preconceived ideas. Conversely, he contends to access the participants' viewpoints in "a way that requires that we learn *to see* what stands before our eyes, what we can distinguish and describe" (Moustakas, 1994, p. 33) [emphasis in original]. This position is echoed by Sarantakos (2013) and Patton (2002) who claim that the researcher should primarily be conscious and clear of his or her personal biases and make deliberate efforts to avoid contaminating the description and interpretation of the participants' realities. In coherence with Giorgi's (2008) contentions and, as will be discussed further below, within the context of this research study, this was particularly challenging to achieve.

Two terms with similar connotations and most commonly applied to describe such an approach are 'epoche' and 'bracketing' (Creswell, 2007; Moustakas, 1994; Patton, 2002), which Reiter et al. (2011) propose to achieve by writing down one's own position and experiences on the research area prior to the data collection and generation phase. Following this practice, in the introductory and literature review chapters of this thesis, I outlined my position related to the two major areas of this study – Professional Development and Assessment for Learning. As Moustakas (1994) claims, this provides the researcher with "an original vantage point" (p. 86) while at the same time contributing to being more open and able to, as far as possible,

interpret the participants' experiences as they really see them (Leedy & Ormrod, 2015).

Epoche, or bracketing, does not deny that the researcher's preconceived ideas and biases exist. Research is not carried out in an inert environment, free from contextual, past or present influences. One could argue that it is inevitable that researchers construct their own understanding of the areas being investigated, especially in view of the fact that, very often, researchers have an expressed interest in such areas, namely due to past experiences and professional involvement. Holloway and Wheeler (2017) argue that, even when researchers try hard to be objective, "their own biases and experiences intrude" (p. 23). In addition, as Giorgi (2006, 2008) affirms, being aware of one's own biases does not necessarily ensure in full certainty that the analysis and interpretation is in fact free from any bias. In view of the research design of this study, this was especially difficult because, during the group sessions, I had to address the difficulty of presenting strong arguments in favour of the implementation of Assessment for Learning practices while at the same time allowing for the participants to express themselves freely without feeling compelled to subscribe to my points of view. It was not possible to simply hide my positionality from the participants, even because it was critical to have an environment of mutual trust that is conducive to a deep discussion about their experiences. On the other hand, during the analysis stage, conscious of the centrality of human experience in phenomenological research (Groenewald, 2004), through "disciplined and systematic" (Moustakas, 1994, p. 22) actions, I made efforts to unearth the participants' experiences while, as much as

possible, withholding my own prejudices. Such efforts on my part were even more challenging when strong opinions were expressed – both when they were congruent with my conceptions and also when the participants did not share my points of view. I was especially careful to give all opinions equal importance when coding and categorising (Patton, 2002). As Moustakas (1994) maintains, “the source [of data] . . . cannot be doubted” (p. 52).

Keeping a focus on the research questions (Creswell, 2007), the challenging process (Merriam, 2009) of identifying significant excerpts of the transcripts enables the researcher to develop an understanding of the participants’ experiences (Moustakas, 1994). In order to achieve this, Merriam (2009) and Giorgi and Giorgi (2008) suggest that following a complete reading of the transcripts while making reflections on key critical issues, the analyst goes through the text again and attempts to create categories (Patton, 2002), or “clusters of meanings” (Creswell, 2007, p. 61). These groupings list and describe the different themes of the participants’ experiences of the phenomena and are singled out either due to their specific relevance to the research or due to recurring nature (Ryan & Bernard, 2003). This process therefore, also involves setting criteria to identify which data are not relevant to the research study (Patton, 2002). On this point, Ryan and Bernard (2003) argue that such a delimiting process is not an absolute one but is rather heavily dependent on the subjective views of the researcher. What is critical to establishing the validity of the identified themes is to include enough descriptive information to help the reader engage with the researcher’s arguments (Ryan & Bernard, 2003).

Central to phenomenological analysis is attributing each theme equal importance – valuing them equally, all at the same level of relevance. Moustakas (1994, p. 53), heavily influenced by the works of Husserl, refers to this approach as ‘horizontalization’:

The perceptions that emerge from angles of looking Husserl calls horizons. In the horizontalization of perceptions every perception counts; every perception adds something important to the experience.

The preliminary, tentative steps in the data analysis were carried out during the transcription of the interviews and group sessions so that any issues which required further investigation would be raised during the period when the participants were available for the research study. However, although my personal notes and reflections were kept for possible future referral, the first formal steps in the data analysis were taken when I read the transcripts of the first and second set of interviews, together with the group sessions at least three times. The first reading helped me develop an overall, holistic feel of the participants’ experiences (Giorgi, 2012). In view of the fact that I had carried out the interviews and group sessions and carried out all the transcribing, I was not totally incognizant of the issues raised. Through the readings which followed, I identified significant statements which I felt were relevant, albeit remotely, to the focus of this research study. Bernard (2011) refers to this process as the “ocular scan method” (p. 304) and describes it as the reviewing of all transcripts, summaries, and research journal for a number of times, highlighting key parts which could possibly be useful when identifying the emerging themes. During these readings, through the use of a word processor,

I digitally highlighted the texts, underlined key statements, and wrote my own comments and reflections in the margin. By means of cutting and sorting (Lincoln & Guba, 1985) through the transcript texts, key direct quotes from the participants' contribution were identified and recorded. During this phase, I was careful to include all the necessary information to allow easy reference and linking back to the original text. At this early stage of analysis, I chose not to limit the number of categories. I preferred approaching the text with an open mind, well aware of the pitfalls of premature categorisation referred to earlier. This was a laborious process, spanning a number of months and therefore, for the sake of consistency, I opted to use a software which I had developed earlier to analyse secondary sources related to this research. I preferred this over third-party packages since I was already proficient in using the software I had written and because it served the purpose of helping me organise my data efficiently. As the number of categories grew bigger, I made use of a third-party mind-mapping software, Edraw, so that I would be able to visualise these groupings better. This gave me the opportunity to repeatedly shift and group the branches and sub-branches of the mind map, which corresponded to what later became the 'sub-themes' and 'themes'. This was done to achieve a relevant set of categories, sorted in a logical sequence and which would later be analysed, discussed and interpreted. The final order corresponds to the structure of section 4.3.

Reference: S02T19 Participant: Laura

Text

In secondary school, in the mid-year, I discussed with the students . . . listen, this is what you got in your comprehension task . . . I used to separate marks. Even though there was a 60 on 100, I separated the marks. . . and in what . . . in the comprehension task, the inferential questions, non-inferential questions, vocabulary.

Remarks:
n/a

Key Term Add New Term Sub-Term Add New Sub-term

03_02 Rubrics 2886

2886

post-CPD interview questions

02 Emotional connection	02_01 Assisting students	Purpose of initiative is to help students
02 Emotional connection	02_03 Justice with student	Concept of justice and fairness
02 Emotional connection	02_05 Communication [clear with students]	Teachers establishing channels of communication with students
02 Emotional connection	02_02 Feedback [ego vs task]	Self-oriented feedback vs task-oriented feedback
02 Emotional connection	02_04 Face to face communication	Face to face being the most preferred way of participants to give feedback.
03 Rubrics	03_02 Rubrics	Rubrics [general]
03 Rubrics	03_03 Rubrics and marks	Using rubrics but with marks, rubrics for judgemental purposes
03 Rubrics	03_01 Rubric with assignment	Give rubric with assignment.
04 Drafting and redrafting	04_01Drafting/Redrafting	
04 Drafting and redrafting	04_02 Timeliness	Time between task and feedback
05 Exemplars	04_03 Exemplars	
06 Learning Intentions	06_03 Learning Intentions [challenges]	Challenges teachers could face when implementing learning intentions
06 Learning Intentions	06_02 Learning Intentions [attempt to write]	Actual examples of participants' learning intentions
06 Learning Intentions	06_01 Bigger picture vs Learning Intentions	How learning intentions focus on today vs the need to see how these fit in
06 Learning Intentions	06_06 Purpose of learning intentions	What participants view as the purposes of learning intentions
06 Learning Intentions	06_05 Learning Intentions [understanding of]	Participants' understanding of learning intention
06 Learning Intentions	06_04 Learning Intentions [Relevance and clarity]	Issues relevant to the relevance of Learning Intentions to students
07 Feedback	07_02 Feedback [examples of feedback teacher give]	usually ad verbatim quotes.
07 Feedback	07_07 Purpose of feedback	Reasons why feedback is given, What do students do with feedback
07 Feedback	07_06 Misinterpretation of feedback in AOL	Teachers opinion contrasts literature findings
07 Feedback	07_05 Feedback to teachers	Use of information for teachers to act upon
07 Feedback	07_03 Feedback [methods of]	How teachers actually give feedback
07 Feedback	07_01 Feedback [effectiveness of]	Issues regarding the
07 Feedback	07_04 Feedback [pitching level]	Pitching level of feedback according to the student's level!
08 Constraints - Introduction	08_00_01 Introduction (Challenges)	
08.01 Constraints - The system	08_01_05 Purpose of tasks and assignments	
08.01 Constraints - The system	08_01_04 Pressures [resources]	pressures due to time, class size
08.01 Constraints - The system	08_01_02 Mammoth task	Difficult to implement
08.01 Constraints - The system	08_01_01 Constraints	Difficulties imposed by superiors, the system, workload, time
08.01 Constraints - The system	08_01_03 Pressures [external]	external pressures teachers feel when implementing initiatives
08.02 Constraints - The student	08_02_01 Motivation of student	Motivation as a required starter
08.02 Constraints - The student	08_02_02 Student awareness	Importance of student being actively involved
08.03 Constraints - Ingrained culture	08_03_02 Fixation on marks	Marks ingrained in our DNA!
08.03 Constraints - Ingrained culture	08_03_06 Understood meaning of FA	What participants say FA is
08.03 Constraints - Ingrained culture	08_03_05 Teacher's beliefs	Importance of teacher's conviction. This is not a list of what teachers belie
08.03 Constraints - Ingrained culture	08_03_04 Purpose of summative	Reasons why end of unit tests are set
08.03 Constraints - Ingrained culture	08_03_031 Purpose of marks and grades	Reasons why marks/grades are given, What do students do with marks/gra
08.03 Constraints - Ingrained culture	08_03_01 Categorisation of student	Grouping, streaming
08.04 Constraints - Hopelessness	08_04_01 Resigned	Summative will prevail!
08.04 Constraints - Hopelessness	08_04_02 Why change a winning horse	
09 CPD - looking back	09_05 Usefulness of 1st CPD programme	
09 CPD - looking back	09_01 Added burden [is FA an]?	
09 CPD - looking back	09_03 CPD [effects of]	Effects of this CPD
09 CPD - looking back	09_02 Conclusion (CPD - Postmortem)	
09 CPD - looking back	09_04 Eureka moments	

Figure 4:1 - Screenshot of Theme Analysis Software

The quotes, grouped by the respective themes and sub-themes, were individually printed on fifteen by ten-centimetre cards (Ryan & Bernard, 2003) and after a lengthy process of iterative revisions, repetitive or overlapping meanings were removed, while the labels were fine-tuned to reflect better the essence of the participants' experiences. On the other hand, care was taken to ensure that meanings which were significantly different from each other were not grouped together (Groenewald, 2004). The theme analysis software program allowed me to filter the quotes and categorise by participant, session, sub-themes, and themes, which proved to be very useful in the eventual stages of analysis. There were instances where quotes could be tagged under more than one label. In such cases, in an effort to ensure that each selected quote was given equal weighting, these were eventually assigned to one sub-theme and theme only, according to what I deemed as reflecting the essence of the contribution. Alternatively, when appropriate, quotes which included more than one argument were broken down into shorter ones and categorised accordingly.

The number of quotes which were eventually used in the later stages of analysis were filtered down to 465, each tagged to one sub-theme and the respective theme. These quotes were once again printed on cards, grouped by theme and sub-theme, with the following information:

- participant's verbatim quote
- source of quote
- author of quote
- theme
- sub-theme
- quotation reference code
- transcript reference code

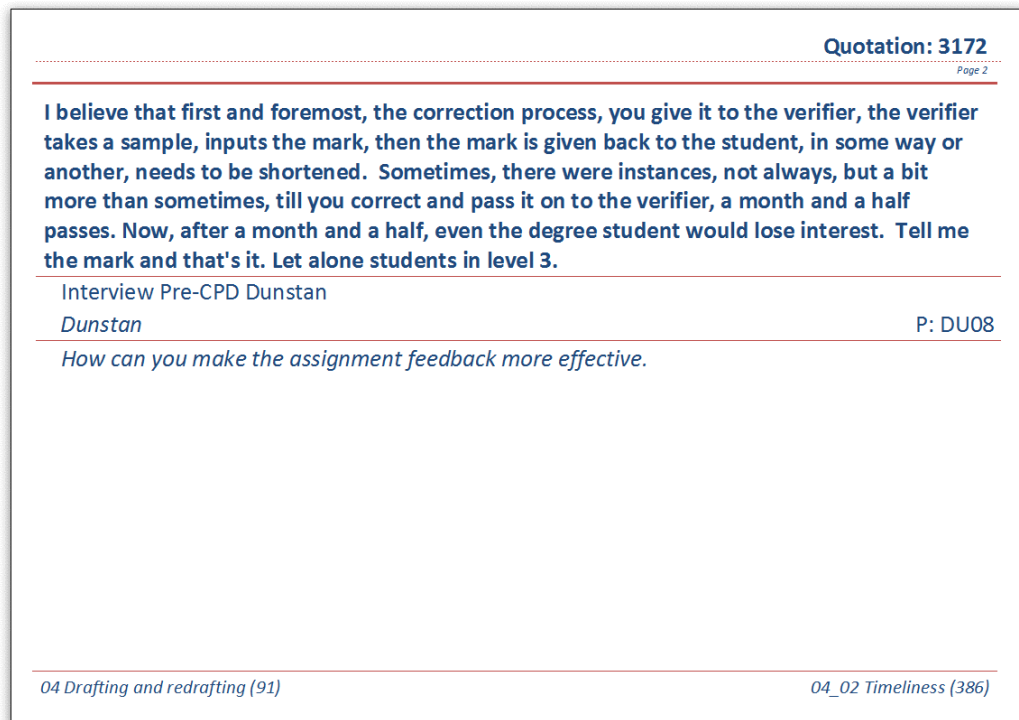


Figure 4:2 - Sample of the Participant Quotation Cards

The purpose of the cards was solely to aid me in the subsequent steps of analysis, namely the logical organisation of ideas and writeup.

To summarise, the primary objective of this lengthy data analysis process was to lift the participants' experiences from their recounts and contributions

made during the interviews and group sessions. These have been rendered in the text of this thesis in a way that preserves as much authenticity as possible, through a critical discussion about the key emergent themes and sub-themes.

4.3 Emergent Themes and Sub-themes

4.3.1 Overview

Eight main themes were identified as emerging from this study and which were relevant to the research questions:

- Assessment for Learning: making connections
- Rubrics as a learning tool
- Drafting and redrafting
- Exemplars as a learning tool
- Learning intentions: for learning or for teaching?
- Assessment for student learning
- Assessment for teacher learning
- Professional Development for Assessment for Learning – the way forward

At this point it is important to acknowledge that the process of theme identification was not carried out in a theoretical or philosophical vacuum but rather in one which, to some extent, was influenced by the researcher's own position, the purpose of this research, and by the content of the professional development programme. Therefore, the themes listed above and discussed in more detail below, should not be considered simply as a naïve appearance of meanings as one analyses the texts. In fact, one could notice a

correspondence between the identified themes and the assessment for learning strategies discussed during the group sessions. As much as the process of data collection is “inescapably a *selective* process” (Miles and Huberman, 2014, p. 55) [emphasis in original], one could also argue that, despite all efforts on behalf of the research, the emergent patterns in the data are also conditioned by the context within which the research is being carried out.

In this respect, each theme, together with the respective sub-themes, was identified with an intention to address the main and subsidiary research question which focused on the engagement of teachers with Assessment for Learning practices:

- Research Question - What challenges, understandings and attitudes do teachers need to negotiate when implementing Assessment for Learning practices within a particular learning community?
- Subsidiary Research Question - In the context of participating in a professional development programme on Assessment for Learning strategies, what factors contribute to addressing these challenges, understandings and attitudes?

Six of these themes addressed issues which I identified as bearing an effect on the participants’ outlook on Assessment for Learning strategies. These included issues related to the participants’ value system and their personal convictions on teacher-student relationships – both in relation to individual students and also to the student body in general. Other themes which were

lifted from the data were related to the participants' professional vision on particular strategies which were discussed during the group sessions. The conversations on these themes focused on the way participants negotiated with their own conceptions as they were exposed to learning strategies from different perspectives. Given the purposeful sampling strategy adopted in this research study, it is worth noting that the participants were not entirely unfamiliar with the topics discussed during the group sessions. However, either the exposure to alternative viewpoints or the fact that they were invited to consider their implementation within their classroom environment, evoked emotions and reactions which will be discussed in the following sections.

