Student-led assessment in the primary classroom:

Facilitating student ownership and motivations towards assessment

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Abstract

By allowing students to play an active role in the assessment of their work, can their perceptions and motivations be changed? This dissertation considers the impact of working collaboratively with primary school teachers and students to develop the skills needed to integrate student-led assessment into their daily practice, with the objective of analysing how this affects the students' motivations and attitudes towards their work. Three teachers and the researcher, the Head of Primary, concertedly trained in how to develop student-led assessment across a 13-week trial that involved Year 4 students in an English curriculum international school in Malaysia. An experimental group comprising of 28 student participants engaged in three rounds of focus groups, while the three teacher participants engaged in weekly working focus groups as well as three interviews over the trial period. The findings suggest that students benefited from their involvement in student-led assessment since, at the end of the study, they could more accurately understand and explain their progress and predict their grades, as well as explain the uses and importance of assessment as learning. The teachers observed successes, such as increased student motivation, enhanced student understanding, more advanced autonomy, and challenges, such as timing and consistency with student-led assessment across the three Year 4 classes. The research leads to suggestions with regards to implications for practice of teachers, schools and policy makers, as well as directions for future research.

Statement of Originality

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature:

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Dedication

To my dear niece Cecilia –

You have made my every day more beautiful since the day you were born. May your world always be big and bright, filled with love and laughter and fueled by a passion for learning.

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This dissertation would not have been possible without the contributions of love and support from many important people in my life.

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Table of Contents

Chapter 3: Methodology 101

Chapter 4: Thematic presentation of findings   **140**

Chapter 6: Implications for the present study and for educational futures 229

List of Appendices   246

List of Tables

List of Figures

Glossary

N.B.: The terms in this glossary and their use throughout this dissertation are relative to the context and application within the field of education and assessment and, as such, should not be applied to any other context.

Academic buoyancy: The theory that education serves to benefit students who are 'academically buoyant' – those that can more easily cope with setbacks and struggles (Martin & Marsh, 2008). This calls for an educational system that recognises differential learners and the need for students to develop independence (Nagy, 2016), by developing self-efficacy, including active participation in and effective feedback on their learning (Martin & Marsh, 2008).

Assessment as Learning (AaL): A means of assessment that is aimed at supporting a student's ability to engage with and reflect upon their learning (Earl & Katz, 2006). It involves students understanding the success criteria and identifying areas of strength and areas that require improvements (Earl & Katz, 2006; MacMath, Wallace & Chi, 2009).

Assessment for Learning (AfL): A means of assessment that focuses on supporting students to understand and improve their learning. AfL is part of an ongoing and collaborative process that promotes better results, whereas formative assessment promotes improved teaching (Wiliam, 2009).

Assessment of Learning (AoL): A means of assessment that serves most often as summative assessment. It ascertains a student's level of gained understanding or knowledge from a topic of study (Earl, 2012). See 'summative assessment'.

English National Curriculum (NC): The curriculum of statutory objectives introduced in 1988 that reflects the English government's expectations of what students should be taught (Wyse & Torrance, 2009).

Feedback: Information about student learning that highlights particular elements of their work, such as specific strengths and weaknesses, and provides ways to improve that assist the child's understanding of the learned concepts (Black & Wiliam, 1998).

Formative assessment: An assessment practice whereby teachers encourage students to reflect upon their learning by using information gathered to improve the learning outcomes, rather than simply acquiring a grade from the work (Antoniou & James, 2014).

High-stakes assessment: Tests that are administered to focus on summative knowledge. Research suggests that high-stakes assessments replace the use of formative assessment with summative assessment (Black, Harrison, Lee, Marshall & Wiliam, 2004) and reduce the beneficial effects of Assessment for Learning (Elwood & Lundy, 2010). High-stakes tests also narrow the curriculum by allowing teachers to 'teach to the test' (Klenowski & Wyatt-Smith, 2013), thus preventing meaningful classroom learning and assessment practices, leading to teacher de-skilling (Shepard, 2000).

Neo-liberalism: A marketised education that is believed to be resilient and responsive to change. This government-sponsored ideological agenda has caused social pressures within education reform and has been lined to parent choice and consumerism (Powell & Edwards, 2002). Neo-liberalism pushes for increased academic results through a culture driven by greater transparency and accountability (Goodson, 2010).

Scaffolding: A method of learning whereby teachers model ideas, then encourage students to construct the best fit for their learning (Elliott et al., 2016). This guidance and support assists students in developing sound judgement (Klenowski & Wyatt-Smith, 2013).

Self-regulated learning: A common term to denote independent learning (Meyer, Haywood, Sachdev & Faraday, 2008). Derived from exposure to classroom evaluation and student outcomes, self-regulated learning influences student perceptions and understanding of their own learning (Crooks, 1988). Self-regulated learning informs students on how to monitor and regulate their ability to set goals and achieve them (Meyer et al., 2008; Nicol & Macfarlane-Dick, 2006).

Student-led Assessment: An assessment process that expects students to play an active role. This involves a clear and transparent marking process that the students understand (Falchikov, 2004), self-directing their learning by generating thoughts, feelings and behaviours that contribute towards their learning goals (Zimmerman, 2002), and students engaging in self- and peer-assessment.

Summative Assessment: Assessment that comes at the end of a topic or unit to assess what has been learned (Wiliam, 2011). It is based upon giving credit or judgement to student work (Earl, 2012) and often responds to demands for accountability (Norcini et al., 2011).

Chapter 1:

Appraising assessment

'When we know what we did wrong, we can fix it.' – Bryan, aged 9

Chapter organisation

The first chapter of this dissertation offers an introductory overview of the research by providing the background, the protagonists and the significance of this study as it relates to current assessment practices and student-led assessment. It further articulates the research questions and methodology overview before providing an outline of the remaining chapters.

Introduction

For a moment, before you begin reading, I ask that you reflect upon the word 'assessment'. What do you envision? A teacher sitting at their desk with a red pen? Ticks along the side of a page? A student working independently? 'Assessment', a word derived from the Latin verb *assidere*, meaning 'to sit beside' (Ory, 2000), somewhat contradicts what one might imagine as assessment. The idea that assessment is accomplished as part of a collaborative task involving engagement from both student and teacher is not an ideal that is taken seriously, even by the most eager of educators (Black & Wiliam, 1998).

Complicated and subjective, a definition of assessment has many meanings. Dhindsa, Omar and Waldrip (2007) provide a simple definition that captures its broad application in that assessment is 'a systematic process for gathering data about student achievement'

(p. 1261). This critical and often challenging aspect of teaching and learning traditionally involves 'experts', or teachers, recognising attainment with ticks, exes or circles, and a verbal comment. From there, it is expected that primary-aged children, as young as 5 years old, interpret these markings and use them as a tool to further their learning. Teachers often assume that providing feedback about a student's performance will directly enhance learning and understanding (Shepard, 2000).

This *systematic process*, as it most commonly exists and is widely recognised, is flawed (Taras, 2002). There exists a disparity between what the teacher aims to convey and what a child is able to receive from the markings. Higgins (2000), for example, found that students struggled to understand and use feedback because they are 'simply unable to understand feedback comments and interpret them correctly' (p. 2). Taras (2002) explains that often students have not been educated on how to interpret their feedback, leaving them unable to make sense of their assessment. The result, Taras continues, is that students are often forced to devote their focus and understanding to a simple numerical or summative grade. Sadler (2010) explains that feedback should support and develop learning by allowing students to use assessment to become more autonomous thinkers and self-regulated learners.

Black and Wiliam (1998), with their seminal research on assessment, caused the UK government to reconsider policy and learning practices. Their work, *Inside the Black Box,* focused on formative assessment as a task accomplished by students, rather than for students, drawing attention to the fact that formative assessment enhances academic attainment. Allowing students to be dependent on teachers is a slippery slope – they

should play a role in the process of their education to further render their learning effective (James & Pedder, 2006). Research shows that by involving students in the assessment process, encouraging them to take responsibility and ownership of their learning, the learning process can be enhanced in encouraging ways (Absolum, Flockton, Hattie, Hipkins & Reid, 2009; Falchikov, 2004; Hayward, 2012; Leitch et al., 2007; Nicol & Macfarlane-Dick, 2006) – including that they are able to understand new information to construct new learning (Davies, 2011; Miller & Lavin, 2007). With increased awareness of the need for assessment practices to communicate better the developments and successes to the student, there has been greater interest in researching student assessment and reporting (Taylor-Patel, 2011). For students to be considered responsible for their learning, they must, it is argued, play an active role in the practices of assessment, making marking transparent, especially since student involvement in assessment has been shown to be a more beneficial way to assess and learn across a wide spectrum of study (Falchikov, 2004). Further, enabling students to assess their own work has proven beneficial to raising achievement and providing a more accurate understanding of capabilities (McDonald & Boud, 2003; Ross & Starling, 2005).