The other two themes were concerned with the effect the group discussions had on the participants with a particular focus on the usefulness of the sessions in the context of their work. The participants were invited to be critical of the running of the sessions and to give their views on what they felt was particularly significant and to suggest ways in which they would have done it differently. Moreover, since research strongly points towards having extended professional development programmes⁵⁵, discussions were directed towards investigating the participants' viewpoints on the continuation of the group sessions in the following academic year, their possible involvement, and the structure which would benefit them most. Table 4:1 contains an outline of the main themes and respective subthemes and therefore, provides an overview of the research area.

⁵⁵ See Section 2.3.2

Table 4:1 - Main emergent themes and subthemes

	Theme	Subtheme
1.	Assessment for learning: making connections	Personal relationships
		Fairness, equality and equity
		Deservedness
		Perceptions and expectations
		Clarity in providing and receiving feedback
2.	Rubrics as a learning tool	Rubrics and face-to-face communication
		Rubrics and assignments
		Rubrics – a disparate meaning
3.	Drafting and redrafting	The extended assignment
		Resubmission and teacher motivation
		Resubmission – concerns and constraints
4.	Exemplars as a learning tool	Clarity of quality criteria
		An appropriate gap in learning
5.	Learning intentions: for learning or for teaching?	Meaning and understanding
		Learning intentions as lesson starters
		Compartmentalisation of knowledge
		Plus or perimeter?
6.	Assessment for student learning	Verbal or written feedback?
		Positive and negative comments
		Strategies, not solutions

7.	Assessment for teacher learning	Teachers as learners: A blank slate?
		Closing the information cycle
8.	Professional Development for Assessment for Learning – the way forward	Sustained support
		Knowledge and beliefs
		Subject-focused professional development

What follows is an analysis and interpretation of the emerging sub-themes related to the affective domain and on the participants' attitudes and values.

4.3.2 Assessment for Learning – Making Connections

Teaching and learning, together with most other events happening in schools, are heavily dependent on human interaction between teachers and students, between the teachers themselves and perhaps more determining, between peers due to the extensive time they spend in proximity to each other. Therefore, it may not be surprising that an underlying value in the participants' discourse on assessment and learning went beyond the mere delivery of facts, content, and knowledge (Boud, 1995a). Developing an environment of trust, perceived fairness and one which is conducive to positive relationships, supported through the implementation of Assessment for Learning strategies (Russell & Airasian, 2012; Willis, 2011) creates the right context for participatory communities of learning. This is also confirmed by a study carried out by Birenbaum, Kimron, and Shilton (2011), who investigated the relationship between Assessment for Learning, classroom assessment culture, and school-based professional learning community. The

five sub-themes discussed below were lifted from participants' contributions during the interviews and group sessions and relate to the parent-theme, which I titled 'Personal Relationships'.

4.3.2.1 Personal Relationships

Only last week, I stopped a student and told her 'I noticed [that you are taking your studies seriously]'. And she told me 'Yes, because I am trying to put my mind to it.' It was obvious that she was happy that she was doing her utmost and the fact that I noticed and told her 'Well done' But she had taken the decision to push herself. You do not want them to depend on you for their sense of worth.

[Laura, Group Session 9]

This excerpt was lifted from a longer discussion on the extent to which personal relationships affect the type of methods which teachers use to give feedback and the way students receive and follow up on such feedback. The notion that this open, positive climate supports learning is strongly supported in literature (e.g. Russell & Airasian, 2012; Tierney, 2014; Tobin, 2007). Moreover, as stated above, Assessment for Learning strategies contribute greatly in this regard (Birenbaum et al., 2011), especially if the teacher is viewed as a credible companion (Reeve, 2009) rather than one with a judgemental role.

This issue was raised during the sessions when the preferred forms of feedback was discussed. Almost all participants, while acknowledging the benefits of textual assessment over mere grades and marks, at some point during the year-long programme expressed their preference for verbal over written feedback.

Building up communication, a positive relationship with the student and sometimes less positive. It is through feedback that you will help them build their self-confidence, build the relationship between the teacher and them, so that they do things better.

[Jacob, Interview 2]

The comments I give are all verbal. First of all, it is impossible to write them all. Verbally, in two minutes, I could tell you a lot of things, there and then. Don't forget that you've already built a certain rapport with the students, there's an environment based on confidence.

[Mariah, Interview 2]

One key notion underlying such interventions is that a constructive rapport is a critical requirement for the effective acceptance and assimilation of such feedback. This is sustained by Dunstan's opinion on the importance of healthy and positive relationships:

The type of relationship you have with students is important. If you have a positive relationship and you tell them half a word, for their good, they won't take you wrong.

[Dunstan, Session 7]

Another important aspect is that verbal feedback, in the view of the participants, is a more appropriate way of communicating with the student because it takes into consideration the affective component as well:

Two students with the same paper, same mark, same mistakes, I talk to them in different ways. The feedback I give is not necessarily the same. When you have the student in front of you and you're talking to him or her, the first thing you see is how they are feeling. This is different to when you are writing feedback on paper.

[Jodi, Interview 2]

If professional development is intended to truly bring about transformative change in teachers, the affective component of teaching and learning, and consequently assessment, cannot be overlooked (Gravett, 2004). As stated earlier, the majority of activities within schools involve interactions between

humans, all with different roles and responsibilities. In my opinion, merely focusing on the mechanics of teaching and learning will make it very difficult to engage with notions which go beyond the legalistic approach to learning such as the ones discussed in the next section.

4.3.2.2 Fairness, Equality, and Equity

Closely related to the previous arguments are the ethical and pedagogical (Atjonen, 2014) considerations related to fairness, equality, and equity when providing differentiated assessment according to the level of the student's work. Brighton (2003), in her investigation on teachers' beliefs in differentiated teaching and assessment, notes that preconceived sentiments on equality, sprouting from the fear of misunderstanding and complaints from different parties, tend to hinder the adaptation of instruction and assessment according to the student's particular level. When there is a strong focus on accountability (Ball, 2012, 2003), sustained by regular audits to ensure that the teacher is abiding by a set of processes, assessment practices which yield measurable, comparable outcomes are preferred over those which may allow room for interpretations (Cizek, 2010; Knight, 2002; Wiggins, 2011). It is less difficult to justify a grade or a mark, especially when this is linked to the implementation of marking schemes (Atjonen, 2014).

What I've done was that in all the skills, discussion, writing task, comprehension, listening comprehension, I divided them again. For example, for the comprehension, question 1 has 2 marks. I will give 2 marks if you give me this type of answer, 1 mark if you give me this type of answer.

[Iris, Group Session 4]

I discussed with the students: 'listen, this is what you got in your comprehension task' . . . I used to separate marks. Even though there was a 60 on 100, I separated the marks. . . and in what . . . in the comprehension task, the inferential questions, non-inferential questions, vocabulary.

[Laura, Group Session 2]

Jacob, especially at the early stages of the programme, was one of the participants who was particularly concerned with the use of textual and verbal assessment. He acknowledged the possibility that for the same type of difficulty, two students would receive different levels of feedback, due to the varying depth of the relationship between the teacher and the student.

I think this issue of feedback has to do with . . . unfortunately . . . it gives rise to certain preferences. Not every teacher has the same relationship with each student. There could be many reasons. Possibly they are not motivated, cannot come for lessons and when they do, they misbehave.

[Jacob, Interview 1]

Later on, he reiterated his viewpoint in one of his contributions during the group sessions:

About feedback, we need to be careful because I am sure that, since we are all human, we are not giving the same feedback to everyone who has the same requirement of that feedback. It could be that Dunstan and Jodi have the same difficulty in the same problem, but the feedback would be different. Therefore, there is an element of preferences. There are many issues of preferences on this matter.

[Jacob, Group Session 6]

Atjonen (2014) corroborates this concern when reporting that the teachers participating in the research acknowledged that their assessment processes were not always fair, and this depended on the background, needs, and behaviour patterns of the respective student. In a comparable study, when asked for recommendations about fairness in the classroom, teachers

participating in Tierney's (2014) study expressed their disagreement with treating students differently unless the student's circumstances require otherwise. Tierney (2014), attributes this to the moral and professional obligation of teachers which compels them to treat students equally, both in the work assigned to them and in its assessment. In the context of Jacob's expressed concerns, it may be plausible to assume that these stem from his strong moral convictions that students should be treated fairly and that they all have equal learning opportunities.

Jacob's view point was explored in more depth in the 2nd interview. I was interested in understanding the underlying reasons of this concern and whether these went beyond his personal reflections on *actual* practices. I was also interested in exploring the reasons why he valued standard and similar assessment so highly. During the interviews held after the professional development programme was completed, what was particularly striking was his change of perspective with regard to the concept of fairness and equality of assessment. He attributed this to an altered scope of assessment – moving away from a judgemental, summative role to a more formative one. This also clarified the concerns he had expressed earlier that within the summative context, grading should be standardised so that the final certification is both reliable and authentic – in other words, the qualification awarded at the end of the course truly reflects the students' level of knowledge, skills and abilities.

I give feedback in class, and so it will not affect me how much feedback I'm giving and how much I'm not giving, because there's no mark. So, we do not need to talk about reliability [anymore], on the authenticity of the result. I am not constrained anymore on whom to help and whom I'm not helping. Who's present is present and who isn't I

am explaining the work and after multiple sessions you will lead them to the final answer. Now, when they are able to reach the final result, then you assess them on the final result.

[Jacob, Interview 2]

While, as Tierney (2014) argues, the implementation of Assessment for Learning strategies does not necessarily imply that such assessments are fair, practices which are more learner-centred and which are less concerned with certification and progression, allow teachers the flexibility to adjust their assessment methods much more than the traditional tests would (Black & Wiliam, 2004b). This is consistent with the conclusions of Flores, Veiga Simão, Barros, and Pereira (2015) who investigated the fairness of learner-centred methods over examinations and tests as perceived by undergraduate students. In their study, the researchers claim that their participants deemed learner-centred methods as being more effective and fair when compared to traditional testing. In agreement, such positive outcomes were also attributed to the fact that extended teacher-student interactions were typically associated with learner-centred methods:

These are methods that are more systematic, are developed over time and require negotiation, collaboration and the integration of different perspectives amongst students and between students and faculty. They also entail a closer interaction between faculty and the students and they occur over time. (Flores et al., 2015, p. 1532)

4.3.2.3 Deservedness

Within the real-world context of the classroom environment, teachers very often need to negotiate the extent to which students are willing to commit to their own learning. Moreover, this needs to be considered in a context where

teachers are required to prioritise their tasks and responsibilities within the time they have available. Resh (2009), in a study which involved high school language, mathematics, and science teachers, proposed the term “deservedness” (p. 317) to describe the factors which teachers take into consideration during the assessment process: “talent, knowledge exhibition in tests or in class-work, effort and class behaviour or some weighted combination thereof” (Resh, 2009, p. 317).

This position is also evident in the participants’ discourse. As a means to strike a balance between the limited resources, namely time, and the need to give personal feedback, Laura acknowledged that one-to-one feedback would be provided to those students who *merit* such particular attention through their attendance to the feedback sessions.

Now obviously, it depends on how the students take it and on whether they are ready to try and improve their work.

[Laura, Group Session 2]

Because in reality, the number of students you have, you would be limited on how much [personal attention] you can give to observe [the progress of] the student. It would be difficult even if you had to do it on a monthly basis. Having said that, many times it is only a small percentage who give you the work. Those who do, you could focus on them. At least you can work in that way.

[Laura, Interview 2]

4.3.2.4 Perceptions and Expectations

The approach described above may raise ethical issues related to the teachers’ decisions and the bearing these have on the student’s entitlement to learning (Russell & Airasian, 2012). Tierney (2003), while acknowledging that teachers tweak their assessment depending on the particular standard of the

student, questions such approaches. She expresses concern regarding whether the teachers have enough information available to them to determine who of their students would benefit from this adjusted assessment – especially in view of the fact that “students display effort differently and that teachers’ observations of effort are limited by time, class size, and their own beliefs about learning” (Tierney, 2003, p. 133). This subjective outlook (Brookhart, 1993; Sadler, 2013) is evident in the way Daniel, one of the participants, adapts the assessment according to the student’s perceived standard:

Many times, the comments I write at the end of the assignment would be related to the effort the student has made [in the assignment]. Sometimes, I write 'Well done' to someone who gets 53% because I know that getting 100% [for that particular student] is an impossible task. But the fact that 53% was achieved, it is still very good.

[Daniel, Interview 2]

As discussed in the literature review chapter of this thesis⁵⁶, the teacher’s expectations on the student’s potential, especially as they are expressed in Daniel’s contribution above, may have a distinct impact on the student’s motivation to learn. One could also argue that, since teachers may be apprehensive of the significant influence they have on students, they may hold back from giving written feedback and revert to assigning only grades and marks, with little instructions on how to improve future work. Another option teachers might consider is described by Willis (2011); one of his participants held back from expressing his expectations on what the students are able to achieve to allow room for autonomous work, with an element of risk taking.

⁵⁶ Section 2.2.1.1

Willis (2011) noted that such a practice was embedded within a context which supports the implementation of Assessment for Learning strategies:

He gave students exemplars of work, clear goals and the conceptual framework and used these as a shared repertoire against which progress and quality were judged. Work was very visible to peers on the laptop computer screens. Feedback, help and commentary on one another's work were a seamless part of the dialogue. (Willis, 2011, p. 405)

The potential positive impact similar methods may have on learning goes far beyond a type of assessment and feedback which carries little, if any, information on how to improve. As Bandura (1993) insists, self-efficacy is not cultivated simply by loading the student with inspirational discourse, typically verbalised in comments like 'well done' or 'keep it up'. This may create a temporary, positive climate but does not inform the next step students should take in their educational journey. The students' own meaning and understanding of the teacher's assessment is critical to the self-confidence and motivation to learn (Stiggins, 2010). A deeper discussion on the synergy between motivation, feedback and feedforward may be found in the literature review chapter of this dissertation, section 2.2.

4.3.2.5 Clarity in Providing and Receiving Feedback

The centrality of clear communication, including in the stages leading up to the assessment exercise, is evident in literature⁵⁷. This contrasts significantly with practices typically associated with summative assessment which, as Wiggins (2011) notes, tend to be more covert. While contributing to creating

⁵⁷ Section 2.2.3.3

a respectful environment (Alderman, 2004), opportunities for communication allow the students to address their difficulties effectively and to clarify their responses to the tasks set by the teacher (Lynam & Cachia, 2018; Wiggins, 2011). Moreover, open channels of communication serve to bring together the divergent expectations and viewpoints which teachers and students hold (Carless, 2006). The importance of such a level of mutual engagement was evident in the group sessions and individual interviews and illustrated in the excerpt taken from one of the first set of individual interviews:

The fact that I give them verbal feedback gives me the opportunity to understand their thought processes and help them to think logically because this is not in their nature. The [educational] system did not allow them to develop this skill - it is a constant struggle.

[Laura, Interview 1]

An issue worth considering is a basic principle that for effective communication to take place, the sender and receiver need to have a similar understanding of the language being used, which in turn, as Boud (1995a) notes, contributes to a clearer appreciation of the realities of both parties. This is especially relevant to assessments with a purpose to inform learning where the student would not have yet achieved the expertise of teacher (Chanock, 2000). Consequently, the teacher may use terms which are possibly misinterpreted by the student – a factor which Turner (1999, 2010) claims is a result of a lack of language transparency which may result in a type of communication which contains the required information, but which lacks the explicitness required to bring about the desired effect. Moreover, unambiguous assessment criteria which clarify what students are meant to achieve was one of the predominant factors which Pepper and Pathak (2008)

identified that contributes to a climate of fairness amongst students and which supports them in the engagement with their learning objectives.

The following extract from a group session transcript captures the assumptions teachers tend to make when using terms which, in their opinion, have the same meaning for both the student and the teacher. During this session, the participants were asked to observe a short video of a person presenting to an audience and to describe what type of feedback they would give to her to help her improve her communication skills.

Laura: My difficulty is in her presentation and my comment was focused on her confidence. She requires more drama and confidence to emphasise the point she was trying to make. She wasn't convinced of her own examples and the way she presented them . . . you need to exaggerate.

Researcher: And how would you give this feedback in a constructive way and at the same time, help her improve?

Laura: You need to work on your confidence in order to believe in what you are delivering.

At this stage, I was interested to explore their awareness of the fact that the students may understand the term 'confidence' differently to what the teacher actually meant:

Researcher: To what extent do you think I, as a student, would know how to be more confident?

Dunstan: With practice you will become more confident.

Daniel: The problem then becomes a stage fright – the moment you see the audience in front of you . . . you freeze.

Laura: What I would add, and generally I tell my student this before their own presentations, is to rehearse it at least two to three times in front of the mirror or in front of someone - the practice to build confidence and conviction of what you are talking about.

Researcher: But what do I need to do to be more confident?

Laura: I've just seen a hundred presentations, and for all of them, I spoke about 'confidence' . . . and all [of the students] understood me because all of them suffer from lack of confidence. Believe in yourself and believe in what you're saying and the message will come out clear. The word 'confidence' would have been clarified for sure.

The conversation then continued with a discussion of possible meanings students may give to the term 'confidence' and on the importance that the message is decoded correctly (Nicol, 2010).