Carless (2015) describes a process called learning-oriented assessment that integrates tasks that promote critical thinking and an understanding of student work quality. This, Carless explains, allows students to participate in the development of skills as part of a productive student learning process. The work of Carless and others is beginning to be more accepted in secondary and post-secondary institutions but comparatively, less is known about student-led assessment approaches with younger students. This study aims to tie together the 'knowns' with the many 'unknowns' in this context by analysing how

primary-aged student involvement in the assessment process can shape students' perceptions of formative assessment practices and their motivations towards learning. It serves to explain how Assessment for Learning, along with formative assessment practices, can contribute to student-led assessment.

Statement of problem

Learning, in its true form, occurs when students are,

> thinking, problem-solving, constructing, transforming, investigating, creating, analyzing, making choices, organizing, deciding, explaining, talking and communicating, sharing, representing, predicting, interpreting, assessing, reflecting, taking responsibility, exploring, asking, answering, recording, gaining new knowledge, and applying that knowledge to new situations. (Cameron, Tate, McNaughton & Politano, 1997, p. 6)

Although, over the past two decades, educational systems across the world have begun to respond to this redefinition of education and the role that students play, it can be shown that the many structures, particularly those in the UK, have not taken the best interests of students into account (Taras, 2002).

Rowntree (2015) noted, 'if we wish to discover the truth about an educational system, we must first look to its assessment procedures' (p. 1). Policy documents, including England's National Curriculum Assessment policy, creates an idealistic picture of classroom assessment, which, in practice, is not being taught. A 2016 survey of 6,613 primary teachers and Head Teachers in England found that 97% of teachers 'disagreed'

or 'strongly disagreed' that assessment was being well managed by the Department of Education. Their verbal comments included words such as 'shambles', 'fiasco' and 'farce'. They argued that the guidelines are contradictory and ever changing and that children are suffering because of an assessment system that does not nurture or foster academic development (National Union of Teachers, 2016). Black and Wiliam (1998) explain how children are forced to tolerate assessment practices that are 'beset with problems and shortcomings' (p. 141) and there is research showing that this is still occurring today. Further, as much as 75% of teaching staff in England are suffering from mental or physical health issues often relating to the stress over marking, exams and administration work (Henton & Brennan, 2017). This dissertation will evaluate these shortcomings, which include marking that reinforces underachievement, a lack of formative assessment, a lack of effective learning, deficits in assessment quality, an overemphasis on quantity, and greater stress upon marking than progression – to seek solutions for these problems that torment education.

Anecdotally, and supporting the claims of the research on assessment, many teachers, including those teaching within Asia, UK and North America, agree that assessments are often carried out for the school, the parents and themselves. Although students may benefit from assessment, there is pressure to make sure parents and school leaders know pages have been ticked and guidelines and policies followed. Some research indicates, meanwhile, that students playing a much more active role in assessment may gain by increased academic attainment (Black et al., 2004; Black & Wiliam, 1998; Elwood & Lundy, 2010; Falchikov, 2004), by improved thinking skills (Carless, 2015) and by students' motivations benefiting from increased participation in the assessment process

(Butler, 1987; Doddington, Bearne, Demetriou & Flutter, 2001; Harlen & Deakin Crick, 2003; Miller & Lavin, 2007).

However, Yan and Cheng (2015), for example, explain how our understanding of teachers' beliefs, aims and routines remains unexplored. Similarly, research involving student-led assessment has focused primarily on *higher education settings* (see Boud, 2013; Dochy, Segers & Sluijsmans, 1999; Falchikov, 2004; Taras, 2003; Topping, Smith, Swanson & Elliott, 2010), with fewer experts researching *primary school assessment* and importantly, the voices and perceptions of primary-aged children relating to assessment (Robinson, 2014). There is a great need to further understand how to create marking and assessment regimes that are more effective for learners (Elliott et al., 2016).

Teaching children the skills and techniques of student-led assessment may seem challenging given their young age. Many, including the parents of the children involved in this study, were unsure that young children could grasp the advanced concepts of student-led assessment. This may be why literature that involves students in the process of student-led assessment in primary schools is still an emerging field. For this reason, this study occasionally uses research from secondary and higher educational settings, in addition to the available literature on primary students (presented in Chapter 2). It of course recognises that applying literature involving older students to the primary context may be contentious. I do not assume that this literature is directly or straightforwardly applicable to the primary context. However, literature from secondary schools and higher educational settings is referenced here because research in other settings involving students in the assessment process has afforded interesting insights and 'fuel for thought'

for germinal research studies such as this. As this literature expands, then further developmental granularity will be gained in the understanding and differentiation of student responses at varying ages and in varying chronological phases of the educational experience.

Understanding assessment

Assessment has existed in many forms: early Chinese exams for positions in government office; Aristotle preparing students for presentations examinations; craftsmen in medieval cities passing trade-based tests. However, it was not until industrialisation that education changed, and when schools began to monitor and assess student achievement on a systemic comparative basis (Earl, 2012). Taras (2002), among others, believes that education as it currently stands must face a new change, as she stresses that, 'Innovation in assessment is no longer an option' (p. 501) and that students must take responsibility in their learning and commit to independent and life-long learning. Although there have been positive improvements in assessment regimes, many still raise concerns (Carless, 2015).

Berry (2008) describes the variety of interpretations of assessment in the literature. 'Measurement' or 'test' often denotes grades reported as a numerical output, although not exclusively so. 'Evaluation' often explains the data collection process, gathering information about student output in the decision-making context. It integrates interpretations and judgements of the assessor. 'Assessment' is the broadest term, encompassing tests, learning strategies and information about student achievement.

There is an obvious complexity to assessment, given the many procedures, purposes and policies that influence the kinds and processes of assessment. Further, classroom assessment takes on a variety of terms to explain its role: 'informal and formal assessment', 'formative and summative data', assessment *for, as* and *of* learning, 'instructionally embedded assessment', 'didactical learning', to name only a few (van den Heuvel-Panhuizen & Becker, 2003). There are also different marking elements including rubrics, targets, tests and quizzes, and bookwork, among others. However, taken all together, this dissertation sees assessment as a teacher's ability to make informed decisions regarding the progress and output of a given child.

Complicated in nature, assessment is a continuous process. After each term or test, report or meeting, the process will recommence, because assessment is an informative process that is aimed at providing precise data regarding current skills and understandings with the intention of improving learning. Many researchers have emphasised the importance of using assessment and feedback effectively to raise student achievement (see among others, Berry, 2008; Black & Wiliam, 1998; Elwood & Lundy, 2010; Falchikov, 2004; Nicol & Macfarlane-Dick, 2006). This investigation of student-led assessment aims to take our understanding further.

Clarifying student-led assessment

    Playing an active role. Zimmerman (2002), a pioneer of the theory of self-regulation, argues that students are less engaged in their own learning and increasingly struggle to attain discipline and engagement with their learning due to factors such as modern distractions of technology and lack of preparation by schooling. Self-directed

learning, Zimmerman explains, is the ability 'to self-generate thoughts, feelings and behaviors that are oriented to attaining goals' (p. 65). It is a complicated process that requires students to be aware of how to apply and reflect upon learning strategies that enhance their knowledge and understanding (Isaacson & Fujita, 2006). Students, Zimmerman believes, require better self-awareness, self-motivation and involvement in their learning to enhance efficacy and intrinsic interest. Through his work analysing self-regulated learning, he identifies the key issue that greater student involvement is needed.

Gibbs and Simpson (2004) explain that effective feedback and assessment satisfies four criteria: it is frequent, linked to the success criteria, written to the students' level of sophistication and furthers learning by using verbal comments rather than simply a numerical grade. Although they do not mention student involvement, the criteria above can arguably be met by engaging students more deeply in their learning. The benefits of students playing an active role in assessment cannot be denied, given the volume of research and our current understanding.

Falchikov (2004) explains how integrating students' voices and opinions can be used within the classroom by allowing students to be considered active participants in their assessment. This involves students learning to benchmark their own performance against success criteria, set by a standard, through curriculum objectives. Black et al. (2004) noted that children made significant learning gains when increased participation in self- and peer-assessment, as well as student-led success criteria were used. This, Falchikov furthers, demands frequent guidance and assistance from their teacher through a process by which children are given the tools to assess themselves and their peers. Nicol and

Macfarlane-Dick (2006) found that enhanced learning resulted when students took ownership of their own learning goals and skillset. Carless (2015) explains how student engagement in assessment changes the focus to emphasise the importance of creating an effective learning process, wherein assessment tasks are created to assist students in developing a greater sense of *learning from* assessment. Earl and Katz (2006), key advocates for the assessment *as* learning model, explain how learning can be improved when students engage actively and critically as part of the reflection and review of their learning encounters. Absolum et al. (2009) explain the importance of providing students with a sense of ownership of their learning to increase motivation and participation. This includes discussions about their performance and creating next steps. Unless this happens, Absolum et al. warn that:

> In a world where young people exercise personal choice over matters
>
> as trivial as the ring tones of their cellphone, or as far reaching as the
>
> learning pathways they pursue, denying them opportunities for active
>
> involvement in important learning and assessment decisions is likely
>
> to promote disengagement. (p. 8)

However, without assessment practices that facilitate these and support this ideal quality of learning, particularly in primary, and if students are not included in the learning loop, students may not be able to become self-directive, independent learners. Absolum et al. explain how allowing students to be involved in the assessment and reflection process completes a learning phase that is essential for the concept of lifelong learning.