For assessment to have a real potential to affect learning, clarity in communication is essential also when the student is the sender while the teacher is the receiver. There might be situations in which the responses to a task mask the student's real conception of the subject area, hence requiring the teacher to delve deeper into the student's thought processes. Wiggins (2011) refers to the etymology of the term assessment and insists that teachers should "sit with" (p. 87) the student to be able to achieve this level of understanding. This supports the participants' expressed preference of verbal over written feedback which was discussed above. Such concern was voiced during the third group session when the discussion focused on the implementation of learning intentions as a potential Assessment for Learning strategy. The extract below is lifted from a longer discussion about the

students' notion of the bibliography which they were tutored about and are required to include in any assignment:

Iris: It could be that they're doing a perfect bibliography but do not know why they are doing it.

Dunstan: For them, it is just a list.

Laura: And you do not rely [only] on that [one] answer to see if they understood it or not.

This exchange seems to suggest a concern that students may produce work of good standard with limited understanding of the concepts underlying their work. This is an issue which is typically the result of shallow learning and which supports efforts to develop professional development programmes with a particular focus on student learning progressions within the respective subject domains⁵⁸.

4.3.2.6 Summary

To summarise, this section has drawn together the complementarity of Assessment for Learning practices and positive learning environments through healthy teacher-student relationships. Consistent with the objective of the main research question, it has also included a discussion on the participants' viewpoints about this aspect and compared it with research carried out in different contexts. The next section also addresses the main research question but through a different lens, that is, the implementation of criteria and rubrics.

⁵⁸ For a deeper discussion on learning progressions, see section 2.2.3.2

4.3.3 Rubrics as a Learning Tool

Before exploring the related sub-themes, it is pertinent to note that, in the context of this research study, the term 'rubric' refers to a tool which teachers could utilise as part of their teaching to provide informative feedback. Typically, a rubric consists of a list of success criteria related to the respective subject area against which teachers indicate the student's progress and areas for improvement. This contrasts with the term which is often used interchangeably, that is, 'marking scheme', which is more concerned with the communication of marks and grades and is therefore more summative in nature.

4.3.3.1 Rubrics and Face-to-Face Communication

Group session four was specifically focused on the implementation of criteria and rubrics as a means to move away from norm-referenced assessments, which compare students' performances, and towards criterion-referenced types of assessment (Cohen et al., 2007). While the literature review chapter contains a discussion on the implementation of criteria, with a section specifically focusing on the constraints of practices⁵⁹, the interviews and group sessions presented insights, which may be interpreted as a consequence of a direct effect of the local educational culture. These will be discussed further below. Consistent with the expressed preference of face-to-face communications discussed earlier, the participants perceived criteria and

⁵⁹ Section 2.2.3.6

rubrics as a means of structuring their feedback conversations with the students.

For me personally, the most effective means of communication that I find is face-to-face. So, if you are correcting [their work] and you write where they need to improve and so on . . . True you have the rubric . . . The description is guiding them. But you still need to discuss with them.

[Laura, Interview 2]

But if you have that paper [the rubric] in front of you, with the student in front of you and you are following the points, then yes. [The rubric] gives structure to the way you give feedback. That I agree with . . . it's like a checklist.

[Jodi, Interview 2]

A tentative interpretation of this position, which was predominant with all participants, is that this displays a concern that students would not know how to interpret the terminology used in the criteria and therefore, would not be able to act on the feedback provided:

Students who are confident, sometimes understand a comment the first time round. You do not need to go into a lot of detail . . . For struggling students, in order to be able to match their level, you need to break down the [rubric] levels more.

[Jodi, Session 4]

The verbal communication of criteria is an interesting solution to a difficulty which is not unique to the participants' context. In fact, this is suggested in the research studies which focused on other learning environments (see Carless, 2006; Handley & Williams, 2011; Hendry, Armstrong, & Bromberger, 2012). Moreover, as Carless (2007b) insists, a clear understanding of criteria bears a significant positive effect on the student's learning and possibility to improve. An analogous solution is proposed by Carless (2006). Through a study to investigate issues related to student perception of feedback, David

Carless adopts a broader perspective to what the participants suggested. He recommends that “assessment dialogues” (Carless, 2006, p. 230) go beyond the particular task and respective criteria by focusing on the general notions of assessment, supporting the student to “clarify ‘the rules of the game’, the assumptions known to lecturers but less transparent to students” (Carless, 2006, p. 230) [emphasis in original]. Askey and Lodge (2000) extend this type of dialogue by advocating for the involvement of peers.

Considering the fact that one should strive towards a deeper and long-lasting engagement with learning, I consider both proposed solutions as valid because their objectives, though complementary, are somewhat different. While Carless’ suggestion aims at helping the students master the tools of learning similarly to how an expert would, the participants’ proposal, probably due to their work at grassroots level, aims to help the students become proficient by developing competence in the smaller components of the respective subject domain. One possible pitfall could be that of putting a strong emphasis on the individual task to the extent that the students’ primary focus would be limited in effect and short-termed (Boud & Molloy, 2013). In agreement, Boud (2009) argues against a type of assessment which is disconnected from the wider context, not only with regard to the subject domain but other environments beyond the classroom. The push towards ‘sustainable assessment’ (Boud, 2000) and ‘sustainable feedback’ (Hounsell, 2007) has the purpose of extending the effect of learning beyond the years of formal learning.

4.3.3.2 Rubrics and Assignments

The preference of the participants to closely link the use of rubrics with assignments is expressed in these four contributions:

But then I agree that the rubric is given with the assignment because it will help in guiding the student. Because if the rubric focuses on 'operations', then students already know that they need to look at the notes which cover operations and need to focus on the 'plus and minus'.

[Jacob, Session 4]

[The students] would know what is expected of them and what they needs to focus on . . . They would know what I am looking for as an assessor and therefore, obviously, what I am expecting of them. . . I think it will help them.

[Mariah, Session 4]

I do not write general comments. If the sum is incorrect, I write my comments where the mistake is. The rubric helps because the comments are broken down.

[Jodi, Interview 2]

If [the rubric] is not given [with the assignment], I do not see its usefulness, it would be similar to just giving a mark.

[Jodi, Session 4]

The impression I developed during the sessions and which I later confirmed while transcribing the audio recordings was that the predominant practice which the participants preferred was that of giving rubrics *with* the tasks:

The rubric can also be used for self-assessment . . . Because they would already know what you are looking for . . . Their self-assessment combined with mine.

[Iris, Interview 2]

Another outlook was suggested by Laura who considered rubrics as a set of milestones which describe the structure of the particular subject area:

You need to present [the rubric] as a repetitive method, a template of how we are looking at the development [of the topic].

[Laura, Session 4]

4.3.3.3 Rubrics – a Disparate Meaning

Through the process of understanding and interpreting the participants' perspectives on the implementation of rubrics, the very close correlation between rubrics with structured textual criteria and marking schemes was observed. This is further accentuated by the fact that most educational institutions and public examinations, possibly for accountability purposes, insist that a breakdown of marks and grades is provided by the assessors. As Mariah below notes, very often, the terms 'rubric' and 'marking scheme' are interchangeable, which may result in lack of clarity on the purposes of such tools:

[In meetings at departmental level] we never used the word 'rubric'. We always used a marking scheme and in the this we would have everything . . . But if we have the writing task, we would have 'excellent, good, average and poor' - you have a corresponding range of marks and you know what you are expecting of him. During meetings, when they mention rubric or marking scheme, I do not distinguish between the two.

[Mariah, Session 4]

This lack of distinction seems to be a prevalent challenge to the implementation of rubrics as a learning tool, to the extent that the participants expressed their concern that textual rubrics were merely a means of disguising marks and making them more agreeable to the student:

At the end of the day, I think the idea of a rubric is good but what can happen is that ultimately [the student] will work out the mark. The mark is hidden . . . it is given in terms of comments.

[Daniel, Session 4]

You can have a student who says, “level one and level two are below 50 and levels three and four, over 50. Isn't this like giving a mark?
[Jodi, Session 4]

This lack of common, standard, understanding of the term ‘rubric’ and the functions such a tool can serve is not unique to the context of this research study. Bharuthram (2015) presents a discussion on the way other researchers and practitioners perceive rubrics, both in their construction and also on the varying ways rubrics are implemented in different contexts. Such prevalent contrasting views on the meanings, constructions and purposes of rubrics are also discussed in a more recent meta-analysis research study by Dawson (2017), who identified fourteen distinct facets of rubrics which literature makes reference to. In his concluding reflections, he argues that, while rubrics have gained popularity within the educational environments, the divergent views on rubrics have been a source of “conflation and confusion” (Dawson, 2017, p. 357). It is my opinion that the participants’ views on rubrics are consistent with the findings in Dawson’s (2017) meta-analysis and this could possibly explain the perceived difficulty to associate rubrics with the formative nature of assessment. One of my entries in the reflective journey expresses my observations on the way I perceived the engagement of the participants with the implementation of rubrics:

It seems that the role of the teacher as a judge over the student’s work is engrained. Even if the attitude towards learning is positive, it is so difficult to view assessments as a means to inform the future rather than judging the past [tasks]. With hindsight, I should have spent more time trying to grasp the participants’ understanding of purposes of rubrics [prior to the preparation of the session on rubrics as an Assessment for Learning strategy].

[Researcher, Reflective Journal]

As a reaction to this, and as a means of helping the participants recognise rubrics as a possible Assessment for Learning strategy, in the subsequent group session, which focused on the characteristics of feedback aimed at improving learning, I built on the concept of rubrics as discussed previously to include an additional column, entitled ‘How to improve’. The participants

Writing task: Rubric for 'Ideas'	Novice	Nearing Proficient	Proficient	Advanced	How to improve
Main idea	The text does not include a main idea	A main idea has been included, but the development still unclear	The main idea is clear and focused	The main idea is clear, focused and very well developed	List 6 – 7 ideas in order and then . . .
Details & supportive					

Figure 4:3 - Rubrics as an Assessment for Learning Strategy

were presented with a number of cases and were asked to use the rubric to indicate the respective level of the components of the work they were assessing. The participants were asked to write a brief comment, specific to the component being assessed and with the purpose of giving clear instructions to the learner on what needs to be done for improvement. Figure 4:3 below is a screenshot of part of the slide used in the session to illustrate how the feedback in the green column is specific to someone who is nearing proficiency in identifying the main ideas of a writing task but is still struggling with the development of the topic. The arrow stresses the significance of a focus on improvement.

The primary objective of this suggestion is to shift the focus of the rubric from being merely a judgemental, past-looking assessment tool to one which, through free-writing, encourages the teacher and the student to focus on the *next* step (William, 2010) in learning. Evidence of the crucial need of a shift in

focus in instruction, learning and assessment may possibly be traced in the assertion made by Mariah during the group session on rubrics:

But it depends on the topic because if I am correcting a comprehension, I'm after answers. It's either correct or not. If I asked them what is there in this cup [referring to the cup on the table], whether it is coffee or not, it is either correct or not.

[Mariah, Session 4]

As a result, the assessor could be in a better position to adopt the arguments proposed by Ramaprasad (1983) and Sadler (1989) to support students by determining the actual and desired levels and providing clear and specific actions to be taken to bridge this gap⁶⁰. Andrade (2005) also distinguishes between types of rubrics by categorising them according to the purpose they are set out to achieve. The 'scoring rubric' (Andrade, 2005, p. 27) corresponds with the marking scheme as described by the participants above, and has a judgmental and evaluative purpose. The other type of rubric described by Andrade is 'instructional' (2005, p. 27) which is more concerned with teaching and learning, and which Andrade (2005) argues is the type of rubric which is conducive to deep learning.

At least in part, this approach also tries to address the strong concerns about the use of rubrics as an assessment tool expressed by Wilson (2007) with regard to their restrictive nature, allowing little room for teacher-student conversation on the assessed work. Moreover, the additional column with suggestions on how to improve seeks to sustain the proposals put forward by

⁶⁰ See Section 2.2.1.2

Chapman and Inman (2009) as a means of addressing the perceived restrictiveness in the use of rubrics.

4.3.3.4 Summary

Essentially, in the context of providing rubrics, the value of providing information to achieve the next step is consolidated if the learner has the opportunity to act on the feedback before submitting the final version (Race, 2015). When students are guided to improve on their work and are given the right motivators to sustain such efforts, then, as Sadler (2013b) contends, they embark on a process which enables them to be owners of their own learning (Hattie & Timperley, 2007). These issues were raised with the participants, both during the group sessions as well as during the two sets of interviews. The following section provides an in-depth discussion on related issues within the context of the next identified theme and related sub-themes.

4.3.4 Drafting and Redrafting

The literature review chapter presented earlier, namely section 2.2.3.9, brings to the discussion the fact that research strongly supports the resubmission of work that is linked with opportunities to act upon the feedback provided and improve on the weak areas in the respective task. In essence, students need to be convinced, through the provision of tangible motivators, to assent to investing additional effort to revisit their work and therefore, affect learning positively.

4.3.4.1 The Extended Assignment

Prior to the academic year during which the sessions with the participants were held, the Foundation College⁶¹ proposed to make one of the assignments an extended one. This was suggested as a means to encourage student-teacher conversations on the task in hand. Once assigned, the students are given a number of weeks to complete it but are also given the opportunity to seek support from the teacher along the way. There are two prevailing models which are adopted by the teachers and which are relevant to this research study:

- The extended task is broken down into shorter tasks, generally one leading to the next. Typically, each task is treated and graded separately. In the case of Mathematics, the practice referred to as ‘follow-through’ is applied, in which case, mistakes do not affect the performance in subsequent tasks. Daniel, one of the participants, referred to such practice as “starting each time from a clean slate” (Daniel, Interview 1).
- The extended task is regarded as one long assignment and students are provided with feedback and support throughout the whole process. The work is collected and assessed at the end. In Jacob’s words during the second interview, this model is conducive to using assessment as a learning tool, “ so, if no marks are involved, the student has all the time and opportunity to correct [his/her mistakes] and improve” (Jacob, Interview 2).

⁶¹ The Foundation College is one of MCAST’s three colleges. For more information, refer to section 3.3.3.2

In my view, the second model is consistent with the arguments put forward by various researchers in favour of resubmitting draft copies of assigned work (see Andrade & Valtcheva, 2009; Boud, 2000; Carless, 2007). What is particularly interesting is the participants' contrasting outlook on both models and how, throughout the sessions, they developed an appreciation of how companionship could bear an effect on learning. Jodi regarded the first model as a series of summative assessments which, due to the fact that they are spread over a period of time, are possibly disguised as formative in nature:

When you collect the [extended] assignment and assign a mark and give it back to them [the students], wouldn't it be like a normal class-based test? What's the difference? Instead of collecting it and grading it at the end, you collect the work and give them a grade half-way.
[Jodi, Interview 2]

The formative nature of the second model is embodied in Dunstan's contribution during his second individual interview:

If I had to give a mark, I would give it at the end because that is what formative is. I am not judging now, I'm judging at the end. We always say that summative is measuring [achievement]. . . Well, what's the point that I say that it is formative and then I pass judgement. If I tell you, 'Look, you need to improve this'. You will go back, improve, try the second task, come back, I see the second task and so on. I measure at the very end.
[Dunstan, Interview 2]

4.3.4.2 Resubmission and Teacher Motivation

The positive nature of such practices, at least when gauged through the teacher's perception and scoring, is evident in Mariah's recounting of one of her experiences with allowing students to submit draft versions of their work:

We enjoyed working together [students and teacher] and at the end, those who took the work seriously enough, presented a good piece of

work, much, much better . . . Even they themselves tell you, 'Really! Are you sure you didn't make a mistake because I never got 25 on 30 in writing!'

[Mariah, Interview 1]

While such assertions are valid within the particular bounded contexts, it is pertinent to consider that Carless (2006), while acknowledging a difference in the way students and teachers perceive feedback, suggests that such 'assessment dialogues' (p. 230) contribute to a clearer understanding of the learning process. The sustained process of drafting, seeking feedback and acting upon the assessment to submit a final version of the work is in itself an opportunity to commit fully to learning by setting aside the required resources, namely, "time, skills and motivation" (Covic & Jones, 2008, p. 82). Black and Wiliam's (1998) contention that Assessment for Learning strategies bear a stronger positive effect on students who find learning challenging, together with Mariah's experience of significant learning gains through resubmissions, could possibly be exploited to secure engagement of participants in professional development programmes. In my view, this is because of the fact that one of the major motivators for teachers is to be convinced, ideally through direct experience, that such extra efforts will have a positive impact on their students. This can be perceived in Iris' response when asked if she considers the additional work as an extra burden:

No. Firstly, because I love the topic . . . and [secondly,] because when you give students the right feedback, you raise their self-esteem and they would start to believe in themselves more.

[Iris, Interview 2]

One needs to be cognizant of the fact that there may be varying levels of enthusiasm towards teaching, which Watt and Richardson (2008) trace down

to the initial teacher training programmes and the individual's original intentions of pursuing a career in teaching. On the other hand, professional programmes aimed at strengthening practices, could capitalise on similar factors which contribute to the teachers' eagerness to seek learner improvement. Hoy (2008) explored such a notion, which was referred to as "academic optimism" (p. 496), both at an institutional level and also at the individual teacher level. Amongst other factors, "going the extra mile for students" (p. 496) as a direct consequence of the student-centred approach, was identified as one of the key contributors to teacher enthusiasm.