Most research above provides an overview of secondary or postsecondary students, an excellent basis for understanding the advantages of students' role in assessment. Having a

detailed examination of assessment as a student learning process is required to understand the whole scope of the issues that lie within the assessment process (Carless, 2015). The next section examines the roles students must play by analysing and deconstructing terms and vocabulary frequent seen in academia to further understand the importance of assessment.

Clarifying terms regarding student-led assessment. The idea of students playing an active role in assessment is divergent from most established norms and integrates a variety of related concepts, each with distinct, fine-grained differences of meaning. For example, Klenowski's (1995) definition of self-assessment describes 'the evaluation or judgement of 'the worth' of one's performance and the identification of one's strengths and weaknesses with a view to improving one's learning outcomes' (p. 146). Self-assessment is but one part of student-led assessment and this term does not adequately capture the place of the student's role in, for example, this study. It is used, at times, to explain the benefits of student engagement but on its own does not equate to 'student-led assessment'. Further, self-assessment does not allow for a pro-active student approach, as students are simply in these instances monitors of their learning.

As a part of self-assessment, students require the ability to self-regulate their learning. 'Self-regulated learning' is the most common term denoting independent learning (Meyer et al., 2008). It defines a practice whereby students set their own learning targets and then play the key role in monitoring and regulation their ability to reach their targets. The role of the teacher throughout this process is also key, because teachers act as facilitators of achievement through guidance and feedback (Meyer et al., 2008; Nicol & Macfarlane-

Dick, 2006).

Self-directed learning (SDL) is also not a new term within this body of research. It is an idea most often applied to adult education (see, for example, Garrison, 1992; Merriam, 2001) in a variety of contexts and fields. Although the implications for SDL are different from adults owing to a variety of ethical and cognitive differences, it may serve as an indication of research potential since it involves students of all ages making choices and taking an active role in developing an understanding of the learning process. Students use skills such as self-assessment and task-selection to develop a learning pathway (Bjork, 1999). In contrast to student-led assessment, SDL requires greater autonomy and greater independence by the student from the educator.

Student-directed learning is often used to describe a student's ability to self-manage, modify and regulate their behaviours and learning (Agran, 1997), meaning that rather than the teacher being fully accountable, students must share responsibility and ownership (Shepard, 2000). Through this model, as with student-led learning, student voice and opinion enable the construction of knowledge. SDL entails a student-centred approach that is similar to student-led assessment in that it involves multiple interventions to facilitate the development of the assessment skillset such as self-monitoring, self-evaluation and independent planning (Wehmeyer, Shogren, Toste & Mahal, 2016). However, the assumptions inherent in this kind of assessment downplay the importance of students being *leaders*. This question has a valid place within educational research and in recent years has been increasingly appearing in studies

relating to special educational needs (see, for example, Royer, 2016; Wehmeyer et al., 2016).

Student-led assessment, the term chosen for this dissertation, reflects the importance of a child-friendly term that allows for both research practitioners and younger children to understand that student voice, perception and leadership are key. Student-led assessment entails a greater emphasis on students playing an active role in the formative assessment process, such that students take a more encompassing part in *directing* the outcomes and success criteria rather than simply *adhering* to them (Antoniou & James, 2014). Student-led assessment demonstrates the importance of giving students a genuine voice when setting goals, monitoring their progress and discussing their learning. Student-led assessment focuses on the idea that students should be endowed with a better understanding of marking, rubrics, targets and reports by exercising choice and opinion, together with the teacher, throughout the process. Students understand the outcomes and work towards achieving these through self-regulated learning, by setting goals and measuring their progress (Hattie, 2012). This process relies heavily upon the guidance and assistance from their teacher (Antoniou & James, 2014; Black & Wiliam, 1998; Carless, 2015). Having a deeper understanding of these processes, which involve reflection, understanding and accountability, provides children with the opportunity to engage with student-led assessment. Within this study, the role of the teacher and their professional judgement is therefore key to supporting child agency and self-direction.

Taking the above rationale fully into consideration, for the purposes of this study, student-led assessment will be understood as involving students into the process of

planning, monitoring and reflecting upon the entire assessment process, from success criteria to report writing. It will involve teacher-guidance throughout the process of students being educated on how to make decisions regarding relevant progress and assessment.

Student-led assessment also involves increasing the students' motivational feelings through self-regulation. This involves students holding more positive dispositions towards learning and understanding (Zimmerman, 2008). This is understood through Zimmerman's phases of self-regulation, which will be appropriately signposted in Chapter 3.

The dissertation acknowledges that this model of student-led assessment is one that may not necessarily be agreed upon by all academics referenced in this study. My decision to pursue student-led assessment is in response to trends throughout both recent and past research. Since no other studies similar to this have been isolated, authors arguing for elements of this area of research have been used to support my more localised focus area.

Background: The protagonists involved within student-led assessment - teachers and students

Within international teaching communities, a diverse and interesting mix of professionals exists, drawn from different backgrounds and countries with varied knowledge, expertise and training. In my first year as Head of Primary in Kajang, Malaysia, I worked alongside a fantastic team of dynamic and motivated educators from ten different countries. Our Year 4 team was made up of an English teacher in his second year of teaching, an

American teacher with 20 years of experience and a Scottish teacher with 6 years of experience. All the teachers followed the English National Curriculum objectives and expectations, including for our assessment processes, while our location outside of England led us to follow high-stakes testing at the end of each year along with a massive emphasis on Year 6 and Year 9 checkpoint examinations – all issued by a British examination board. The teachers, passionate about assessment, felt that more attention within our school community should be given to formative assessment and the crucial role that teachers play which strongly aligned to my own beliefs. This is where the project began. I found myself in a leadership position, enthralled with the literature supporting students playing a much more active role in education, with the capacity to try something different and exciting, potentially making change within a small population of Year 4 students.

The most critical protagonists, it may be argued, are the students, whose voices speak the loudest in this study. The student participants consisted of three classes with a total of 47 students aged 8 to 11. Of these students, 28 consent forms were returned and thus these students' perspectives were used to better understand student-led assessment. Given Malaysia's British colonisation until 1957 and the continued English education system until 1982, most of the students' level of English was native or near-native competency (Mohd-Asraf, 2005). English has persisted through the educational system making Malaysia one of Asia's top-performing English-speaking country (Darus & Subramaniam, 2009).

The other protagonists in this research, three Year 4 teachers and myself, engaged in a team mentoring strategy where together we developed the implements needed to assist children with student-led assessment. This involved weekly meetings, constant feedback and sharing of ideas and good practice throughout the entire research process. This allowed me to be a 'partially participating observer', in that although I am a part of the research, including for the focus groups with students and interviews with teachers, I was not present in all classes throughout the learning process (Bryman, 2008). This study therefore rested on the premise that although many stakeholders have varying opinions regarding the nature and purpose of assessment, teachers' judgements are essential to understanding the successes and failures of implementing and teaching approaches, and most importantly, the learning that results (Pishghadam, Adamson, Sadafian & Kan, 2014).

Implementing change within an educational setting of this kind requires leadership and, without a doubt, requires the understanding, support and assistance of teachers; a fact that has been well researched and established (Hallinger, 2011). Considering student voice in progressive educational research has precipitated, in recent years, a redefinition of students' roles in creating change (Bahou, 2011). This is where my motivations to explore the notion of assessment began. As a teacher and leader, I had always prided myself in leading a democratic classroom where power and decision-making were distributed appropriately between adult and youth. In fact, I have conducted this study tacitly before, without knowing it and without collecting any data. Five years ago as a Year 3 teacher in Spain, I allowed my students to write their own reports and targets. I encouraged peer- and self-assessment. I allowed them to create success criteria and

rubrics. At that point, I had no idea that it was unusual – it seemed logical. Now, grounding these ideas in research, I hope to allow children to reach new learning milestones and goals that allow us, the educational community, to bring enriching assessment to a greater number of primary students in our international school and to Malaysia – and possibly, also, to students globally.

Background: The setting – a private international school in Malaysia

Throughout my experiences as a primary teacher in North America, Europe and Asia, I have noticed significant problems regarding the management and delivery of assessment. It is often swept aside as if it were of no importance, simply understood, or could be left for teachers to grapple with independently.

My focus school, a rapidly growing private International School in Malaysia and where I began working in 2015, is located in a suburban community of Kajang, 20km outside of the capital of Kuala Lumpur. This school is non-religious, co-education and supports inclusion. Since it is fee-paying, it attracts a demographic of wealthy Malaysians and expats from surrounding communities.

The school began in 2012 with 60 students, but at the time the research was conducted, four years after its launch, Eaton had increased its intake to 500 students from Kindergarten to Year 10. Having spent over a year and a half at Eaton prior to commencing the research provided me with a good opportunity to understand and appreciate the setting, cultures and families of the school.

Throughout my time in Malaysia, my interests in assessment grew, particularly when I began examining whole-school assessment thinking in my leadership role as Head of Primary and was confronted with worry and doubt from teachers: our assessment policy was vague and unclear; the National Curriculum provided little guidance; teachers were each all employing their own strategies; and student learning was being neglected. The expatriate staff, who came from ten different countries, all had different experiences of and training in assessment, but most still felt confused, particularly as in the previous year, the school had very few discussions on how to improve assessment. Furthermore, international schools in Malaysia are subjected to loose guidelines, none of which is related to assessment as such, or even teaching practice. With the 2016/17 academic year came a wave of motivation and drive within the Primary School teaching staff. This international setting, along with a group of ambitious practitioners, allowed for the focus of the study to grow. From here, I could not help but question why, most often, assessment research does not integrate the opinions and needs of those it affects most: *children*. In consequence, this study gathered research data through focus groups with four to six students three times throughout the research. When I was not in class, students engaged in photo-voice, a research technique that involved the students snapping photos of assessment that they found relevant or interesting. In addition, the research study also involved weekly one-to-one interviews with the classroom teachers and myself, during which we discussed and shared good practice emerging from the processes of the project.

Methodology and research design

My research will take a qualitative approach, since I aim to better understand how student-led assessment affects both students' and teachers attitudes and feelings in what

Bryman (2008) calls a mutual corroboration: in this case, between the participants accounts and the student data. It involves taking forward a method of classroom-based inquiry research that attempts to draw attention to high-stakes and large-scale assessment by using teacher-based research. It will integrate Action Research emerging in the form of a case study, by using the tools of AR while acknowledging clearly the multiple actors, and the scale and transfer of responsibility to the students. The community of inquiry developed through the methodology is customised for my setting since it was developed by me, and with the assistance of the teachers involved, to test the principles and theories of student-led assessment within the actual classroom environment whilst attempting to capture the daily lives of children in their natural setting.

Three Year 4 classes were engaged in student-led assessment facilitated by the class teachers, through a mentoring and sharing relationship. The three teachers and I developed, shared and implemented strategies to allow both the students and ourselves to co-construct, analyse and interpret the process that the staff went through to affect change in their daily assessment practices. The perceptions of both students and teachers were gathered to provide insight into how they, the children, viewed the changes.

In doing so, this research serves three specific aims. The first aim is to arrive at a description of student-led assessment and what constitutes a learning environment that supports students engaging actively in the assessment process. The second aim is to increase our understanding of student-led assessment in primary education, since a recognised deficit exists in this area (Elliott et al., 2016). Without a greater body of knowledge, the significant gaps include key details needed to build a comprehensive

picture of how to support learners, leaving us unable confidently to explain the needs of learners engaging in student-led assessment. The final aim of this study is therefore to provide young people with the opportunity to be heard in a domain dominated by adult perceptions and voices of what constitutes good assessment. Through this research we may better understand the importance of consulting the youngest stakeholder, those with arguably the most at stake, in assessment – and by understanding and accepting our moral responsibility of asking children for their perceptions in making decisions crucially related to their learning (Dixon-Woods, Young, & Heney, 1999; Hattie & Timperley, 2007).

The research questions

As outlined above, current, prevailing assessment practices do not yet adequately work in the best interest of all children (Elwood & Lundy, 2010; Hattie & Timperley, 2007). With these claims in mind, I will explore the following precise research questions:

Q.1) In what ways do students' understanding and appreciation of assessment change when student-led assessment practices are introduced to the primary classroom?

Q.2) What can we learn from teachers' perceptions of the implementation of student-led assessment in three Year 4 classes?

Q.3) How can children's perspectives on the student-led assessment process enable us to understand more clearly our wider pedagogical practices?

It may be noticed that this enquiry is not concerned with the effectiveness of the student-led assessment inversions – that is not the purpose since this study is too small scale. The above research questions were designed to bring light and provide foundation to an under-researched area of major educational research.

Organisation of chapters

Chapter 1 has provided an introduction to this dissertation's focus as practitioner-based research into student-led assessment. It further introduced the problem, provided a rationale for the research and outlined the direction of study. It provided justification for terminology and the student-centred approach, as well as provided the methodological standing.

Chapter 2 presents relevant literature that explains the foundations for this study. Although traditionally split into two distinct chapters, this dissertation holds the literature review under one chapter but divides it into two sub-chapters as the theories and principles in Chapter 2: Part I and II are integrally related and link together to develop the breadth of the dissertation. Chapter 2: Part I delves into the past, present and prospective future of assessment, examining the political and social perspectives that drive and influence assessment today. It provides insight into deficit areas within assessment and their detrimental effects. Chapter 2: Part II then spotlights alternative forms of assessment and their role relating to student-led assessment. It examines the tools used within this study, their implementation and rationale for use.

Chapter 3 details the methods used in the study. First, the research design and theoretical framework are discussed, including justifications for the methods of inquiry used – qualitative research, action research, case study and interpretivism. Then, ethical considerations involving the participants are examined, before discussing the procedure, methods of data collection and data analysis.

Chapter 4 reveals the qualitative research findings that result from the exploration of my research questions as they relate to the perceptions of students and teachers involved in the study. It synthesises the findings of students' and teachers' perceptions of student-led assessment to present an understanding of how student-led assessment impacts learners *and* practitioners. Presented in three main sections, each section deconstructs and analyses one research question and its many implications, including the similarities and differences between the perspectives of the teachers and students, as well as patterns within their responses.

Chapter 5 provides a comprehensive discussion of how the findings hold implications for the six deficit areas identified in Chapter 2. These deficit areas, which contribute to the major weaknesses within the current, dominant assessment system, are then examined – together with the themes that were extracted from the findings to suggest ways, grounded in research, that student-led assessment may enhance pedagogical practice.

Chapter 6 closes the study by providing recommendations for educational futures and recommendations for future research. The chapter also discusses limitations of the study before providing final thoughts from the researcher and a conclusion to the study.

Chapter 2:

Literature review

Introduction

The chapter is organised in two parts. Part I begins by critically examining the history and context of assessment within England, before further considering the effects of globalisation on worldwide assessment practice. Part I also examines the shortcomings in normative assessment models in order to analyse how current systems contribute, counter-intuitively, to deficits in student learning. Part II will then analyse the different components of 'good' assessment and will discuss the reasons why assessment has come to be regarded as vital to student achievement and success. Part II will then evaluate strategies used in assessment, including formative, summative, self- and peer-assessment, as well as a variety of tools used for marking.

It should be noted that, in both Part I and Part II of the Literature Review, my personal views will be put side and the research itself will be used to speak to the concepts within this dissertation.

Chapter 2: Part I

Setting the stage for assessment

A Look into the past

Wiliam (2013) calls assessment 'the bridge between teaching and learning' and argues that it is 'perhaps the central process in effective instruction', because it allows us to

understand what has and has not been effectively learned (p. 15). Wiliam, who has researched learning and education across the globe, has repeatedly noticed that marking and assessment are often focused on the particularly unhelpful approach of data-driven assessment such as testing and numerical marking. This study will focus mostly upon the English assessment system while acknowledging that this phenomenon and its patterns are increasingly global.

The history of assessment policy in the UK has been varied. The 1960s to 1980s were characterised by a thriving culture of classroom-based research, school-based assessment and autonomous practitioners developing their own strategies (Stenhouse, 1980). Towards the end of the 1970s, Conservative politicians were beginning to believe that schools were not held accountable enough and wanted 'consumer-oriented education', with greater national testing (Benn & Chitty, 1996). In 1987, during Margaret Thatcher's third term in office and a time of painful economic restructuring, came a Conservative Manifesto promise called the National Curriculum Assessment (NCA), published as a deliberately reforming document promising brighter educational futures for all, at a time when unemployment and inflation were continuing to cause destabilising effects (Whetton, 2009).

In 1987, the Task Group on Assessment and Testing (TGAT), a group established by the Secretary of State for Education and fronted by Paul Black, aimed to 'advise on the practical considerations governing assessment within the National Curriculum' (DES, 1987, para. 1). It was also around this time that National Tests at ages 7, 11, 14 and 16, with 'levels' linking learning objectives to the National Curriculum, were introduced.

Prime Minister Thatcher supported the testing in attempts to solidify her education market place ideals and so began the birth of a widespread testing culture (Gillard, 2011).

This period, which was also marked by the landmark 1988 Educational Reform Act, was often referred to as the 'marketisation of education', while at the same time removing powers from Local Authorities and schools, and placing it into the hands of the centralised state (Chitty & Dunford, 1999). Lauder, Jamieson and Wikeley (1998) explain the paradox that this move took away the autonomy from local players and institutions, making for a shift in power that saw the government, federally and regionally, assuming much greater regulation and control. This in turn caused conflict within the mechanics of education because multiple parties were completing to claim their stake in educational governance – parents, teachers, school leaders, central government, and policymakers. Still, the marketisation of education continued. Powell and Edwards (2002) described this period as an increased imposition of enforcement and surveillance: a part of a 'relentless neo-liberal political campaign to legitimise 'choice' for parents and place 'power' within schools' (p. 96). They further argue that a government-sponsored neo-liberal ideological agenda was being pushed forward to drive 'parent choice' and consumerism irreversibly into the system. Pierson (1998) explains how parents with means were free to select top-performing schools for their children. The easiest way to display the options to such parents was to present data in the form of test results.