4.3.4.3 Resubmission – Concerns and Constraints

Since the group sessions and individual interviews were grounded within the participants' classroom realities, it was reasonable to expect that constraints to the submission of drafts prior to the final version were raised. Being misunderstood by their superiors was a concern expressed by Iris who was concerned that if the final versions of the assignments were of a good standard, then she could be accused of being too lenient in her grading. Another issue raised by Dunstan and Jodi was that written assignments may take too long to review and give feedback upon, to the detriment of open 'assessment dialogues' (Carless, 2006, p. 230) referred to earlier.

In my view, while acknowledging these real concerns, there should not be major difficulties with tackling such concerns especially because they are operational in nature and could be approached by focusing on the processes within the institution. The role of the senior management team is crucial to

this. On the other hand, what could be considered as more challenging to address are the apprehensions, attitudes, and beliefs voiced by the participants in the context of resubmissions.

Jacob, for example, questioned the extent to which one should guide students within higher education institutions. His expressed concern, which is echoed by other lecturers at similar levels (Foster, McNeil, & Lawther, 2012), was that of striking the right balance between supporting students but at the same time, allowing space for independent learning required at such levels:

You know what my question is. At degree level, do we need to guide the student so much when we are expecting that, later on, students goes home to carry out their own research?

[Jacob, Session 6]

Foster et al. (2012) argue that such dilemmas, especially with respect to the early years of higher education, emanate from the lecturer's contrasting perspectives about these transitional stages. Higher education may either be considered as an extension of further education or as a preparation for the later years of higher education. Through professional discussions, one may also need to understand what meaning different lecturers attribute to the process of 'guiding' students, which may range from providing explicit instructions on how to correct a mistake, often referred to as spoon-feeding (Dehler & Welsh, 2014), to task-oriented feedback providing strategies for problem solving⁶². Lynam and Cachia (2018), in their study with students in higher education, report that one of their participants felt that receiving too much support could lead to an increased risk of lecturers addressing

⁶² See Section 4.3.7.3

challenges in their stead. This is closely linked with the academic maturity of the learner which I relate to the extent to which students give value to their own learning, the purpose of learning and their own personal development.

Properties of feedback, commonly associated with Assessment for Learning strategies, contrary to Jacob's earlier concern, are particularly aimed at strengthening long-lasting learning and reducing the dependence on Vygotsky's (1978) "knowledgeable other". In my view, at the very early stages of the professional programme, one should seek to address any perceived difficulties on behalf of the participants to strike a balance between spoon-feeding and supporting the students to become autonomous learners. Failure to do so may result in not gaining the maximum benefits of resubmission or even worse, dismiss its implementation altogether. This is especially significant when there is little distinction between the formative and evaluative role of assessment:

There will be those who tell you, 'So miss, so let me change it' and corrects it for the sake [of changing it] not because they has actually learnt anything . . . and so that they could say, 'I will get a better grade.' But then there will be those who change it to improve their learning.
[Jodi, Interview 1]

Through their research, Covic and Jones (2008) did in fact identify a group of students who had their grades improved following the resubmission of their work but could not determine the motivation for such improvements with full certainty. A finding which the researchers deemed significant was the fact that half of the student who resubmitted may have done so because they did not put in enough effort in the first attempt. At this stage, it may be pertinent

to question the real benefits, if any, of assigning a grade to the first attempt. Echoing Sadler's (1983) strong assertion, marks are "action-neutral for the purpose of improvement" (p. 75).

One model which was discussed during the group sessions and which I believe was effective in challenging the participants' viewpoint, was that of comparing practices such as the one described above by Jodi, one of the research participants, and Covic et al. (2008) with the way higher education students are supported in developing their dissertations. This particular example was useful because, even though high-stakes are linked with such an assessment, one would rarely expect the tutor to grade the draft excerpts of the text. It was interesting to note that while the participants attributed a difficulty due to the culture of marks and that students look for marks rather than comments, they acknowledged the fact there was no difficulty on behalf of the students to accept the fact that no marks are assigned for dissertation drafts. This suggests that, rather than being limited by a 'culture' of marks and grades, which the participants often referred to, one could consider that it is the 'expectation' of marks and grades which may in fact hinder the full benefits of resubmission. As much as there are no expressed expectations of marks in the case of dissertation drafts, teachers could design their assessment strategies with a similar mindset. In this context, when asked to recount any personal classroom experience of resubmission, it was not difficult for the participants to recall examples of good practices such as the following:

No, no, they [the students] did not ask for a mark. They just took note of what I was looking for [in their assignment]. They go back and see

how to address that specific problem They themselves realise that their work is getting better.

[Laura, Interview 2]

4.3.4.4 Summary

With an intention to address the research and subsidiary research questions, this section proposes elements which are pertinent to providing feedback on draft versions of tasks prior to their final submission. After discussing the extended assignment practised at MCAST Foundation College, the motivation of students and teachers to exploit the benefits of resubmission was presented as one of the factors affecting its implementation. Lastly, the expressed challenges with striking a balance between spoon-feeding students and supporting them to become independent learners were described and discussed.

Issues relevant to another tool related to Assessment for Learning, that is, the adoption of exemplars to guide the learner towards good practices, is presented and discussed in the next section.

4.3.5 Exemplars as a Learning Tool

During the group sessions, the use of exemplars was presented as a means of communicating the criteria of good practices (Handley & Williams, 2011). The purpose of this was to invite the participants to view such a tool as a means to support the students to become experts in the respective subject area⁶³. As Willis (2011) notes, when students are guided to interpret tasks from the

⁶³ See Section 2.2.2.7

teacher's viewpoint, they are in a better position to incorporate the qualities which would enhance the standard of their own work.

4.3.5.1 Clarity of Quality Criteria

The arguments presented in the literature review section suggest that the presentation of exemplars should focus on the characteristics of the work which distinguishes it as an example of good practice. However, most of the participants in this research study, during the interviews prior to the group sessions, expressed their concern that such a practice could be discouraging especially for the struggling learners.

You would have students who are already very motivated, you know they will achieve. [Those,] yes, they will take it as a challenge, 'I want to be like them, I am capable of achieving like them.' But then you have the student who, when they see something like this, they immediately lose heart and say, 'I will never reach that stage.' So, you need to be careful with these students. As we're saying, you cannot take something and apply it always and with everyone.

[Jodi, Interview 1]

Deep down students would know what level they can reach. One of the students came to tell me, 'I will never reach that level'. I was hurt because I made a big mistake, a real big mistake.

[Iris, Interview 1]

Such and similar revelations at the very early stages of the journey with the participants were revealing and particularly useful in informing the development of subsequent sessions. It appears that, and possibly confirming my interpretations discussed earlier, at least for the participating teachers, teaching is not the mere transmission of knowledge between inert individuals. The social and emotional component of learning was critical to the participants' decisions, to the extent that, as indicated in the above quotes,

they would even consider suspending the implementation of initiatives which are normally associated with promoting learning:

I have mixed feelings [on using very good exemplars] for the reason, perhaps I made a mistake too, that I chose one which really struck me and I read it [out to the students]. I saw the faces in the class cross because the students felt that they could not reach this level. I sort of saw them losing heart. . . I think that was a mistake . . . I read it, it sounded very good and did not show them that it had a number of mistakes even though the final product was very good.

[Iris, Interview 1]

Literature strongly suggests that when students are involved in assessing work which corresponds to their expected level (Handley & Williams, 2011), learning gains are significant (Rust, Price, & O'Donovan, 2003). However, unless students are guided to *understand* the criteria for good practice, they will still have difficulties to differentiate between poor and good work (Handley & Williams, 2011), thus hindering their ability to guide their own learning (Sadler, 2009b). There may be instances where strategies linked with learning gains are implemented without teachers being fully aware of the ramifications of overlooking the intricacies of such implementation. I suggest that professional development programmes should attempt to discover and address any such lacunae. This is consistent with the assertions made by Hendry, Armstrong, and Bromberger (2012) who identified the “teachers’ facilitation skills” (p. 158) as being critical to leading students to develop an understanding of the criteria of good practice. The participants’ viewpoints referred to above, suggest they were not completely cognizant of the way theory and research propose how exemplars should be implemented for optimal effect. Merely presenting students with good quality work with

minimal support to make the invisible criteria, visible (Rust et al., 2003) bears little, if any positive effect on learning (Handley & Williams, 2011). In agreement, Hendry and Anderson (2013) found that the students participating in their research study felt that there was more progress when, apart from having the opportunity to assess exemplars, they were directed by the teacher to understand the expected standards more clearly. In this context, Sadler (2009b) argues that students should eventually be in a position to “explain quality when they see it” (p. 822) both at a macro and micro-level (Sadler, 2013b, 2016). Students should then be able to defend and justify the thinking processes involved in their work, while at the same time be in position to suggest ways how to move closer to the expected level of quality (Sadler, 2016).

4.3.5.2 An Appropriate Gap in Learning

Another theme which may be lifted from the participants’ above contributions and verbalised by Mariah’s concerns below, is the challenge of presenting the students with an “optimum gap” (Sadler, 1989, p. 129) between the actual and expected standard in the respective subject area.

I do not want to discourage students because if I show them an image of [an expert] but at the end of the course, they know . . . that they did not become like [the expert]. They would feel [that they are] a failure because I would have filled them with idealism and ideas which are not common. Had you told me there is a video of children like them playing, from their nursery or a foreign nursery, someone their level, their age . . . then, I would agree to that.

[Mariah, Interview 1]

An observation made by Lipnevich, McCallen, Miles, and Smith (2014), to a certain extent, corroborates such a concern. In their study, students were given the option to choose exemplars of different levels against which they could pitch their level to. The researchers noted that all students opted for the ones which demonstrated an excellent standard at the level comparable to their own. Moreover, all students in their study preferred exemplars over rubrics, claiming that these were more effective in clarifying the desired standard. One could argue that the students in Lipnevich et al.'s (2014) study were highly motivated to learn, especially when compared with the broader spectrum of classroom realities. However, although generalisation of findings between different contexts is not a straight forward, linear process, it would be interesting to explore further whether the claims made by Mariah above, truly reflect the views of students in the same context. This may be ground for further research.

In another study set out to investigate students' perceptions on the use of exemplars and how it effects their understanding of the desired standard of work, Hendry and Tomitsch (2014) concluded that, while most of their participants felt that exemplars had a positive impact on their future work, few actually considered that their tasks had become more challenging as a result of being exposed to exemplars of the desired standard. Hendry et al. (2013) interpreted such findings as a result of a better, more realistic understanding of the expected level. They did not find any evidence that suggested that the students were discouraged from pursuing efforts to improve. In this context and in light of the concerns expressed by Mariah, one

could suggest attempting to strike a balance between helping the students establish a clear understanding of what they should be working towards, while at the same time breaking down the journey into manageable stages, appropriate to the particular student's standard within the respective subject area. Due to the extended interactions with students, teachers are in a prime position to take ownership of this process. In my opinion, well-designed professional development programmes could be very effective in supporting teachers in this regard.

This topic was raised again during the sessions when discussing exemplars as a tool which supports Assessment for Learning. The purpose was to invite the participants to critically reflect on episodes in their professional work where examples of high-quality work were used as a learning tool. The model presented was one where Art students are taken to an art museum with the intention of exposing them to artefacts produced by renowned artists. This is not an uncommon out-of-the-classroom activity and all participants in this research study could relate to it. The effective art teacher would present the object of art to the students indicating the various factors which distinguish it from a poor product, for example, through the choice and intensity of pigments or the overall composition. Although one needs to be cautious when claiming transferability from one subject area to another, the discussion and contributions which followed indicated that the participants were starting to appreciate alternative implementations of exemplars in their teaching:

What makes [exemplars] so good is that they do not refer to one single painting but ... art in general ... what makes [any] painting excellent. If the focus is on why the red [colour] is important in that [particular]

painting, exemplars would be irrelevant . . . you wouldn't be learning on the effect of colours in art.

[Dunstan, Session 8]

Moreover, Laura considered building on her previous practices and compiling a repertoire of student work to be used with other classes. Her intentions were to present work at various levels so that the students could learn how to differentiate between them:

I already put aside some work . . . My idea is that the students learn how to observe the work of others . . . Now I have a stock which I could use. First, I will teach them the skill of evaluating other people's work . . . I prefer to present the two, the good and the bad because I believe that they can identify what is wrong by comparing it to what is right . . . And vice-versa.

[Laura, Interview 2]

One might claim that the approach taken by Laura is not completely congruent with what the major literature reviews suggest, that is, exposing the students to the desired standard and excluding samples of weak work. However, in my view, teachers should have the freedom to explore and implement initiatives even if this may not be fully compatible with what literature proposes as good practice. In this context, Riley (2000) strongly argues against top-down reforms which seek conformity leading to teachers feeling there that it is another "hoop they must jump through" (p. 37). The approach adopted in this professional development programme is one that is consistent with the constructivist paradigm in which participants, collectively and individually, are given the opportunity to build their own realities (Gardner et al., 2011). Such is a case where the teacher is 'the driver' rather than 'the driven' of reforms (Shirley & Hargreaves, 2006).

4.3.5.3 Summary

This section presented a discussion on some key issues with regard to supporting students to become more engaged with their own learning through exemplars. The teachers' viewpoints which were identified through their participation in this research study were reviewed with the purpose of informing professional development programmes designed to address such issues. Exposing students to exemplars, as a means of clarifying the learning process, is one of several strategies which can bear a positive effect on learning. The next section discusses the participants' understandings and attitudes, together with the expected and experienced challenges when implementing another strategy typically associated with Assessment for Learning that is, providing the students with a "clear and understandable vision of the learning target" (Chappuis, 2015, p.33).

4.3.6 Learning Intentions: for Learning or for Teaching?

A key principle of Assessment for Learning is that students, through their active involvement (Crichton & McDaid, 2016), are empowered to become owners of the process of their own learning (ARG, 1999). Helping to understand the aims of their learning through what are commonly referred to as learning intentions, down to the everyday lessons, is key to such a deep engagement. During the second and third group sessions, learning intentions were presented for discussion as a means to help the students understand what they are actually learning from the task at hand (Chappuis, 2015), or as

summarised by Hattie and Timperley (2007), knowing where the student is going.

4.3.6.1 Meaning and Understanding

One of the entries in my reflective journal described the way I was interpreting the participants' viewpoints on the implementation of learning intentions within their classroom environment. While there was a general consensus between the participants that lessons should have a strong introduction, I felt that they were apprehensive of the fact that learning intentions add no or little value to learning. The two participants' contributions below capture their concerns as they questioned the meaning students could make of a statement, which is typically shared with them at the beginning of the lesson:

However, I find that this "learning intention" is more for the lecturer than it is for the student. Just by saying "Today we will learn how to distinguish between expression and equations". . . just that . . . ultimately, they will take nothing out of it. At the most, when they do revise, they will use it, but strictly speaking, it is more for the lecturer.
[Jodi, Session 3]

A good teacher won't just throw in a statement and that's it. The same statement needs to be explained in such a way that students see the relevance with what they are learning. . . I can come in and say . . . 'today we will be doing a lesson on verbs'. What did the student gain with this statement? For me the student did not gain anything. . . it is vague.
[Mariah, Session 2]

Statements such as Jodi's and Mariah's suggest that the meaning they attribute to learning intentions is different to Hattie's (2012) definition which focuses on the purpose of clarifying what standards students need to achieve, "what we intend the students to learn" (p. 48) in a language which students can

easily understand (Chappuis, 2015, Clarke, 2001). Crichton and McDaid (2016) posit that such divergent positions may be due to a lack of opportunities to reflect on a better understanding of the purposes and implementation of learning intentions. They propose professional development sessions which focus specifically on learning intentions as a tool to clarify the learning journey, both for the teacher, but more importantly, to the student. Reflecting on the development programme as part of this study, one could justifiably argue that two, ninety-minute sessions are not enough to observe a significant transformation. This is more warranted when the participants held such strong views which contrasted with what literature proposes and which Loucks-Horsley et al. (2010) refer to as “naïve conceptions or alternative conceptions” (p. 54). In agreement, Yin et al. (2015) note that the teachers participating in their study benefited more when the programme spanned over two years and was supplemented with “participatory, rather than evaluative” (p. 58) coaching. On this last note, it is pertinent to stress that during the group sessions, and even more so during the analysis stage, the scope was not that of judging the extent of disagreement between the participants’ viewpoints and what literature proposes as good practice. As stated in the introductory chapter, the purpose of this research study is to seek to understand the participants’ viewpoints on a number of Assessment for Learning strategies. This is expressed in the main research question:

- What challenges, understandings and attitudes do teachers need to negotiate when implementing Assessment for Learning practices within a particular learning community?

4.3.6.2 Learning Intentions as Lesson Starters

One such viewpoint expressed by the participants is that the learning intentions serve the purpose of helping the teacher *introduce* the lesson rather than as a means of explicating what the students are expected to have learnt by the end of the lesson:

If you had to summarize everything [that is being said] . . . you are introducing the lesson without showing [the students] the direct method.