Independently from government control, in 1989 the British Educational Research Association (BERA) established a task force to research various aspects of the Educational Reform Act called the Assessment Reform Group (ARG): a voluntary group

that involved itself with the policies behind assessment practice by bringing 'existing research evidence to bear on matters of policy and practice in assessment…through conferences, seminars and the publication of papers and books' (Harlen, 2009, p. 248). The group, which worked to study and report on research evidence regarding assessment within the UK, was anxious about the introduction of National Testing and, as such, worked to provide a review of the newly instituted practices and policies (Harlen, 2009).

The role of ARG within the UK education scene was becoming apparent. Although members frequently changed, their dedication to attending to issues that furthered assessment policy reform remained consistent. They worked with teachers, researchers and educational agencies globally, gathering research and informing assessment policy, while looking to and for guidance and insight from a growing international body of literature (Gardner, 2012).

The 1990s were welcomed by an education system beset with increasing inequality, polarization and decreasing investment. In 1992, Ofsted, the Office for Standards in Education, was created, a body for inspecting and reporting on schools, which emphasised standardisation of testing and outcomes (Gillard, 2009). Ofsted pushed for an increased stress upon testing, including standardised tests for literacy and maths, and controversially highlighted the importance of league tables for recording and communicating comparative data across schools. As a result, testing culture soon became rampant in England, with the collection of data and the drawing of comparisons epitomising the neo-liberal agenda of the era (Robertson, 2011). The effects of the Reform Act continued to ripple from nursery schools to post graduate university

programmes throughout the 1990s, marking this a time dominated by 'a series of amendments, amplifications and reverses' in educational policy (Pierson, 1998, p. 136).

Resistance arose in 1993, according to Pierson (1998), when teacher unions began to boycott tests and the assessment processes on the grounds that learning was being sacrificed to a monolithic testing culture. Provoking opposition movements in this way, intensified by a neglect of areas such as funding and resources, continued until a much weakened Conservative Party under John Major lost the 1997 General Election to the Labour Party (Jones, 2016). Jones explains how a major contributing factor in Labour's victory was teachers boycotting assessment procedures across England. Tony Blair, leader of the 'New Labour' Party, declared his top three priorities as: 'education, education, education'. Target setting culture remained prominent, however, as the new government retained a strong emphasis on maximising the number of students who achieved successful grades on standardised tests (Whetton, 2009). With Blair's strong emphasis and large-scale spending on primary education, Chitty (2007) argues controversially that his leadership also marked further deterioration in quality of education, owing to the narrowing of curriculum objectives and intensifying test provisions. This is a legacy of new labour even if it may not reflect the full inheritance.

In 1998, the ARG reappeared with force, as they strove to rekindle an emphasis on student voice in assessment by putting pressure on the government to take action (Whetton, 2009). ARG published highly influential research including *Inside the black box* and then again in 1999 and 2002 respectively, *Beyond the black box* and *Assessment*

for learning: 10 principles. These documents focused on the importance of integrating assessment as a part of formative and self-regulatory learning.

In the background, the NCA system had remained relatively unchanged. However, criticisms persisted (Whetton, 2009). With constant testing pressures came an emphasis on 'management-by-objectives-and-targets', which in turn led to the introduction of rigid and prescriptive strategies in numeracy and literacy (Wyse & Torrance, 2009, p. 216). Criticisms of the testing culture persisted through the 2010s as the testing culture was extended under the Tory-led Coalition Government (2010-15). As the BBC reported in their article 'Gove wants formal assessments for four and five-year-olds' (2014), the prospect arose of the testing of early primary-aged children. In more or less the same period came the announcement of plans for 'academically ranking' 11 year olds nationally in an attempt to 'raise the bar', in maths, reading, spelling, writing, punctuation and grammar (Coughlan, 2013).

Regardless of who was in power, according to trends in policy and legislation, various UK governments have, in the past 20 years, focused relentlessly on national testing regimes in England that have 'involved summative paper-and-pencil tests and which constrained and distorted classroom activities, especially towards the end of each key stage as teachers coached and practised for the tests' (Wyse & Opfer, 2010, p. 218). Research indicates that national testing regimes have, arguably, had a damaging effect on the English education system, especially since teachers found the testing culture to be overwhelming – particularly in primary where, beginning at a very early age, children are subjected to a formalised regime of high-stakes assessment imprinting all of their

learning (Elwood & Lundy, 2010). In fact, a study by the House of Commons – Children, Schools and Families Committee (2008) found that 'the average pupil in England will take at least 70 tests during a school career' (p. 52). The growing testing culture alarmed the ARG because, according to international research evidence presented and evaluated by Harlen and Deakin Crick (2003), it negatively affects a child's schooling experiences, their motivation for learning and their wider connectivity with the curriculum content. As a result, it increasingly favoured high-stakes testing regimes championed by many governments, causing formative assessment to be marginalized, thus neglecting the learning process. However, as Whetton (2009) explains, political pressure demands schools to be under the scope of relentless accountability channeled through a testing regime.

Allais (2012), in her article regarding the impact of 'economic imperialism' on educational policy, explains how this policy trend from across the world is now taking a new direction. This more recent shift is often referred to as a 'new education paradigm'. The policies are dominated by 'qualifications frameworks, outcomes-based curriculum reforms and competency-based training in the reform of vocational education' (p. 254). The resultant global paradigm, Allais explains, which is linked to the advance of neo-liberalism, is being implemented in over 100 countries internationally, and most often made to work against traditional qualifications. She also claims that we are experiencing a rise in skills required for the 'knowledge economy', with learners being trained to be 'more responsive to the needs of employers, communities and economies' (p. 255). This, Allais insists, is happening especially acutely within the UK educational system alongside 'new public management' systems, which have seen the education system

broken into smaller fragments competing around performance targets and output measures.

The above-mentioned issues are but one piece of a longstanding British public sector reform movement jigsaw, but they remain key determinants for the future of educational policy (Pierson, 1998). The next section will explore how the history of assessment and the adoption of a testing culture within England have been affected by these globalising perspectives.

Globalising perspectives

Within education, changes in policy and curriculum, including assessment measures and high-stakes testing, must be interpreted in global terms (Pierson, 1998). Bol and van Werfhorst (2011) explain how standardisation of curriculum and testing has resulted in a decrease of autonomy for teachers and schools and a diminishing ability for them to have an input in how and what they teach. Bol and van Worfhorst examined educational systems across the world using various data sources including Organisation for Economic Co-operation and Development (OECD), Program for International Student Assessment (PISA) and United Nations Educational, Scientific and Cultural Organization (UNESCO) and found that with increased standardisation in schools, decreased average performance resulted.

International assessment initiatives, including those of the OECD, have in the last 30 years played a critical role in driving standardisation since they serve to set an international benchmark for global knowledge by gathering and measuring data on an

international comparative basis. Of this data, PISA, an international survey of educational skills and knowledge conducted by OECD, remains of key importance to policy-makers and educationalists (Bol & van Worfhorst, 2011). Broadfoot (1996) explains that,

> Assessment is arguably the most powerful policy tool in education. Not
>
> only can it be used to identify strengths and weaknesses of
>
> individuals, institutions and indeed whole systems of education, it
>
> can also be used as a powerful source of leverage to bring about
>
> change. (p. 21)

As a result, changes within assessment have been occurring on a global scale as different countries strive to keep pace with international agendas dictated by OECD and its data-driven culture. In recent years, with the OECD's expansion of PISA, both the scope and scale of standardised testing have resulted in the emergence of a kind of 'global governance', whereby numbers from PISA-sponsored league tables pressure countries to enhance their results on the grounds that these results receive significant national and global media attention (Sellar & Lingard, 2014). The 'success' of PISA, which has brought about a widespread focus on comparison, has given rise to a new age of accountability and audit within school systems and an effective 'globalisation' of assessment (Tatto, 2007). Tatto explains how this regime puts pressure on teachers to 'enhance' the quality of education through the push for increased 'standards'. This has in turn been forcing the players – policymakers, governments and localised education systems -– within international education to keep pace with the increasingly demanding and high-stakes testing culture (Lauder, Brown, Dillabough, & Halsey, 2006).

In the age of global academic comparisons, including those involving PISA and OECD,

politicians and policy-making are attempting to gain statistical ground by improving their comparative results. There has in consequence begun the 'economisation' of education, putting greater emphasis on skill and human capital development, pushing countries to forge better economies by having more well trained and knowledge-based educational and investment strategies (Sellar & Lingard, 2014). This pressure is what drives countries to move up the ranks in league tables.

Questions have of course arisen regarding how PISA outcomes are presented in policy-making across the globe and how the effects of those policies influence states in each setting. Rinne (2008) explains that,

> In the obscuring processes of the supranational homogenisation of education and educational policy and of national differences, supranational organisations, such as the OECD and the EU, play a significant role. It would also seem that the message, objectives and language of those organisations are cast in the same mould. They have started to speak in the same words with the same stress, repeating the same phrases about globalisation, economic efficiency and productivity, and swearing that globalisation is inevitable in the name of progress. In this discussion, the role of nation-states stays silenced in the background. (p. 676)

The OECD, though independent from governments, is an externalised control that can implement change by indirectly influencing its key domestic sources. England, which has produced more-or-less average PISA results since its introduction 15 years ago, has claimed that they are of strong importance to policy-making (Baird et al., 2016), such that

the testing culture has become standard in England (Martens, Knodel & Windzio, 2014). Martens et al. (2014) explain how, for example, in response to recent PISA findings, England has opted for a different strategy from most other countries. Instead of large-scale reform or policy changes as a consequence of PISA, the government has followed a 'pick and choose' model: boast about successes and keep quiet about shortcomings. A principal reason for this is that there already exists a strong testing culture in England and PISA results therefore largely come as no surprise; it was, as Martens et al. argue, already 'everyday business in English schools' (p. 2009). In consequence, pressure to standardise education, including by raising their independent testing results, forces teachers, schools and school boards to adhere to rigid measures of implementation (Baird et al., 2016). Goodson (2010), on behalf of the European Commission, critiques the neo-liberal approach that England has taken in to response to PISA results. The 'neo-liberal reforms in the fastest and deepest manner' have equated to poor educational standards (p. 775), because many competing countries have been obliged to find economic solutions that increase their global academic rank. England has, in response, chosen to follow narrow curriculum objectives and standardised testing.

These pressures carry through to higher education institutions, both within the UK and abroad. Schools are ranked in league tables that are publicly available and that carry strong implications for a school's reputation and access to funding. Glover and Brown (2006) explain how the burden of assessment, particularly expectations of summative assessment, mean that feedback is slow to arrive to the learner and lacks the depth to make it effective. More about the control and power relations that drive curriculum and assessment will be discussed next.

Curriculum control and stakeholders influence

As discussed above, there are many influences that shape assessment and education, including OECD and PISA. Klenowski and Wyatt-Smith (2013), in their empirical examination of international comparative tests in Australia, found that when standardised examinations were introduced, teaching to the test and a narrowed curriculum resulted. This included a teacher's failure to include topics that were considered of interest to the students and a diminishing capacity to utilise and hone higher-order thinking skills. It further emerged as being a tool for control because it allowed parents to select schools based upon openly published test results.

Taylor Webb (2006) explains the concept of 'choreography of accountability', which details how the current discourse within education ascertains that school improvement can be generated by accountability measures. The argument for accountability is that, when data is transparent, teachers will work harder to achieve better results. Taylor Webb conducted interviews and focus groups with those affected – teachers, principals, librarians, students, district administrators and parents – with two Washington primary schools to analyse perceptions on a case study basis. In actuality, the results suggested that teachers felt forced to produce choreographed fabrications that help manage the perceptions of inspections and observations and which satisfy the demands of accountability – whilst seeming at all times institutionally 'correct'. This, teachers felt, negatively affected their actual teaching.

Within the UK, many teachers perceive this culture to mean a lack of trust and a mechanism to support a regime of performativity imposed by politicians who, for

political reasons, wish to see the nation rise through the PISA rankings by following hegemonic, centralised policies (Wyse & Opfer, 2010). Ball (2003), through his work involving the critique of such performativity, helps to clarify the ways in which state regulation affects teachers' ability to 'organize themselves as a response to targets, indicators and evaluations' and 'to set aside personal beliefs and commitments and live an existence of calculation' (p. 215). He explains how there are costs associated with this level of regulation, which can result in 'values schizophrenia', whereby the moral context in which education takes place rapidly changes. Teachers, in questioning their actions and responses, are forced to choose between what is right for the child, in 'good practice', and the rigors of performance. Ball further discusses 'fabrications': an effect of performativity, similar to Taylor Webb's notion of choreographing: where a performance is simulated to appease those who are evaluating the practice. Ball explains how these pressures stem from reform agendas that serve to ensure markets and management are closely monitoring teachers so they learn to closely monitor themselves – all for the supposed betterment of educational standards.

This dissertation acknowledges that high-stakes and standardised tests also present a bias against minority groups and students from lower socio-economic and varying sociocultural status, including through unequal access to linguistic capital and the inability to access the language needed to perform well on the tests (see, for example, Currie & Thomas, 1999; Hall, Collins, Benjamin, Nind & Sheehy, 2004). Hall et al. contend that there is a powerful deviation of results depending on the overall sociocultural status of the school. In their examination of two primary schools in England, they found students whose ability and learning were not aligned to the

standardised expectation of the education system placed proportionately lower than their peers of different socioculture brackets. Specifically, they named several factors that contributed to the narrowed assessment attainment, which include 'the school day, the curriculum, the teacher's responsibilities, the pupil's worth, the ideal parent, and what counts as ability' (p. 801) – factors they argue favouring one type of learning over another. This dissertation argues against standardised tests on the grounds listed above, but foremost on the premise that standardised testing is not based upon student-led methodology and does not benefit the learner.

Such political pressures and control systems within education and assessment are, as we have seen, not a new problem. Many of these issues arise because of internal or more localised pressures – such as will be discussed below through an examination of the theory of academic buoyancy.

Academic buoyancy

Many researchers including Brown and Harris (2014) have discussed how self-regulated learning, a key component of student-led assessment – and in particular the notion of students acting as active agents in assessing their own work – draws upon theories of capabilities and greater achievement associated with increased meta-cognitive development.

In this critical analysis, the problem lies within an education system that serves to reward students who perform well academically, although the system itself does not necessarily provide the motivation to allow *all* students to be successful. This is different from

resiliency, which often offloads the responsibility onto the pupil and fails to take external factors, such as socio-economic factors or family history into account.

In a key intervention, Martin and Marsh (2008) explain how our education system serves to benefit students who are 'academically buoyant' and are able to cope with academic setbacks and struggles. Martin and Marsh explain how resilience is similar in nature but involves more acute and chronic challenges, whereas being buoyant reflects an ability to remain proactive, motivated and adaptive over a sustained period. These systemic values are not detached from the success that culture provides. They argue, however, that not all children are prepared for effectively dealing with academic adversities or setbacks. Nagy (2016) calls for a system that allows all children to succeed by providing them with the skills needed to cope in an environment that recognises potential and effort, not simply success. She explains that we need to create a system that 'ensures that the systemic value is placed on the underlying characteristics of a successful student rather than the outcomes themselves' (p. 166). Martin and Marsh also explain that a variety of factors contribute to self-efficacy, including participation and effective feedback. This further relates to Skinner and Pitzer's (2012) concept of student engagement, which underlines academic coping as an important element of student motivation and success. This will be further discussed in Chapter 2.

Although there are many theories of human flourishing and capital that exist within the literature, the idea of academic buoyancy is most applicable to the present study since it relates to core concepts of agency, autonomy and self-fashioning in children's lives. These classical liberal educational theories complement the idea that education's most

important ideals involve the development of autonomous, motivated and self-regulatory beings. The continuity with academic buoyance means examining one's capacity to assume responsibility for such goals, in a similar way that student-led assessment requires students to take responsibility for their learning.

Although the concept of academic buoyancy is but 10 years old and its relationship with assessment is relatively new, these perspectives allow the reader to connect the idea of providing students with the needed skills to become more autonomous and responsible learners in a more contemporary educational setting. Students being unprepared for an education system is but one of the many adversities that many face within their academic careers. The following section further outlines factors relating to assessment that contribute to detrimental effects within current education system.

Shortcomings in assessment

Throughout the last twenty years, the theory and practice of assessment within education has generated great debate, as described above. There have been numerous developments that have improved assessment standing and practice, including variations in assessment methods, greater emphasis on success criteria and discussing these with students, a better understanding of marking and feedback, and more student engagement (Carless, 2015). However, more needs to be done.

For the past two decades, Dylan Wiliam, a researcher of assessment practices and a foremost authority within educational research, has expressed apprehension over the state of assessment, not solely in the UK and America but throughout the world (Learning

Sciences Dylan Wiliam Centre, 2016). He is but one of the many who have critiqued current assessment regimes. Among the areas that have been identified as problematic, by Wiliam and others (see, for example, Gardner, 2012; Harlen & Deakin Crick, 2003), include marking that reinforces underachievement; a lack of formative assessment; a lack of effective learning, deficits in assessment quality; an overemphasis on quantity; lack of teachers' understanding and greater stress upon marking rather than progression. This section will examine these deficits and the research into their detrimental effects. It will then finish with a perspective on the underlying neglect of children's rights.

Marking that reinforces underachievement. Marking and informing pupil work is not only key to student success but is a core purpose of education (Boud, Lawson & Thompson, 2013). Within the context of secondary schools, the United Kingdom inspection report by OFSTED (1998) found that, 'Marking is usually conscientious but often fails to offer guidance on how work can be improved. In a significant minority of cases, marking reinforces underachievement and under expectation by being too generous or unfocused'. Problems within the UK were found to be due to practices that reinforced rote learning and emphasised presentation over content (Black et al., 2004). This can also be attributed to the fact that often classroom assessment and feedback is outcome-oriented and does not focus on the learning that occurs within the assessment process itself (Earl & Katz, 2006). Furthermore, during their review of 160 published journals, Black and Wiliam (2006) found that teachers provided feedback to students as a social or managerial tool and had neglected to ensure feedback that furthered learning.