[Dunstan, Session 2]

For me, the statement makes sense, but most of the time, the student will understand it by the end of the lesson. At the beginning, you are showing them where you are leading them. . . . In the beginning we are stating what we'll be doing today. 'It is there that I will take you'.

[Daniel, Session 2]

To some degree, this perspective is comparable to the finding of Crichton and McDaid (2016) who noted that some of their participants considered this strategy more as a means to introduce the lesson and a routine that helps the students settle down. Wood (2008) asserts that the sharing of the lesson learning plans with the students at the beginning is not just another way of introducing the lesson, but rather advocates for a shift of focus away from teaching and towards learning. In my opinion, while acknowledging the teachers' positions on a particular issue, in the case of the implementation of learning intentions, professional development programmes should serve the

purpose of supporting the teacher in understanding the “true purpose” (Dean, 2004, p. 39) and more effective ways of implementing any suggested initiative. Failing to do so, as Boyle and Charles (2010), in their investigation into the teachers’ engagement with Assessment for Learning found, might result in the mere superficial implementation of such practices, possibly aimed at abiding by statutory policies (Crichton & McDaid, 2016), but missing out on the real learning gains. In a culture which, as the participants in this research study note, tends to promote judgement and evaluation, teachers, both individually and collectively, need support to achieve this. Such culture may direct teachers to implement learning intentions as a checklist of items as the class and the teacher go through a prescribed syllabus (James, 2007) and as a means of providing evidence of content coverage, especially in contexts where pressures related to accountability and high-stake assessments are involved (Flórez & Sammons, 2013). This is reflected in Jodi’s suggested use of learning intentions as a means of setting out a logical sequence of topics and ensuring that no steps are omitted:

They [learning intentions] are handy for us teachers so that we do not leave anything out. If you’re doing fractions [in class], you know that at some point you will need to simplify. So, simplifying needs to be done before doing fractions.

[Jodi, Session 2]

While Flórez and Sammons (2013) acknowledge that the reasons behind the similar misinterpretations of Assessment for Learning strategies require further investigation, they list several possible factors which contribute to such a situation. One which I believe is relevant to the bounded, finite context of this research study relates to an apparent deficit in a profound

understanding of Assessment for Learning, “which adversely affects the quality of it in practice” (Flórez et al., 2013, p. 19). Professional development programmes aimed at raising initial interest, but which is then sustained and focused on helping teachers to learn (Thompson & Wiliam, 2008), is key to addressing such difficulties.

4.3.6.3 Compartmentalisation of Knowledge

Hussey and Smith (2003, 2008) present an alternative viewpoint which may help in understanding the reasons why the participants in this research study seem to have contrasting views on learning intentions. Hussey et al. (2003, 2008) stressed that teachers are constantly faced with the dilemma of trying to address the bureaucratic aspect of being required to provide evidence of their performance, while at the same time reacting to the complex, very often unpredictable classroom environment. They claim that such difficulties are aggravated by the fact that learning intentions, which are commonly linked with learning objectives and success criteria, are prescriptive in nature, suggesting that educators should consider a “broader conception of learning” (Hussey & Smith, 2003, p. 367). This matches the contrasting priorities which Merriam and Brockett (2007) point out with regard to the educators’ focus on the student learning gains when compared with the institutions’ requirements to address the operational and statutory obligations. The concern of adopting a narrow approach to teaching and learning, which compartmentalises knowledge into smaller, possibly unrelated fragments, may be perceived in the participants’ contributions, a selection of which is presented below:

You have to consider the bigger picture because we are not teaching concepts separately . . . language is all things merged together.
[Mariah, Session 2]

But the fact that you reach the stage that the student can build the bibliography, that they can write it, you would have passed through . . . covered many learning intentions which [this process] represents.
[Laura, Session 3]

However, the tendency is that if I have the first three months working on reading, this would incorporate a number of learning intentions . . . but you do not separate these learning intentions.
[Laura, Session 3]

In an attempt to create a learning intention model for the teaching and learning of the critical analysis of science-related news, McClune and Jarman (2011), together with their participating teachers, ended up with a list which was too long for its purposes. The researchers contended that this was impractical to adopt. This supports the concerns of the teachers participating in the research study reported in this thesis, namely, the fragmentation of the learning process and the linear approach to the teaching and learning of these components. To counter this difficulty, Crichton and McDaid (2016) suggest that learning intentions are not written specific to the respective topic, but rather take a more “decontextualized” (p. 194) approach, which can be applied to different lessons. In agreement, McClune and Jarman (2011) propose to keep the number of learning intentions to a minimum, categorising them according to the level of difficulty they represent. While increasing the “grain size” (Chappuis, 2015, p. 34) may reduce the complexities of implementing learning intentions as an integral part of the lesson, in my opinion, one should be attentive to the fact that this does not result in mitigating the potential gains associated with helping the students

understand what they are actually meant to learn. In this context, Swaffield (2009) maintains that teachers should be vigilant and constantly check whether there is a match between their actual practices and their planned intentions, claiming that failure to do so will lead to falling “short of being assessment for learning” (Swaffield, 2009, p. 4) or “learning how to learn” (James, 2007, p. 215).

The conversation between the participants contained in the next sub-section sustains the importance of clarifying the learning journey for students. It also exposes the contrasting perspectives which teachers may have as they reflect on the *same* incident.

4.3.6.4 Plus or Perimeter?

The exchange below took place in the third group session, after the participants were invited to revisit the introductory learning statements so that these reflect their actual intentions of learning rather than focusing on the tasks which the students are meant to carry out. Dunstan, one of the participants, was interested in checking what the students thought that they were actually learning in one of his classes and to see if this corresponded with his original intentions.

Dunstan: Lately we were covering perimeter in class, and at the end of last lesson, I asked [the students], ‘If you had to tell me what we’ve covered today, what would you say?’. Do you believe they told me ‘plus’? I was surprised. I gave them some hints and practical examples to see if they tell me ‘perimeter’ but . . . they were seeing the whole exercise mechanically, without much thought.

Researcher: It seems they were more focused on what they were doing in class rather than why they are doing it.

Dunstan: They have been doing simple additions since primary school, but this was different.

Mariah: But it was *plus* that they were doing. I would have worried more if they said 'division'! They were still in context. In your skirting exercise⁶⁴, that is what they were doing – plus. They weren't out of point.

Daniel: You wanted them to say 'perimeter'.

Dunstan: Or at least an explanation of what we were actually learning.

While listening to, transcribing and analysing this excerpt, I reflected on this episode which I felt is particularly relevant to this study. The three points which follow present is a discussion on the seminal reflections which I recorded in the research journal:

- As Black et al. (2003a) point out, professional development programmes can instil an initial interest in teachers but go on to assert that this has to be sustained over time. Dunstan's inquiry about the students' understanding of the learning direction is possibly due to his reaction to a prior presentation which formed part of this research study. Programme leaders need to build on perceived interest by the participants through coaching and companionship (Joyce & Showers, 2002). In view of the objectives of this research study and also, due to the temporal limitations, the effect of sustained support to the participants

⁶⁴ Mariah was referring to an example Dunstan used to teach perimeter by using a practical example of fixing skirting to the walls of a rectangular room.

was not investigated. However, this would be a possible area for further research, especially within the context of the local educational system.

- Dunstan's reaction to the unexpected response from students is consistent with literature which advocates the crucial need to make the learning progression explicit to the learners, in a language they understand (see e.g. Black et al., 2003a, 2010; Hattie & Timperley, 2007; Wiliam, 2010). The focus needs to be shifted away from the task at hand to the purpose of the lesson. Therefore, for instance, if during a science lesson, students are asked to explain the relationship between pressure and temperature by constructing a graph, they need to be fully aware that what they are expected to learn goes far beyond the mere task of drawing a graph. In addition, Loucks-Horsley et al. (2010) insist that learners are exposed to the *why* of learning rather than merely on the *what* and the *how*, claiming that this helps the learner make connections with previous knowledge and be more able to transfer and explain such knowledge in relation to other contexts. This level of explicitness of the purpose of the lesson is a prerequisite not only for the student (Willis, 2011) but also for the teacher (Stobart, 2014). Iris' concluding comments during the same group session summarises this notion effectively:

Students would be preparing a perfect reference list without knowing why they are actually doing it.

[Iris, Session 3]

Iris' reflection was in relation to the topic she was teaching at that time - that of helping the students use literature to support their arguments in academic writings tasks. Her main concern was that her students do not

appreciate the fact that the list of references is actually providing evidence that they approached their writing task correctly and not as another participant remarked:

A list of books and journals . . . it would just be a list for them.
[Dunstan, Session 3]

- On the other hand, when designing professional development programmes, positions such as Mariah's cannot be ignored. Skott (2015) asserts such beliefs are "subjectively true" (p. 18) and especially due to their complex nature, need to be understood within the respective educational contexts (Opre, 2015). Mariah's observations suggest that there she did not feel that one should make so much distinction between what is expected to be learnt and the task itself. In my opinion, such viewpoints need to be addressed prior to proceeding with introducing learning intentions to the programme participants. Otherwise, as Dean (2004) asserts, one would run the risk that the learning intentions which teachers introduce in the lessons which "are still not very explicit and . . . are, bluntly, not 'learning intentions' at all" (p. 39). Conversely, one could also argue that teachers sharing similar positions as Mariah's would be clear in their mind about what the scope of their lesson is and that this is more than sufficient. As Laura remarked:

We would be overthinking it in a way. When learning how to summarise, if you're going to write brief statements of the main ideas of what you read, that is a task in itself. You're learning the process of doing it . . . and that is your intention - to learn that process. I cannot understand why this distinction between the task and the learning intention because I see them intertwined.

[Laura, Session 3]

One way which I propose to explore the extent to which both the teacher and the student share the same understanding of what is expected to be learnt, is to investigate their different approaches to the assessment task. In the ideal context, the purposes of the assessment task, as designed by the teacher, would be consistent with what the students are anticipating and preparing for. Taking the above discussion as an example, one would ask the teachers about the contents of an assignment they would set to check the level of understanding of the topic being covered during one particular lesson, in this case 'perimeters'. Similarly, the students are asked about their expectations of the same assignment, particularly focusing on trying to understand what concepts they would expect to see in this assignment. Significant variations would necessitate interventions on behalf of the teacher to ensure realignment between the teacher's intended teaching and student's actual learning. This could also serve as the basis of discussions aimed at emphasising the importance of learning intentions as a means of explicating the learning process for teachers and students alike.

4.3.6.5 Summary

This section discussed issues related to the implementation of processes which are aimed at clarifying what students are expected to learn through the implementation of learning intentions. The participants' meaning of this Assessment for Learning strategy was explored with an effort to investigate their position and attitude towards their implementation in their own

classroom environment. The next section explores the participants' practices and outlook related to the provision and receiving feedback about learning, which as Hattie and Timperley (2007) claim, could bear a significant effect on strengthening learning.

4.3.7 Assessment for Student Learning

As discussed earlier, the quality of feedback which students receive about their learning can have significant effects on their progress, both positively, but also negatively. This section discusses three sub-themes which emerged from the participants' experiences and practices which I considered to be particularly relevant to the impact that assessment may have on students' learning, with special focus on their engagement with the provided feedback within a context of deep, long-lasting learning gains.

4.3.7.1 Verbal or Written Feedback?

During the sessions, especially when discussing the use of rubrics as a tool which aids assessment, I became more aware of the preference which the participants expressed for verbal over written feedback, mainly since they felt that students would benefit more from such a method. It is interesting to note that, although, as stated earlier, the lecturers taught different levels in two subject areas, languages and mathematics, all participants favoured verbal communication as a means of making sure that the message they want to convey is in fact received by the student. The direct quotations below indicate

the strong position taken by the participants when probed on their expressed opinion:

I have a difficulty with giving my feedback in writing. I do not have control on how this will be interpreted. If you write 'relevant points but you did not discuss them in enough detail'. . . that is not enough and to explain exactly what I meant . . . I will not do it in writing.

[Laura, Session 5]

Laura's statement would appear to reflect her concern that the students do not fully understand the feedback provided to them. This seems to emanate from her commitment to ensure that students receive and engage with the direction which addresses their learning gap effectively. An interpretation of the group discussions and interviews suggests that written comments were viewed by the participants as limiting, especially since extensive text would be required to pass on comprehensive feedback about the task. This needs to be taken in the context of the teachers' constraints on resources, mainly time, and the students' reluctance to read the feedback:

To be very honest, we cannot write compositions as comments. We have large classes . . . I give them [feedback] in point form . . . But verbally, in class, I drill the students.

[Mariah, Interview 1]

In the past we weren't this way. We used to give feedback and students had to resubmit their work . . . They didn't read the feedback just the same. We used to go near them, one by one . . . we called it 'feedback session'. It was a lesson specifically set for feedback. It is only then that they took note of what you had to say.

[Jacob, Session 6]

On the last point, that is the lecturers' concern that students ignore the feedback provided to them, Ferguson (2011) proposes an alternative view by presenting the problem from the students' angle and reports that most of the

students considered the teachers' feedback difficult to understand and therefore, ineffective. Nonetheless, as Lee (2009) reports, there is the risk that teachers stick to their habits of giving feedback in ways that they are used to, even though they may be well aware of the lack of potential benefits to learning. A direct consequence of this is that assignments are not collected once they are assessed (Ferguson, 2011), resulting in the students being primarily concerned with the final mark or grade. This may reinforce the excessive importance given to the evaluative component, which as discussed earlier⁶⁵ diminishes the formative aspects of assessment. It also supports the need that any feedback, especially if written, is provided in a language that is understood not only by an expert in the field but also, by a novice⁶⁶.

Another aspect related to the implementation of Assessment for Learning within an organisation may be lifted from Jacob's referral to the 'feedback session'. In most institutes at MCAST⁶⁷, it is common practice that when the assessed work is returned to the students, the lecturer holds a session during which the assignment is discussed with the student on a one-to-one basis. In my opinion, this is an example where an initiative which finds the required support throughout all levels of an organisation's hierarchy is set to be more sustained than individual and sporadic initiatives. This issue is strongly supported in literature⁶⁸ and is consistent with efforts to engage the wider learning community and which secures the commitment of the school leaders (UK DfE, 2016). The struggle to adapt initiatives in isolation may demotivate

⁶⁵ See section 2.2.3.10

⁶⁶ See sections 2.2.3.6 and 4.3.2.5

⁶⁷ For an overview of the structure of MCAST, please see section 3.3.3.2

⁶⁸ See section 2.2.4.4

some teachers to sustain their efforts in bringing about the desired changes within their classroom. Others, while acknowledging the pressures of experiencing a lack of wider support, opt to negotiate with this difficulty and take ownership of their own teaching. Laura, for example, provides verbal feedback as a means to address a shortcoming she observes in the wider educational context, which she refers to as 'the system':

The fact that I give them verbal feedback gives me the opportunity to understand their thought processes. It helps them to think logically because this is not in their nature. The system did not allow them to develop this skill and it is a constant struggle.

[Laura, Interview 1]

Mariah, when faced with a similar difficulty, adopted the same approach as a means to work around the constraints which she felt were imposed on her. It is interesting to note that both participants, independently from each other, opted for a comparable approach, that is giving feedback verbally, to address difficulties which they felt were imposed on them:

This year I'll work differently. Since the institute is not giving back the assignments to the students, when the result is out, I will set a feedback session, one or two, depending on the class size. This will be compulsory where the students will come in, one by one and we'll go through the assignment together.

[Mariah, Interview 1]

The perceived preference for verbal feedback is not unique to the context of this research study. In an investigation on the expectations and experiences of English university students, the National Union of Students (NUS, 2011) reports that a substantial majority of students considered verbal feedback as their preferred mode of receiving assessment. In agreement, Beaumont, O'Doherty, and Shannon (2011), claim that their participating educators

acknowledged the importance of verbal feedback and discussions, particularly while the students are working on the assigned tasks. They provide a list of various approaches which their participants implemented, and these ranged from one-to-one to group feedback sessions. Beaumont et al. (2011) also noted that a mix of verbal and written feedback was the preferred method in the final stages of assessment, when this would probably be more evaluative than formative in nature. In another study on the students' points of view on feedback, Rowe and Wood (2008) took a slightly different perspective to the area and found that the students' outlook varied according to the nature of the feedback itself:

Results indicated a diversity of preferences (that is, written/verbal, specific/general, group/individual), suggesting that a balanced approach in providing feedback would be most effective to meet individual needs. There were clear preferences for verbal feedback when generic and provided to the group as a whole. Written feedback was preferred, on the other hand, when offered as specific comments addressed to the individual on an assignment or exam (Rowe & Wood, 2008, p. 78).

An underlying assumption for 'assessment dialogues' (Carless, 2006, p. 230) to be truly effective is the need for a positive professional relationship between the teacher and the student, one that is conducive to learning and progress. Laura reflected on this during the first group session which discussed the role of Assessment for Learning to bridge the gap in learning:

This is because there is continuous dialogue happening . . . I do not need to write anything. The relationship which I'm building with them is important. . . this is assessment happening continuously.