The lack of teacher *knowledge* with regards to feedback also causes detriments to the

assessment system. Gardner (2012) explains how the complex nature of feedback has left gaps of understanding within the research. In fact, Kluger and DeNisi (1996), in their meta-analysis on feedback, found that more than one third of teacher feedback caused a *reduction* in student performance. This, they believe, is because 'researchers and practitioners alike confuse their feelings that feedback is desirable with the question of whether feedback intervention benefits performance' (p. 277).

The lack of effective marking has been persistent, especially within National Curriculum levels, designed to provide summative feedback, which are often unattainable and overly complex, leaving students confused. These levels, which on implementation many teachers found difficult owing to their criterion referencing, were regarded by many as a model of ranking students rather than providing indicators for progression (Gardner, 2012).

Christodoulou (2017) supports the argument that the English assessment regimes need to be reconstructed to better meet student needs – however, Christodoulou calls for an education system that reexamines how we look at feedback. She argues that formative assessment is best used when it is 'specific, frequent, repetitive and recorded as raw marks' (p. 163) to help teachers know when learning is genuinely occurring in the classroom. This means that teachers should focus on finding strengths and weaknesses for each pupil, to make meaning of their learning, and to support their academic growth by using formative assessment that provides clear indicators for next steps.

How students receive, understand and react to feedback greatly affects future learning. Hattie and Timperley (2007) found that feedback given through marking is among the most important indicators of student success. The delivery and style of feedback determines its effectiveness. A key theme throughout their investigation was that feedback must be 'targeted at students at the appropriate level, because some feedback is effective in reducing the discrepancy between current understandings and what is desired, and some is ineffective' (p. 86). Much of Hattie and Timperley's emphasis relies on students knowing and understanding the information and the role of the teacher in clarifying this. Their figure below, a model of enhancing learning through feedback, shows the active role that students are expected to play and that 'feedback involves both the giving and receiving (by teachers and/or by students)' (p. 103).

Figure 2.1: Hattie and Timperley's model of using feedback to enhance learning
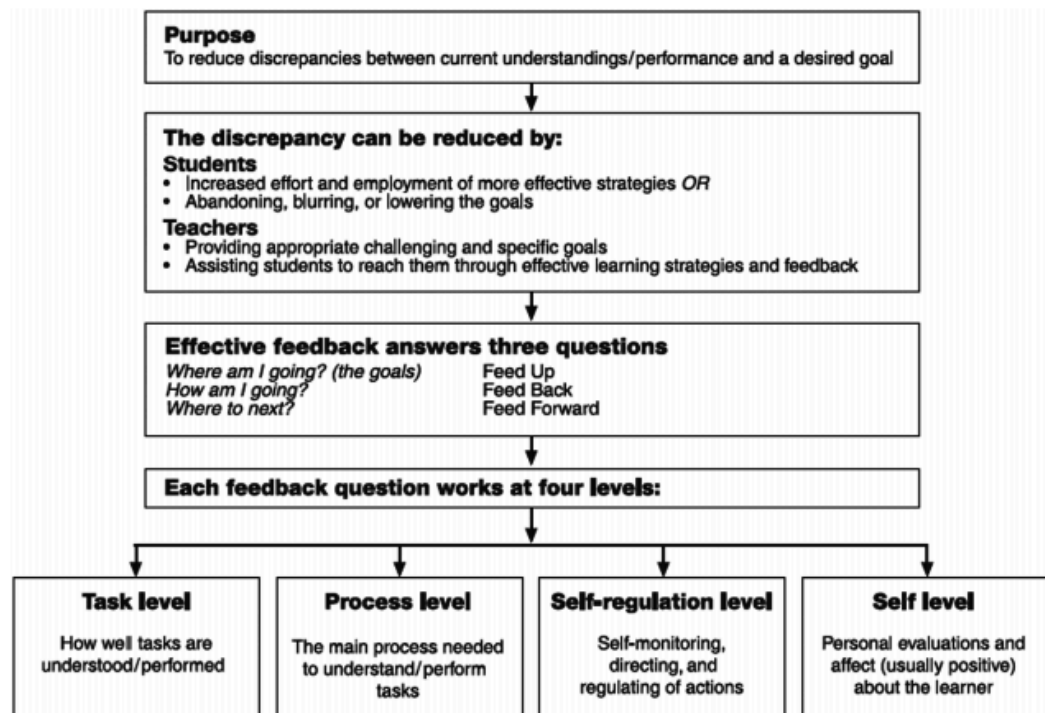
Analysing 'how' feedback is given, Butler (1987) examined 'task-involving feedback' – feedback that provides motivation and works to propel students towards concept mastery, and 'ego-involving feedback', feedback that assesses ability relative to their peers, and its impact on learners. Butler found that when task-involving feedback was introduced, students continued to show interest and participation with the activity; however, ego-involving feedback quickly made students feel discouraged when their level of conceptual understanding was compared to others, resulting in changes in motivational perceptions. These motivations, Butler described, influenced a student's level of interest and score during divergent thinking posttests. Applied to marking and assessment, if students are not interested and motivated to take part in assessment and learning – thus preventing students from developing greater intrinsic motivations within learning – the learning is not maximised and assessment does not then lend itself to the emphasis on the key requirements of understanding.

Butler (1987) then went on to analyse the effects of learning and motivation when three styles of marking were given: grades alone, grades and comments, and comments alone. Her results indicated that both grades alone, and grades and comments, resulted in improved academic attainment. Butler also found that descriptive comments, or comments that clearly explain using detailed statements, were most beneficial. In fact, using solely descriptive comments throughout student marking proved to be the best method of assessment. This is far from a global practice, since leaving descriptive comments is the most time consuming for teachers.

Furthering Butler's work, Hattie and Timperley (2007) made a distinction between feedback about the task (FT) and feedback about the process of the task (FP). These, they found, were conducive to allowing students to master and understand their tasks, contributing to the instructional process of learning. They are thought, when used correctly, to enhance effort, motivation and engagement. Hattie and Timperley found a third category of feedback, feedback related to self (FS), such as praise, and determined it was the least effective. This, they found, was rarely related to learning because it did not impact effort or engagement and failed to provide information about the learning or task. Since FS comments provide answers to the students, according to Hattie and Timperley, they 'deflect attention from the task' (p. 96). Flutter and Rudduck (2004) similarly found in their study of primary-aged children that comments such as 'you must try harder' only confused the students, often leaving them unable to improve the quality of their work.

Given the many implications above and the absence of directive policy within the UK, the lack of effective feedback and marking seems to be a very persistent issue. We know that feedback furthers learning but Christodoulou (2017) explains how years of standardising assessment has not transformed learning or led to increased attainment. Although she does not argue for student-involvement in her assessment 'fixes', the concepts outlined in her critique are applicable and provide 'food for thought' when examining the direction of UK assessment practices.

Lack of teacher understanding. After more than 50 years of educational research on teacher effectiveness, it has been agreed by many that effective teaching is

among the most critical factors that affect student learning (Hattie, 2009; Visscher & Coe, 2013).

There is an increasing body of literature that indicates that a teacher's lack of influence and practice has negative effects on formative assessment practices in the classroom (Antoniou & James, 2014). Stiggins (2002) explains that a central issue within performance is that teachers' knowledge and understanding of assessment is diverse, which can make it more challenging to collect, collate and convey information to parents. Teachers struggle to interpret assessment results and use them to formatively move forward. Further, Schneider and Andrade's (2013) study of formative assessment in the classroom found that many of the teachers in the investigation provided infrequent and uninformative feedback; targets were not clearly articulated to children and their formative data was often used as summative data. In a review of marking by teachers during the same year, Ruiz-Primo and Li (2013) examined a group of teachers in 25 primary and elementary classrooms and at the end of the school year, randomly sampled 6 or 9 student workbooks to analyse teacher feedback. They found that, of all assessment and feedback communications within students' books, teachers used grades, numbers or symbols as forms of assessment 61% of the time; 33% of the time teachers used narrative comments; only 14% of the feedback was deemed by authors to enhance or move learning forward with only 4% of that considered to be prescriptive comments. Hoover and Abrams (2013), in their study that aimed to examine teachers' use of reporting summative data in formative ways, surveyed a total of 656 teachers in primary, middle and high school. They found that only 30% of teachers examined their assessment results weekly and 64% of teachers said that, due to instructional demands, concepts could not

be retaught. Teachers who did use their data for formative assessment often analysed the whole lot of scores rather than breaking down the gaps or deficits to enhance individual achievement gaps.

The reason for these deficits may be that many teacher preparation programmes have failed to provide teachers with the required knowledge to assess students formatively. Further, heads or principals are also expected to have background knowledge in formative assessment but, in the US and the UK, there are no mandated basic assessment competencies required at the administrator level (Stiggins, 2002).

There may also be, Antoniou and James (2014) argue, complications within the definition and implementation of formative assessment. In their examination of primary school teachers in Cyprus, they found that teachers had difficulties effectively employing the policies and practices of formative assessment. This, they found, is one but many examples of research that attests to the struggles faced by teachers in classroom settings. However, McDonald and Boud (2003) found that teachers who were trained in delivering more student-centred, formative assessment through an emphasis on self-assessment demonstrated a positive impact on student performance in both the overall and in each curriculum area. Van der Hurk, Houtveen and Van de Grift (2016), identifying the deficit areas, performed an analysis of cyclic data-driven teaching methods. Their model has been adapted from data-driven teaching methods, a common practice where teachers frequently reflect, discuss, plan and re-evaluate the learning and skills employed in the classroom by the teachers themselves. Figure 2.2, taken from Van der Hurk et al., explains how professional practice was improved by lessons and discussions.