[Laura, Session 1]

In contexts where teaching and learning, and consequently assessment, are inherently influenced by the nature of relationships and social interactions⁶⁹, one could expect that the quality and quantity of feedback depends on the establishment of positive relationships. Students consider this as central to creating an environment which is conducive to asking for and receiving feedback (NUS, 2008). In my view, this is critical to the “facilitative function” (Archer, 2010, p. 102) of feedback, which the author defines as the extent to which it supports the learners in taking ownership of their own learning and becoming less dependent on the teacher. Evans (2013) extends this notion to the co-constructivist paradigm which takes into consideration the effect assessment bears on the teacher as much as on the student (Gibbs, 2006)– a key principle of Assessment for Learning.

Linked very closely to this is the balance between negative and positive feedback as perceived by students and teachers. This will be discussed further in the next section.

4.3.7.2 Positive and Negative Comments

A common theme which may be identified in the participants’ contribution is the effort they put into ensuring that their students are not demotivated as a result of assessment. They admit that it is sometimes challenging to strike a balance between being realistic and at the same time providing feedback that

⁶⁹ See section 4.3.2.1

is positive in nature, especially when the work submitted is far lower than the expected level.

So, the message you need to pass on needs to be positive. They would surely have something positive. If the work is a very poor, evidently, they wouldn't have understood anything . . . but I do not tell the student, 'What have you done?' but, I appreciate your efforts.'

[Mariah, Interview 1]

Mariah's last comment brings into perspective the apparent lack of distinction between ego-centred and task-centred feedback⁷⁰. Moreover, it may reflect an attempt to mask the negative aspects of the student's work with pseudo-positive comments and therefore, make the feedback experience less disheartening. Butler (1988) reports that such practices are comparable to merely using marks and grades with regard to their effectiveness in motivating long-term learning. The approach to making assessment feel less negative is also shared by other participants, for example:

I give a lot of feedback . . . hands on . . . during the lesson. I always have. . . and this ties in very closely with the character of the individual. My character is a positive one. I always look at the positive. So, I try to instil that approach with the student as well. Therefore, I try to focus the feedback more on what is good rather than what is wrong.

[Dunstan, Interview 1]

I try to avoid being negative in my comments. For example, I write, 'student needs to revise decimals'. I am showing that the student did not do well but at the same time, I am not making it obvious and spoon-feeding it to them.

[Daniel, Interview 1]

One of the entries in my research journal echoed Ramaprasad's (1983) distinction between positive and negative comments, noting that what

⁷⁰ See section 2.2.1.2

constitutes the nature of feedback is determined by the effect it has on the student's learning. If the primary purpose of assessment is to inform the next step in learning, then, in my view, what defines 'positive' feedback is one which the students can implement to improve their learning. Conversely, 'negative' feedback is such that it hinders learning gains. In the same journal entry, I also considered the term 'neutral' feedback, which I described as assessment which bears little or no effect on the student's future work or motivational level and which is therefore ignored altogether (Ferguson, 2011). It is pertinent to note that the meaning I attribute to positive and negative feedback contrasts Ramaprasad's viewpoint which draws on prior research and focuses particularly on the *size* of the learning gap:

If the action triggered by feedback widens the gap between the reference and actual levels of the system parameter, the feedback is called positive feedback. On the other hand, if the action reduces the gap between the two levels, the feedback is called negative feedback. (Ramaprasad 1983, p. 9)

As he later, in the same research paper, remarks that these definitions do not correspond with the popular understanding, for the purpose of this research study, the meanings adopted are the ones referred to in my journal. This also reflects the position taken during the group and individual sessions and which, in my opinion, ought to be endorsed in professional development programmes which are delivered locally.

The dilemma, which was referred to earlier, of teachers trying to strike a balance between the positive and negative nature of assessment is also discussed by Tierney (2014). She discussed the concept of fairness in the

context of assessment honesty, claiming that since Assessment for Learning is predominantly specific to the particular student, there is no objective standard which assessors could abide by. However, Hattie and Timperley (2007) identified student commitment towards goal achievement as one of the factors which differentiates between the effectiveness of positive and negative feedback. They report learning gains for students who are actively committed to achieving set goals and conversely, students who have not yet developed such commitment will benefit more upon receiving feedback which is negative, even though the effect may be temporary (Hattie & Timperley, 2007). While not providing evidence of the intended target audience, Daniel's practice, as described below, seems to indicate coherence with Hattie's (2007) latter contention:

[My intention is that] hopefully, from then onwards . . . 'with what I've written negatively about your work, you'll change it to something positive so that in your future assignments, you do not repeat the same mistakes'.

[Daniel, Interview 1]

One pitfall which Hattie et al. (2007) identify with this method is that repetitive negative feedback could eventually result in refraining from attempting tasks. A further concern with this approach, one which was discussed at length during the group sessions, is that students may not necessarily have the required competences to transform negative comments into positive outcomes. Revisiting Archer's (2010) two categories of feedback, learners need to receive guidance on the what, why and how of their learning process:

Directive feedback informs the learner of what requires correction. Facilitative feedback involves the provision of comments and suggestions to facilitate recipients in their own revision (2010, p. 102).

This entails students being guided, rather than spoon-fed throughout their learning journey. The participants' viewpoint on this position is discussed in the next section.

4.3.7.3 Strategies, Not Solutions

A theme which emerged through the data-analysis process and which seemed to be a common conviction amongst all participants was the value of avoiding giving direct solutions to mistakes which students make but rather supporting them by providing them with strategies on how to go about and address the shortcomings. This approach is strongly supported in literature (see e.g. Black et al., 2003a; Nicol & Macfarlane-Dick, 2006; Stobart, 2014) especially since it is conducive to self-regulated learning.

The participants reported different ways of avoiding spoon-feeding their students with Daniel and Iris, separately, sharing similar methods.

A student tells me, 'I have a difficulty.' I go around the class and mark the mistake with a circle, 'Your mistake is there. You need to discover what your mistake is.' I do not put the circle exactly next to the mistake.

[Daniel, Group Session 6]

I do not tell [the student] what the mistakes are. I only indicate where the mistake is and where they could improve. The student takes back the work. . . fixes the mistakes, gets it back. Then, [in the following lesson], they copy it again neatly. I only mark where they can improve or where they have made a mistake. 'The rest, you need to work it out, I just guided you. The work is yours'.

[Iris, Interview 1]

These two contributions seem to suggest that the teachers highly value the fact that students should own the process of their own learning. The level of effectiveness of such an approach also depends on students' predisposition to learn, both in terms of being willing to improve the work and also in terms of knowing what is required to reach the expected standard. Lynam and Cachia (2018) refer to this as "academic maturity" (p. 229), which they describe as the collective attributes which contribute towards independent learning. As Beaumont et al. (2011) remark, students are trained to become less dependent on their teachers over time. An episode of Assessment for Learning is one stage of many others which together contribute, and are in turn affected by, the wider school culture. One way of achieving this is through Beaumont et al.'s (2011) model which groups the various strategies of Assessment for Learning into three sequential stages: preparatory guidance, in-task guidance and performance feedback. The teachers and students participating in Beaumont et al.'s (2011) study, practise a high degree of Carless' (2006, p. 230) 'assessment dialogues' as the work at hand was broken down into smaller, perhaps, more manageable tasks. Students are then provided with the opportunity to submit drafts after receiving verbal or written feedback. Laura, one of the language teachers participating in this research study, shares a similar outlook on providing facilitative assessment (Archer, 2010) spread over a series of sessions:

My approach is that if I read a paragraph and I notice something in this sentence, I set a question which could either be vague, 'Are you noticing anything here' or more direct, 'What tense have you used, do you think it is correct?' I accompany them step by step. I see what they did, I comment about it and then they arrange the mistakes. Many times, two drafts are not enough; it depends what level they are at. I

must admit that with languages, there is more room [to provide such feedback]⁷¹.

[Laura, Group Session 7]

4.3.7.4 Summary

This section has interpreted various participants' experiences, positions, and practices in relation to creating an environment in which students can benefit most from the assessment provided to them. However, a critical principle in effective conversations is that, while assessing students' work, the information that is generated is not only useful for the student but also for the teacher. This is a key principle of Assessment for Learning and will be discussed in the next section.

4.3.8 Assessment for Teacher Learning

If one acknowledges that as teachers participate in professional development programmes, they themselves are learners, then their authentic involvement and engagement is critical. This is coherent with the theories of social constructivism, and therefore necessitates an understanding of the teachers' standpoint on the various facets of Assessment for Learning. Adopting one of the sets of characteristics which Windschitl (2002) attributes to the constructivist classroom, one would expect a constructivist professional development programme to create the right opportunities for teachers to "work collaboratively [while being] . . . given support to engage in task-oriented dialogue with one another" (2002, p. 137).

⁷¹ For a comparison between the implementation of assessment for learning in different subjects see Black, Harrison, Lee, Marshall, and Wiliam, 2004.

Through a clearer understanding of the values and purposes which participants attribute to feedback, this research study attempts to establish the basis of prospective programmes. Moreover, this section provides a discussion on how the participants' teaching processes are adapted as a result of the information available to them through assessment.

4.3.8.1 Teachers as Learners: A Blank Slate?

One pitfall of professional development programmes is that the participants' experience is overlooked. Particularly through its focus on the challenges, understandings, and attitudes of teachers with respect to the implementation of teachers being exposed to *new* ideas, *new* practices, and *new* experiences with the indirect, sometimes unarticulated, implication that past processes failed and thus need to be avoided. For example, Chappuis, S., Chappuis, J., and Stiggins (2009), suggest that right at the start of programmes, the participants are exposed to "an influx of new ideas" (p.58). On the same lines, Shulman and Sherin (2004) present the challenge of introducing a "big idea" (p. 136) as a means of creating a community of learners within schools. In this context, it is pertinent to emphasise that this is not an attempt to disparage the need to consider alternative outlooks on practice. What is being stressed is the critical importance of the contributions which participants bring to the discussions (Beavers, 2009). The constructivist paradigm supports the notion that teachers, as learners, are actively involved in the process itself and not considered as passive, blank slates (Harlen, 2010b; Merriam & Brockett, 2007). Loucks-Horsley et al.'s (2010) comparison between 'transformative'

learning and 'additive' learning (p. 70), in my opinion, illustrates the significance of acknowledging previous experiences which, as Trotter (2006) asserts, should not be overlooked.

The individual interviews and group session discussions seem to support this notion. All participants, apart from having received professional training in education, had years of experience of teaching at various levels. From the outset of the study, I was clear in my intent to give significant consideration to this and not present Assessment for Learning as another added task, over and above their already hectic schedule. I was aware of the fine balance of presenting theoretical material supported by literature and not being overbearing to the extent of seeming paternalistic, disregarding prior learning. Rather than some sort of novel practice, (Gardner, 2010b), Assessment for Learning strategies were presented as suggestions to 'fine-tune' their existing practices in an effort to make them more effective in bringing about the desired improvements in student learning. This is in agreement with the assertion that an effective teachers' professional programme "challenges existing practice, by raising expectations and bringing in new perspectives" (UK DfE, 2016, p. 8). This was especially relevant when the participants shared examples of their own experiences which, to varying extents, conflicted with what literature proposes as good practice:

First, I give the student a positive comment . . . always: 'It seems you've made a huge effort, or it seems you've paid attention . . . or, it seems that you've worked hard during the last week'.

[Iris, Interview 2]

Many times, the comments I write at the end of the assignment would be related to the effort the student has made [in the assignment].

Sometimes, I write 'Well done' to someone who gets 53% because I know that getting 100% [for that particular student] is an impossible task. But the fact that 53% was achieved, it is still very good.

[Daniel, Interview 2]

Building a clear understanding of the teachers' position and the factors which impinge on the development of their viewpoint is, in my opinion, critical to programmes which are built on trust and respect. This does not necessarily mean that there needs to be agreement on issues at all levels (Riley, 2000) but as Cordingley et al. (2015) and Knowles et al. (2015) sustain, these differences in opinions can serve as the starting point of professional conversations. Moreover, acknowledging "personalised ideas" (Hickey & Harris, 2005, p. 13) reduces the risk of resisting change (Brookfield, 2006) which Garet et al. (2001) claim may be predominant, even with teachers who publicly support reforms for teaching and learning improvement. With reference to this research, as indicated in section 3.5.8.2, this could be one of the reasons why all teachers fully participated in the study till the very last session, with none dropping out. The first interviews which were held before the group sessions, served the purpose of identifying the participants' beginning viewpoints, practices, and contexts which in turn helped me inform the design of the programme (Bayar, 2014). Moreover, an awareness of the participants' background helped me, as the researcher, understand their contributions better not only during the group sessions, but also at the data analysis and interpretation phase. For programmes which, as suggested by literature⁷², span over a number of years, the teachers' active involvement in the design is critical to sustaining motivation and engagement (Bayar, 2014). When Laura

⁷² See section 2.3.1

was asked about which type of follow-up programme she would be interested in, her response suggests a strong agreement with this approach:

I would want to be in charge of the whole process . . . I come up with a plan of what to do and discuss with the mentor who acts as a point of reference. I make a commitment . . . 'OK, so these are the stages we're implementing' . . . adaptations according to what has been discussed with the mentor and what I want to achieve.

[Laura, Interview 2]

The development of extended professional development programmes is discussed further in a later section of this chapter⁷³. By recounting the type of feedback which participants use when assessing their students' work, what follows is a discussion about such methods in an attempt to delve further into the participating teachers' viewpoints.

To varying degrees, different teachers may attribute divergent meanings to the same term related to Assessment for Learning (Boyle & Charles, 2010). There may be instances where the formative component of the feedback, that is the extent to which assessment is, in fact, *for learning*, varies from teacher to teacher. This would be in spite of the fact that when asked to define Assessment for Learning, the statements would be very close to textbook definitions (Garet et al., 2001). By asking the participating teachers for examples of their own practices, one could explore any possible inconsistencies between their intentions and their actual methods. Crichton and McDaid (2016) report that teachers may claim that they are implementing Assessment for Learning strategies, but their practices show evidence of weak implementation, with minimal effect on deep learning. In my opinion, this

⁷³ See section 4.3.9.1

goes beyond attempts of judging teachers and differentiating between 'effective' and 'non-effective' practitioners or to merely increase inter-grader reliability by ensuring a level of agreement between assessors (Sadler, 2009a, 2013a). What is being proposed is that professional development programmes can be fine-tuned to match teachers' needs through the interpretation of their real-life contexts (DfE, 2016; Hickey & Harris, 2005). This is consistent with Brookfield (2006) who asserts that there is a higher tendency of learner engagement if there is a prior clear appreciation of the "values, expectations [and] experiences" (p. 226), and to this I would add practices, of the participants.

4.3.8.2 Closing the Information Cycle

- Iris: [When a student makes a mistake] it is useful for me because it could be that I wouldn't have thought of that mistake. 'It's a good thing you made that mistake because you know what? I'm going to do it next week.'
- Dunstan: 'I want you to read it and explain it to me... what you've understood and start building from there'. Sometimes, the student is the best source of information.
- Laura: I think, in reality, if you are doing your work thoughtfully, you'll be doing formative all the time. We are continually assessing... How did they interpret what I said today?... if I realise that they were lost... I reflect on how I covered [the topic] and I go over it again... and I assess which stage they've reached.

This extract taken from a longer dialogue during the first group session would appear to reflect an appreciation on behalf of the participants for reflective practice, acknowledging that assessment could be a rich source of information. While one should not assume that this level of commitment is

prevalent across all educators, as Hoy (2008) claims, it bears a positive effect on teachers' motivation which in turn, most likely, would have a cascading effect on student learning and achievement. Wiliam and Black (1996) set the adjustments to the learning process on a continuum, ranging from the quick responses to classroom incidents to more long-termed programme revisions. The three practices described above by the participants may be interpreted as being immediate reactions to the needs within their classroom contexts, with the intentions of narrowing gaps in learning (Ramaprasad, 1983) but also to inform teachers' future actions and decisions.

Black et al. (2004) report that there were significant improvements in student engagement when teachers participating in their study reacted to students' responses in ways which could be compared with the claims made by Iris, Dunstan, and Laura referred to earlier in this section. Darling-Hammond and Falk (2013) sustain such claims, while asserting that, in this context, the explicitation of the teaching goals and the students' learning experiences are critical.

Iris' previous comment about her approach to students' mistakes could be interpreted as a readiness on behalf of the teacher "to seek *disconfirming evidence*" (Chappuis, 2015, p. 205) [emphasis in original]. Rather than confirming what has worked in class, a critical outlook seeks to construct an objective opinion on any shortcomings in learning. The most effective teachers, as Chappuis (2015) and Hattie (2009) contend, are the ones who actively explore alternative "calculated and meaningful ways" (Hattie, 2009,

p. 22) of how to address areas which require particular attention. They are able to tap into their past experiences and competences they would have developed over the years in ways which make their reaction to assessment truly effective in addressing the students' difficulties.

4.3.8.3 Summary

The journey from the initial exposure of a concept or topic to the eventual evaluative assessment, according to Hattie (2009), requires a series of feedback and monitoring cycles which serve the purpose of clarifying the teaching and learning process. This section discussed specifically how this information can be useful for effective teachers who do not hesitate to identify and address learning gaps but rather steer their teaching with a clear purpose of helping students learn.

4.3.9 Professional Development for Assessment for Learning – The Way Forward

This section focuses on the implications on professional development programmes, designed specifically to achieve learning gains through the implementation of Assessment for Learning strategies. Some issues, especially those closely linked with the respective themes, have already been raised in previous sections and will not be discussed again. What follows are my reflections through the analysis of data generated through the participants about other issues related to the research questions.

4.3.9.1 Sustained Support

Vygotsky's (1978) 'Social and Development Theory' places an emphasis on the network of interactions between members of the learning community, both between themselves and with the wider learning environment. It is not uncommon, especially in secondary and post-secondary schools, that, depending on the teachers' respective specialisation, they are assigned to teach more than one level. As a result, maintaining an effort to ensure that students are genuinely active participants in their learning process, requires a conscious effort on behalf of the teachers to sustain such an environment. Arguments supporting Assessment for Learning practices which strengthen the students' sense of belonging in their own journey to develop expertise similar to the teacher's insider knowledge have been explored in earlier chapters of this dissertation. Therefore, I suggest that, apart from providing support related to the respective subject area (Yin, 2015), professional development programmes need to provide opportunities through which teachers develop a deeper appreciation for co-constructed learning environments, "where both teacher and student identities are constructed and performed" (Pryor et al., 2008, p. 9)". This in turn requires programmes which are closely relevant to the real classroom contexts of the participants and which offer support through the provision of sustained coaching (Yin, 2015). In coherence with Vygotsky's theory, if one builds on the notion that teachers are also learners, mentorship which accompanies them through their own learning within their own realities becomes critical. The participants in

the study reported in this thesis expressed their strong preference for this as they remain in control of their own learning journey:

I would want to be in charge of the whole process . . . I come up with a plan of what to do and discuss it with the mentor. I do not think that this can be achieved at institutional level . . . by imposing. . . definitely no. The way to go is to identify people who are genuinely interested and then, let *them* influence their peers.

[Laura, Interview 2]

The above quotation is taken from the reply which Laura gave when asked about which type of programme she would be interested in once the first set of training sessions were over. Apart from the strong assertion about the importance of taking control of one's development, it also suggests a preferred role of Vygotsky's knowledgeable other – one of mentorship and companionship rather than imposing one's expertise on the teachers. Laura's expectations of the programme coordinator were also expressed during separate interviews with Daniel and Dunstan:

That they are is open-minded . . . you cannot push people, "Look, you have to this and that". They need to be flexible.

[Daniel, Interview 2]

But you can maximize [teacher development] by being accountable to someone or something. Even if it is in a formative way, not having someone measuring my progress. It's like you would have a companion . . . Also, you would know and learn from what others are doing.

[Dunstan, Interview 2]

This theme echoes the positions expressed by Villegas-Reimers (2003) and Black et al. (2003a) to adopt a more collaborative approach to professional development by giving a voice to teachers in identifying and selecting their own learning paths. It also suggests a need to allow space and time for

teachers, both individually and collectively, to explore and negotiate methods (Harlen, 2010b; Pryor & Crossouard, 2008) which are most effective within their learning environment – effectiveness which is reflected in student learning gain. This research study and literature⁷⁴ suggest that this requires that the programme should span for longer than one scholastic year. While as Mariah, during the second interview, remarked that through the sessions, we had laid the foundations of Assessment for Learning, all except Jacob would have considered involving themselves in an additional year of professional development. When probed and asked to clarify, he claimed that with what he had learnt during the pre-service training, through experience, and also through the sessions, he felt that he was prepared enough and did not feel he required any further support. By assuring him that a second year of the programme was entirely hypothetical, I tried to rule out any concerns Jacob might have had related to a reluctance to commit more time over and above his busy schedule. However, he sustained his position of not requiring further assistance to implement Assessment for Learning strategies in his future teaching. I did not pick up or sense any aversion to his participation in the research study, as the following observations seems to indicate:

We weren't bored, the time wasn't too long either - an hour and a half flew by. We discussed [between ourselves] and had time to talk to you as well. We had time to talk to each other and see researchers' work as well. The sessions were very good.

[Jacob, Interview 2]

Although, Yin et al. (2015) report that an additional year of coaching and support was effective in bringing about a sense of fulfilment in the teachers'

⁷⁴ See section 2.3.3.5

own development, programme developers need to take into consideration that even some of the most collaborative participants may, at any stage, choose to cease their involvement. Moreover, the teachers' personal and work-related circumstances may present an additional difficulty to commit to extending the programme:

If there is another programme, I would be interested in attending. However, due to family commitments, the session times were difficult for me. Perhaps once a month or every 6 weeks would be manageable.
[Mariah, Interview 2]

I suggest that teachers' own development should not be seen in isolation but rather, the programme developer needs to be sensitive to circumstances which may impede the full commitment towards personal growth. In this context, one dilemma schools could face is to strike the right balance between statutory requirements to implement innovations across the whole school and the particular circumstances and level of motivation of the participants. While the relevance of professional development in teacher improvement and as a result, in student learning is strongly supported in literature⁷⁵, imposition, on the other hand, typically associated with traditional programmes (Kennedy, 2005), may be counterproductive. In her concluding comments, Meister (2010) makes reference to the teachers' voice as being critical to the validity and success of professional development. I extend this notion of valuing the teachers' viewpoints to incorporate the disposition towards personal growth, which, apart from varying from individual to individual, also fluctuates over time for the same person. Within this

⁷⁵ See section 2.3.2.3

uncertain context, as Guskey (2002b) claims, providing the right amount of support and exerting the necessary pressure to induce change, is an additional difficulty to be addressed prior to the start of any programme and more importantly, sustained over time. On this last note, Guskey (2002b) suggests that, continuous teacher support is very often overlooked and neglected, and therefore negatively impacts the effectiveness of such programmes. Such provision of support is not only limited to being provided by the programme coordinator. Gravett (2004) identified collaboration between colleagues and also, with the school leadership as critical to the success of her intervention with about 60 teachers in three different schools. This shifts the focus from individual growth to one which is embedded within an influence from other learners, all with their own direction and pace, but with one scope, that is, to leave a substantial positive impact on student learning (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). This may sometimes require a considerable revisiting of one's practices and ways of thinking which reflect a transformation in one's convictions (Gravett, 2004).

4.3.9.2 Knowledge and Beliefs

In the context of this research study and more specifically in relation to the main research question which explores the challenges, understandings, and attitudes of the participants towards Assessment for Learning practices, one of my reflective journal entries touched upon the extent to which the participants' understandings and expressed thoughts truly reflected the beliefs which, as Skott (2015) notes, act as a lens through which teachers

interpret others' and their own actions. For the purpose of this discussion, the meaning I am attributing to the term 'beliefs' is constructed from Skott's (2015) consideration of the various facets of beliefs. In summary, beliefs may be viewed as subjective convictions of individuals, which generally influence the approach to Assessment for Learning practices and which are expressed consistently within different contexts and periods. On the other hand, beliefs might not necessarily precede practice. Buehl and Beck (2015) report findings from research which suggest that there were observed changes in beliefs as a result of alternative practices which educators undertake. The relationship between beliefs and practices can be viewed as one of a cyclical nature: beliefs affecting practices, which in turn could influence the belief system of the individual.

Beliefs, in my opinion, although closely dependent on the cognitive knowledge of a particular concept, are deeper than the mere understanding and comprehension of such concept. A direct implication on professional development programmes, one which has been referred to earlier, is the duration of programmes, where it has been consistently argued that programmes with the purpose of fostering deep and long-lasting change should not aim at achieving immediate results (Gravett, 2004). While perhaps the first session addresses theories and concepts about Assessment for Learning, addressing the cognitive aspect, teachers need to be given the opportunity to relate with such knowledge and make time for a slower process of allowing a gradual development of their beliefs. Through support and mentoring, which was discussed in the previous section, teachers will

come to challenge long-held convictions, which could even have stemmed from their own experiences as students (Skott, 2015). Brown (2004) insists that addressing teachers' beliefs about assessment, amongst other issues, is critical to any development plan, claiming that there is evidence to support that this bears a significant effect on the strategies which are eventually adopted by teachers in their practices. Introductory meetings, such as the first set of interviews carried out as part of this research study, serve the purpose of trying to identify and develop an awareness of the participants' beliefs on pertinent issues. Moreover, within the logistic, practical, and personal circumstances related to the programme, another consideration which may be explored is the distribution of the sessions. In agreement with the participants, the programme coordinator would try to strike a balance between allowing time and space for the participants to reflect on proposed alternatives to their practices while at the same time not prolonging the programme to the extent of risking attrition. When considered in the context of the already hectic schedule of teachers, maintaining interest in one's personal growth is a challenging task. Providing support which is related to the respective subject areas was one of the suggestions made by some of this research's participants as a means to instil and ensure engagement. This will be discussed in the next section.

4.3.9.3 Subject-focused Professional Development

Though to varying extents, professional development programmes which are subject-specific were the predominant preference of the participants. The

correlation between the teaching area of each of the participants and Assessment for Learning practices was beyond the scope of this research study and was not a factor which was being explored. Any reference made on particular subjects was made in the context of giving examples to clarify the strategies related to Assessment for Learning. In fact, many examples presented during the group sessions were not directly related to mathematics and languages. For example, the participants were invited to think about the learning processes of tile layers and painters and were asked to suggest how the different types of strategies being discussed could be employed in such contexts. I suggest that this was particularly effective in view of the fact that it encouraged the participants to consider assessment as a tool for learning, and eventually, evaluation in alternative contexts:

We spoke about companionship. I still remember the painter example where, while he is still on the job, you're telling him how to improve so that the final product is good.

[Jacob, Interview 2]

On the other hand, consistent with what literature suggests, there was an expressed preference for subject-specific sessions:

Sometimes, we, the Maths teachers, felt like a fish out of water and with regard to language terminologies, I couldn't understand what they meant.

[Daniel, Interview 2]

To be able to implement what we discuss during the sessions in class, these need to be subject-based, related to the syllabi and assignments.

[Mariah, Interview 2]

These contributions indicate that although there are Assessment for Learning principles common to all subjects, the group sessions would have been more

constructive had the participants been grouped according to the respective subject areas. This provides opportunities for collaboration and exchange of ideas between peers, a factor which was reported by Yin et al. (2015) as being critical to the participants in their research study. Moreover, subject-specific programmes would address a deficit identified by the National Research Council (NRC, 2001) when referring to assessment practices which “do not capture the progression of students’ conceptual understanding over time” (p. 27-28) in the particular subject areas. To counteract these challenges, apart from guiding teachers to be cognizant of the many steps towards becoming an expert in the field, Yin et al. (2014) proposed the mapping of the learning progressions to assessment, thus creating a seamless symbiosis between the two processes. Such a practice is coherent with the notion of explication of the learning process through the use of criteria which was discussed earlier⁷⁶. Black et al. (2011) insist that this is particularly important when giving feedback to students as they struggle to grasp concepts presented to them. The skilful teacher tries to decode what lies behind students’ misconceptions by understanding the root of their mistakes. Moreover, as Laura’s reflection suggests, effective feedback is one which is very specific to the work produced by the students:

In languages it is difficult to show clearly how [the work] ought to be because there are endless examples of the correct answer. If I give them a writing task, all [responses] will be different but all [possibly] correct.

[Laura, Session 8]

⁷⁶ See section 2.2.3.6

This emphasises the function of Assessment for Learning which is particularly interested in the next step of *each* student's learning journey and therefore, consistent with the concepts of fairness, equality and equity which were discussed previously⁷⁷. It also necessitates that the support to teachers is provided through the involvement of experts in the pedagogy of the respective subject area. The actions taken towards improved teaching and learning may be different from teacher to teacher (Black et al., 2003a). Therefore, at least in the later months of development programmes, one would propose that classroom interventions are identified through negotiations between the teacher and the supporting expert on issues relevant to the implementation of Assessment for Learning strategies which are focused on the particular subject. As Black et al. (2013a) notes, this limits the generalisability of possible findings of such interventions – not only to other school environments but also to different subjects within the same College. This, together with other factors influencing the generalisability of this research study, will be discussed in the concluding chapter.

4.3.9.4 Summary

This section discussed three broad issues which are related to the final emergent theme and sub-themes relevant to the focus of this study. The participants' views, together with my reflections on the duration of professional development programmes and how these could bear an influence on teachers' convictions were exposed and analysed. In the concluding part of this section, the extent to which professional development programmes

⁷⁷ See section 4.3.2.2

should be specific to the particular subject area was discussed and compared with concepts proposed by literature.

4.4 Chapter Conclusion

This chapter began with an overview of the analytical approach to the data generated through the two sets of individual interviews and nine group sessions. Eight emergent themes were identified and discussed in relation to the research questions:

- Assessment for Learning: making connections
- Rubrics as a learning tool
- Drafting and redrafting
- Exemplars as a learning tool
- Learning intentions: for learning or for teaching?
- Assessment for student learning
- Assessment for teacher learning
- Professional Development for Assessment for Learning – the way forward

The analysis and interpretation of these themes and their related subthemes sought to understand the engagement of teachers with Assessment for Learning strategies through their participation in a professional development programme. The next and concluding chapter contains the final reflections on the main outcomes of this research study, revisits the research questions, and considers limitations and the implications the findings may have for further research, policies, and practices.

Chapter 5 – Conclusion

5.1 Introduction

The study reported in this thesis set out to understand the factors which teachers may need to negotiate when considering implementing strategies which contribute to the formative nature of assessment and learning. A small group of seven teachers were invited to participate in a number of sessions focused on key assessment for learning strategies and were given the opportunity to reflect, both individually and collectively, on how their own teaching and assessment practices could be fine-tuned to incorporate processes which would encourage student learning. The purpose of this study was not merely to convince the participants to adopt the practices which were discussed during the sessions. The focus was on the teachers' engagement with such practices as illustrated in the main research question:

- What challenges, understandings and attitudes do teachers need to negotiate when implementing Assessment for Learning practices within a particular learning community?

As stated in Chapter One, the interest in this area originated from my perception that Assessment for Learning within the Maltese national context was not prevailing as I had expected it to be, especially in view of the expected learning gains claimed in literature. I was interested in exploring possible reasons behind what manifested as barriers to implementation. The professional development programme gave me as the researcher, and the participants, the opportunity to expose a number of key strategies which are

typically associated with Assessment for Learning. Moreover, the participating teachers had the space and time to reflect on these concepts as they related them to their teaching contexts. During the sessions, my role was that of presenting Assessment for Learning strategies and facilitating the discussions to create an environment where participants would feel free to express their opinion. Beyond the group sessions, my efforts shifted toward the identification of themes and subthemes which emerged from the collected data. Apart from seeking to answer the main research question, the findings elicited from the data contributed to answer the subsidiary research question which asked:

- In the context of participating in a professional development programme on Assessment for Learning strategies, what factors contribute to addressing these challenges, understandings and attitudes?

The next section of this chapter revisits the two research questions and summarises the findings as discussed in Chapter Four. This is followed by a consideration of the limitations of the study and the chapter concludes with some consideration of the possible implications for policy and practice, and some suggestions for future research.

5.2 Summary of Findings and Implications for Practice

The contribution to knowledge of this research study is related to the *teachers' experiences of the implementation of Assessment for Learning within their teaching and learning contexts*. The data generated through the

group sessions and individual interviews point towards the essence of *fostering positive personal relationships between teachers and students*, which in my view provides the foundation for any assessment initiatives which support learning. This notion was emphasised to the extent that *teachers expressed a strong preference for verbal over written feedback*. They claimed that face-to-face encounters are better suited for rich discussions about the student's work. An awareness of such positions may have a direct implication on the design of professional development programmes. For teachers to be active participants in their development, taking ownership of their own learning, one would expect their preferred mode of communicating with students to be taken into account and, possibly, developed. The concept of bridging the gap in learning entails that firstly, there is a clear understanding of the actual level of the learner. Only then can one assume that the support provided to achieve the desired level can be relevant to the learner. Similarly, if for example, there is an intention to focus professional development on the type of feedback teachers give to students, in my opinion, the starting point should not only be that of clarifying teachers' current positions on the role of feedback in learning, but also that of acknowledging the methods teachers currently implement when providing feedback. This approach contributes to *an environment in which teachers feel safe enough to explore alternative aspects of assessment*.

The data generated through this research study also reflect the purpose which the participating teachers attributed to assessment. The discussions centred around issues like *fairness, equality, equity, and deservedness* in relation to

assessment, suggest underlying attitudes toward the roles and functions of assessment. Such perspectives may be positioned anywhere along a continuum, ranging from being purely judgemental to a more formative purpose of assessment. The concerns expressed by some of the participants suggest that issues related to uniformity between students are more relevant when the assessment is viewed through an evaluative and judgemental lens. Conversely, the participants seemed to be less concerned about uniformity when their perspective of assessment shifted to a more formative one, claiming that support to achieve the next step in learning depends on the particular needs of the student. In view of this, ***an awareness of the participating teachers' mindset and preconceived ideas, and more importantly, identifying the roots of such positions*** are, in my opinion, critical, especially at the early stage of planning professional development programmes. Careful consideration of these core-beliefs, which in many cases could be long standing and ingrained in everyday practices, would contribute to mitigating any resistance to change. The latter is in fact one of the purposes which this study set out to achieve, through an exploration of possible challenges, understandings and attitudes towards Assessment for Learning practice within the bounded context of a local learning environment.

Another finding which contributes to understanding of the nature of assessment, is related to ***how teachers adapt their feedback according to their perception of the standard of the student***. This reflects the purpose which teachers attribute to assessment and the extent to which they consider assessment to be an integral component of learning. Moreover, a finding

related to this issue is concerned with the assumption that teachers' feedback is received, decoded and understood the way it is intended to be. The analysis of the participants' transcripts suggests that they place considerable importance on leading students to share the same meanings and develop similar understandings of particular topics. However, there were *instances which seem to indicate that teachers take this aspect of communication for granted*. The journey from being a novice to becoming more of an expert in a particular field requires a clear understanding of the qualities which constitute expertise. It is therefore essential to address this aspect of communication in professional development programmes.

The need for clear and effective communication was also reflected in the findings related to another theme which was identified through the analysis of data – that is the utilisation of rubrics as a learning tool. Admittedly, I was surprised by the extent to which the *participating teachers strongly favoured verbal over written feedback with regard to the richness of information each method carries*. Such views had a consequence on their opinions regarding the implementation of rubrics as a tool to map out the different stages towards developing expertise. This has implications on the design and implementation stages of the professional development programme by providing an opportunity for these preferences to be revealed and taken into consideration when the different strategies of Assessment for Learning are presented. The bounded nature of this research study limits the generalisability of the findings, meaning that one may not assume that other teachers, even if practising within the same College, may have a similar

outlook on issues pertinent to the use of rubrics as a learning tool and which emerged through the data analysis process. What this study proposes is that ***professional development coordinators need to have the opportunity to gain insights on the perceptions of their participants, always within the context in which they are practising.***

Significant findings from this study have also revealed the participants' outlook on providing students with the opportunity to resubmit previously assessed work before its final evaluation. The discussions during the sessions were influenced by a practice which was introduced across certain levels at MCAST and which expected that teachers provide students with an opportunity to act upon the feedback and improve the standard of the final product. While acknowledging the concerns expressed by the participants, it can be argued that ***the involvement of school leadership enhances the likelihood that initiatives aimed at improving learning could be successful.*** Although the role of school authorities in the implementation of Assessment for Learning strategies is beyond the scope of this study, earlier brief discussions⁷⁸ emphasise the strong support this finds in literature. ***Professional development, which is intended to bring about a change in practice or policy within a school, needs to involve as many stakeholders as possible, while at the same time ensuring that ownership of the process is not limited to a selected few.***

⁷⁸ See sections 2.2.4.4 and 2.3.3.4

Further analysis and interpretation of the data revealed two other main themes, both of which are related to the importance of clarifying the learning journey through the use of exemplars and learning intentions. Discussions evolved on how ***the careful use of examples reflecting the expected standard needs to avoid demotivating students***, if they are deemed as attainable. As discussed in the second chapter, this is certainly not the scope which literature suggests as good use of exemplars as an Assessment for Learning strategy. Prior to proposing the use of exemplars as a tool to improve learning, professional development coordinators should seek to emphasise that samples of work at the expected level are not standards to compare to, but rather standards to work towards. The crucial distinction lies in the effort to avoid excessive competitiveness and norm-referenced strategies and focus on providing support through breaking down the learning gap into smaller achievable challenges and by providing appropriate feedback. A key episode lifted from the group sessions was a discussion between two participants on the extent to which they believed that the students were aware of the actual learning intentions of the lesson. It reflects the difficulty some teachers may have to differentiate between the topic they are teaching and what students actually get to know and be able to do as a consequence of teaching. ***Professional development programmes need to help teachers align their perspectives on learning to that of their students' before introducing learning intentions as a tool to support authentic learning.*** Moreover, through the extension of programmes to include teacher support within their own environment, one could consider providing

opportunities through which the participants confirm what their students are really learning and check if they are able to transfer this knowledge to other contexts.

Stemming from the need of teachers to avoid disheartening students, discussions during the group sessions and interviews revealed a practice of supplementing feedback about work of low standard with comments about the student's efforts in producing such work. The motivational consequences of similar practices have been discussed at length in the literature review chapter. However, it is pertinent to propose that ***a clear understanding on what constitutes negative and positive comments, and the effect they may have on the student's motivation to learn, needs to be addressed through professional development programmes.*** Providing teachers with opportunities to contrast the consequences of ego-centred with task-centred feedback may lead to a realignment between their intentions and the actual outcomes of their feedback. While being cautious not to generalise the observations to other contexts, it is worth noting that all participating teachers in this study highly valued the need to encourage their students to improve, irrespective of the level of work they produce. This, in my opinion, provides a favourable environment for teachers to consider adjusting their feedback to make it consistent with their intentions.

Issues pertaining to the dual role of the functions of Assessment for Learning were also identified through the analysis of the generated data. ***The information gathered through assessment does not only inform the***

students' learning but is also a reflective exercise through which teaching is adapted to the learning context. The benefits this has on the teacher's teaching and consequently, on student learning have been discussed in the section about the analysis of this theme. It assumes a high degree of professionalism and self-direction within an environment in which teachers are at liberty to apply the newly acquired knowledge within their classrooms. The notion of teachers being leaders of their own learning has been a central point in this thesis. *Successful professional development acknowledges this fact and seeks to build on the prior experiences, knowledge, and competences.* This is one of the significant issues which I reflected upon throughout the group sessions, at the analysis, and the interpretation phases.

The final group of sub-themes were aimed at answering the subsidiary question, more specifically, to identify factors which contribute to addressing the challenges, understandings and attitudes when implementing Assessment for Learning practices. *Three main factors emerged from the data, namely the need for extending support to the implementation phases of the professional development programme, the need to allow for the necessary time for deep transformation to happen, together with issues which relate to the importance of running programmes specific to the respective subject areas.* Further to that discussed in Chapter Four, these findings strongly point towards *the need for professional development programmes to be intimately related to the teachers' actual practices.* It also implies that *support should be provided by experts in the respective fields, through teams rather than individuals, encompassing Assessment for Learning as*

well, as teaching and learning in the particular subject domain. This was a challenge I had to negotiate with since the subject which I received pedagogical training in was different to the subjects which the participants taught, that is, Mathematics, Maltese, and English. Other challenges and limitations, which were related to the research design or the researcher, will be discussed in some detail in the next section.

5.3 Limitations Encountered

Although this study has achieved its aims, it is important to consider a number of limitations which define and limit the findings to its specific context.

The study was carried out with a small group of teachers who were purposefully selected, depending on their general outlook on teaching and learning. Therefore, one cannot assume that their opinions, together with the findings and interpretations of the data, reflect the views of the wider teaching body, both within the same college and other educational institutions. Such generalisations could possibly be considered only if more participants from different contexts were involved in this study. Alternatively, one could consider replicating the study with other purposefully-selected participants with diverse responsibilities, for example, school leaders, policy makers, parents and students. Exploring the research area from different perspectives would contribute to both the richness of the data collected and also that of the findings of the study itself. The purpose of studies such as this one is not to identify trends or patterns, but rather to provide a detailed and deep account of the participants' experiences within a specific, bounded learning

organisation. As Clough and Nutbrown (2012) contend, researchers may determine the scope of their research in terms of “breadth and generalisability” (p. 160) or, contrastingly, in terms of “depth and specificity” (p. 161). Striking a balance between these two broad purposes may prove to be difficult to achieve (Clough & Nutbrown, 2012) and the study reported in this thesis has preferred depth and specificity.

The purposeful sampling, though central to the research design, may have been a source of bias towards certain positive practices of teaching. On the other hand, as the participants’ contributions indicate, the discussions were not exclusively positive. Some were very critical of the suggestions being proposed as good strategies for Assessment for Learning. The reason for this could have been because at the beginning of each session, both the group sessions and the individual interviews, I reminded the participants that this research was more about understanding their views rather than an exercise to try to convince them to implement alternative practices in their teaching. An interesting development of this study could be that of extending the invitation for participation to a wider, less homogeneous sample of the teacher population. Moreover, in view of the bounded, particular context of this study, further investigations could also involve other educational sectors in Malta, namely, the State, Church and Independent schools. This would contribute to developing a deeper understanding of the conceptions which teachers coming from different educational contexts may hold, allowing for meaningful comparisons across the wider Maltese educational environment.

A further limitation of this research study was its duration. Although the two sets of interviews and the group sessions provided the required data for this study, it would have been interesting to investigate how the challenges, understandings and attitudes of the participants vary over time, possibly by extending the study by another year and focusing particularly on the implementation. However, due to the already busy schedule of the participants, it was an achievement to conduct a study spanning much of a scholastic year, and extending this study to two years would surely have risked of attrition.

An awareness of the limitations is important because it substantiates claims that findings of studies such as this cannot be claimed as the complete, universal truth (Cohen et al., 2007) about the area being investigated. It needs to be taken in the context of previous studies and future ones as suggested in the next section.

5.4 Recommendations for Further Study

The data analysis and interpretation phase of this research study identified eight main themes together with a number of relevant sub-themes. However, as stated above, the scope of this study is limited in terms of potential for generalisation of the findings and this section suggests a number of possible future studies which emerge from the findings of this study. Such studies could contribute to further exploring the challenges, understandings, and attitudes teachers need to negotiate with and how professional development programmes contribute to addressing these issues.

This study could be extended in a number of ways. Replicating the investigation in the same context but exploring the views of key stakeholders, such as students, members of the senior management team could yield interesting information which could then be assimilated with the findings of this study to inform practice. Gathering information from different viewpoints not only contributes to the trustworthiness and meaningfulness of the findings but also ensures that any interpretations, and eventual implementation, are more relevant to the context within which the study is carried out. Since the findings from this study seem to suggest that the involvement of College leadership may have positive implications on the implementation of new initiatives, one could explore this further by investigating how some of the difficulties expressed by the participants could have been addressed had they been more actively involved in the planning stages by school management.

Furthermore, since the participants came from a limited number of subject areas, further qualitative investigations involving teachers from other subject areas could generate alternative insights of a wider segment of the teaching body. Additionally, as indicated earlier, the study could be extended by another year. This would allow the researcher to seek confirmation of the first-year findings by investigating teachers' practices and related outcomes in the following years.

While taking into consideration the resistance typically associated with the implementation of new initiatives, a large-scale, nationwide quantitative

study on the perceived understandings and meaning different stakeholders attribute to Assessment for Learning could be useful to inform professional development programmes. Although this study contributed to identifying and developing a deep understanding of similar issues, the bounded context could not address the wider dimensions of all local educational contexts. The suggested study could provide a comprehensive view of the relevant issues across many strata of the local educational system.

This study also revealed, and to a certain extent confirmed, the hectic schedule of teachers, large classes, and the lack of time. One recommended study could investigate how technology can assist teachers in this regard. Whilst currently there are packages which support teachers in the mechanics of assessment, the ones which support the implementation of Assessment for Learning seem to be limited. The contextual specificity of teaching, learning, and assessment entails that the proposed technology is specific to the subject areas, while at the same time allows for customisability according to the particular learning contexts.

5.5 Final Thoughts

In conclusion, this study exposed a number of the participants' challenges, understandings, and attitudes regarding the implementation of Assessment for Learning strategies and how participation in a professional development programme could address relevant issues. Similar to other life experiences, this prolonged intense journey may have left an impact on anyone who came close to it. As Clough and Nutbrown (2012) reflect, "so, research worthy of

the name must bring about some change: change in the researcher, change in the researched, change in the user of research.” (p. 13). Whilst acknowledging that change cannot be achieved overnight, I hope that my study has had a lasting, albeit limited, effect on the participating teachers. For my part, my deep involvement in this study has extended my understanding of teachers’ approaches to Assessment for Learning and the implications these may have on professional development programmes.

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Appendix A – MCAST Ethics Committee Approval



Tonio Pace <toniopace@gmail.com>

FW: Initial Research Proposal

1 message

Tonio Pace <Tonio.Pace@mcast.edu.mt>

18 November 2016 at 12:33

To: "toniopace@gmail.com" <toniopace@gmail.com>

From: Isabella Anna Zeno
Sent: 18 November 2016 12:22
To: Tonio Pace <Tonio.Pace@mcast.edu.mt>
Subject: Initial Research Proposal

Dear Mr Pace,

Reference is made to your research proposal, submitted to the MCAST Ethics Committee on the 31/10/2016. Please note that your research proposal and subsequent research endeavour has been approved by the MCAST Ethics Committee. You may thus proceed in line with the proposal that you have submitted. Kindly take this email as the formal response of the MCAST Ethics Committee.

Best regards

Isabella Anna Zeno

Isabella Anna Zeno

AO University College

Students' House

1st Floor Room 102

MCAST Paola

Phone: 23987172



Appendix B – The University of Sheffield Ethics Committee

Approval



Downloaded: 16/11/2016
Approved: 16/11/2016

Tonio Pace
Registration number: 140220812
School of Education
Programme: PhD/ Education (Malta) DL

Dear Tonio

PROJECT TITLE: Teacher Professional Development for Formative Assessment
APPLICATION: Reference Number 011387

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 16/11/2016 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 011387 (dated 08/11/2016).
- Participant information sheet 1024837 version 1 (08/11/2016).
- Participant consent form 1024839 version 1 (08/11/2016).

The following optional amendments were suggested:

Reviewers suggest that you carefully consider the issue of researcher bias in this study. In particular you seem to be assuming that the training will result in 'transformation' but this undermines the potential responses of your participants. You may want to consider whether 14 meetings is necessary as this is quite a large commitment for busy teachers.

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

David Hyatt
Ethics Administrator
School of Education

Appendix C – Information Sheet and Participant Consent Form

Doctoral research: Teacher Professional Development for Formative Assessment

Information Sheet

I am currently following a Ph.D. in Education with a particular focus on the engagement of teachers as they participate in a professional development programme on the formative aspects of assessment. Through this research project, I intend to study how such a programme transforms the teachers' understanding and attitudes with regard to assessment for learning and how these transformations in turn affect their assessment practices.

Research strongly points towards the improvement in learning, academic progress and achievement as a consequence of incorporating more formative assessment practices within the classroom. When implemented successfully, these will bear an effect on the students' motivation and ability to adapt their skills in new, unexplored contexts.

If you agree to take part in this study, you will be invited to participate in a professional development programme on assessment for learning, held at MCAST, tentatively twice monthly between November 2016 and June 2017. The sessions will be led by me and will be in groups of no more than eight teachers. This will allow for active involvement of all participating teachers. You may also be invited to participate in individual or group interviews which will focus on the data which emerge from the study.

Your participation and contribution throughout the process will be related to the research study only and in no way will it have any consequence related to your employment conditions with the College. This study will be conducted according to the ethical guidelines set out by University of Sheffield. To protect your identity, in the final write up, your names will be replaced with fictitious ones. All transcripts and personal notes which make reference to your contribution and participation will be stored securely and only the researcher will have access to this information. Any digital information will be stored on digital devices and will be accessed through the researcher's own credentials only. Once exhausted, the data collected throughout the study will be destroyed. On the other hand, due to the particular organisational structure and vocational mission of MCAST, it would be impossible to shield its identity from anyone who is familiar with the local educational context. Therefore, changing the name of the institution to protect its anonymity would be ineffective.

Kindly note that the data relevant to your involvement in this study would be made available to you upon request.

Should you require further information, please feel free to contact me on toniopace@gmail.com or [REDACTED]. You may also contact my tutor, Prof. Cathy Nutbrown, University of Sheffield on c.e.nutbrown@sheffield.ac.uk.

Should you choose to participate, please sign the consent form below:

- I confirm that I have read and understood the information explaining the research project and have had the opportunity to ask questions about the project.
- I understand that my participation in this study is voluntary and am free to withdraw from the study at any time, without providing a reason and without any negative consequences.
- I understand that my name will not be linked with the research materials. I will not be identified or identifiable in the report or reports that result from the research.
- I consent to participate in this study.

Participant's Name

Participant's Signature

Date

Tonio Pace

Appendix D – Mezirow’s Phases of Transformative Learning

Table D:1 Mezirow’s (1978) ten phases of transformative learning

Phase 1	A disorienting dilemma
Phase 2	A self-examination with feelings of guilt or shame
Phase 3	A critical assessment of epistemic, sociocultural, or psychic assumptions
Phase 4	Recognition that one’s discontent and the process of transformation are shared and that others have negotiated a similar change
Phase 5	Exploration of options for new roles, relationships, and actions
Phase 6	Planning of a course of action
Phase 7	Acquisition of knowledge and skills for implementing one’s plans
Phase 8	Provisional trying of new roles
Phase 9	Building of competence and self-confidence in new roles and relationships
Phase 10	A reintegration into one’s life on the basis of conditions dictated by one’s perspective

(Mezirow, 1978)