They found that six weeks of training, repetitive and cyclical, could have a remarkable impact on developing teaching skills, which previous studies claimed required 15 years to master. Although more research is needed, Van der Hurk et al. have researched information that better enables us to understand the process of teacher training in research.

Figure 2.2: Van der Hurk et al.'s (2016) model of cyclic-driven professional development
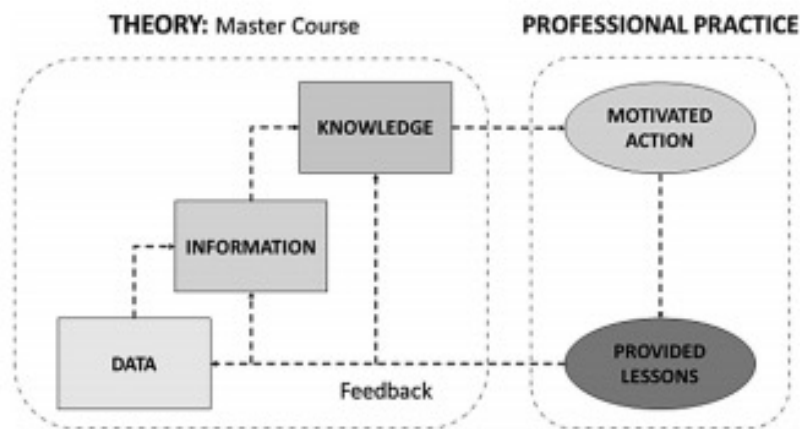
Lack of formative assessment. Hattie and Timperley (2007) explain that there is no denying the importance of formative assessment. The role of the teacher, they explain, is to support students in making the correct judgements on their work by understanding their goals and targets. They conducted a conceptual analysis study of feedback and its effect on student learning. They found that, of 138 influences relating to student attainment, the third most important is formative assessment. They further examined how assessment, as it stands, is not being used in a way that maximises learning because the

feedback is not targeting students at their correct level and thus does not inform students' current understanding of how to improve.

Researchers including Black and Wiliam (1998) and Bennett (2001) found that formative teaching and learning are key skills that contribute to students achieving higher academic attainment. Several OECD (2005) case studies also showed that schools went from 'failing' to 'exemplary' when formative assessment practices were introduced. Further, 'successful' and 'unsuccessful' schools differed in their ability to close the achievement gap because their use of data; schools who were closing the achievement gap often used student data as formative information to direct institutional changes.

There exists a large body of evidence to suggest that formative assessment can improve attainment when three critical criteria are met: assessment makes informed inferences about student progress; feedback is clear and tailored towards improvements; and the learner is involved (Bennett, 2011; Black & Wiliam, 1998; Hill et al., 2016). The above three criteria are routinely *not* being met, because educational policy often acknowledges the importance of formative assessment but in practice it is often ignored (Antoniou & James, 2014). Assessment systems continue to strongly rely on high-stakes testing and overlook, or ignore, Assessment *for* Learning and self-assessment (Elwood and Lundy, 2010). Christodoulou (2017) argues that our formative assessment practices have not transformed schools over the past 20 years because the systems in place are not conducive to improving attainment. She explains that, although teachers in England provide more feedback than nearly any other country, the feedback that is being provided is not being effectively implemented because feedback is often based upon generic skills,

and is both abstract and unhelpful. It is not focused on teaching knowledge but rather, focused on teaching to the test.

What is more, the neglect of formative assessment often turns to high-stakes testing to gather data. A drawback of high-stakes testing, according to Broadfoot (1996), is that the criteria are arbitrarily designed by people in positions of power to advantage students who have the language and skills to best access the content – typically students who are of higher socioeconomic status. Family income was found to be a strong indicator of student success on standardised tests involving second grade students in the US – students whose family income was less than half of the poverty line scored 6 to 13 marks lower than their middle income peers (Milne & Plourde, 2006). Further, there is no evidence to support the claims high-stakes testing actually improves overall achievement, although the detrimental effects, such as teaching to the test, a neglect on higher-order thinking and a narrowed curriculum, have been well documented (Klenowski & Wyatt-Smith, 2013). Harlen and Deakin Crick (2003) explain that, although research that investigates methods of testing has previously shown an increase in test scores, this is likely due to an increased familiarity of teachers and students with the test itself, rather than an increase in learning.

Research suggests that there is a lack of evidence to prove that formative assessment, in its current practices, is actually effective for increasing attainment (Christodoulou, 2017). Black and Wiliam (1998), with their review of 578 publications relating to assessment through classroom testing, found that when encouraging rote learning and information recall, knowledge gained was soon forgotten. When working with formative assessment

and self-regulated learning, Nicol and Macfarlane-Dick (2006) explain how students who are given the opportunity to comment on the work of other students better develop objective expectations and standards which could then be transferred to their own work and enhance their own performance.

Although the benefits of formative assessment are well documented in research, its integration into teaching practice is being neglected. More regarding the important effects of formative learning within assessment will be discussed in Chapter 2: Part II.

Deficits in assessment quality. There are many contributing factors that lead to deficits within assessment quality, including the above-mentioned lack of formative assessment. A national survey in the UK has identified *feedback* as one of the most ineffective practices in student learning experiences (HEFCE, 2008). This section goes further into how 'good' assessment is created and administered.

Boud et al. (2013) posit that there is a lack of student capacity when exercising judgement and opinion in assessment because the assessment criteria practices are set by teachers. Students are often confined to adhering to the authority of the teacher, thus eliminating student judgements and voice, since learner autonomy is fully embedded in the practices of the teacher and the education system as a whole.

Teacher judgement and authority is the predominant presence in marking and assessment. There exists the 'tick and flick' method where teachers flip through students' work, acknowledge that the work has been finished and provide evidence that the teacher has

checked it (Elliot et al., 2016). Others will cover workbooks in ink to assure parents, principals or inspectors that assessment is being done, making marking a tool to appease adult audiences (DfE, 2016). These processes have been heavily scrutinised by Black and Wiliam (1998) and Butler (1987), among others, in attempts to find more constructive ways to enhance assessment. Owing to teacher workloads and large volumes of expected marking, the quality of teacher feedback often lacks quality and depth. This, Glover and Brown (2006) explain, is rendering the formative elements of feedback ineffective for many students. To avoid buildup of marking, teachers have learned the routine of feedback and reporting that meet the standards, but this has left deficits in student learning, since teachers are attempting to assess to the standard, rather than provide meaningful comments. Shepard (2000) discusses the ways to enhance learning through assessment and argues for a broader range of assessment tools. When observing the impact feedback had on students, Shepard found that at times a noticeable increase in students' attainment grades had been observed, although the correlating level of improvement or learning did not – the students were getting better grades but their mental construction of learning and knowledge had not improved. This further demonstrates that teachers are mastering the art of quick feedback that satisfies expectations, while largely devoid of pupil learning and neglecting steps for improvement.

Boud et al. (2013) explain how formalised assessment, namely summative tasks and tests, often deny students an active role or responsibility in the assessment process since assessment is externally monitored and ranked. Shepard (2000) also found that high-stakes accountability ensures that students receive a reward or external praise for the work that they do in class. However, Shepard continues, high-stakes testing impedes

meaningful classroom assessment practices and he further suggests that the joy of learning is made meaningless as long as only high output is the anticipated result from the student effort. The detrimental effects of standardised tests will be outlined next.

Lack of effective learning. We know from research above that formative assessment is a key necessity in raising academic attainment. A major component to this learning is judging one's own performance and integrating self-monitoring into the learning process. Research indicates that, for effective learning to exist, students must be committed to autonomy: 'monitoring what they do and modifying their learning strategies appropriately' (Boud, 2013, p. 14). Furthermore, self-regulated learning is formed from exposure to classroom evaluation and constructive student outcomes (Crooks, 1988).

Biggs and Moore (1993) explain how autonomy can also be referred to as 'metacognition', which, they argue, entails the ability to know how, when, where and why to learn to the maximum potential. This, they also argue, then helps learners to develop positive feelings and greater motivations towards learning. Many researchers have suggested that metacognition is a key attribute required for optimum learning, because students are then able to monitor and regulate their own thinking process (see, for example, Isaacson & Fujita, 2006; McCarthy, 2013).

Another source of ineffective learning comes from an emphasis on standardised testing through repetitive or rote learning. Originally, standardised examinations were introduced to avoid unfair testing variants. However, with this came a lack of effective learning

when teachers felt forced to adhere to standardised expectations. Harlen and Deakin Crick (2003) found that 'high-stakes' standardised testing often had negative effects on learning. They found that it increased the discrepancy between higher and lower achieving students. Berry (2008) supports this by explaining how standardised tests only focus on a narrow range of thinking skills, leaving other key social, emotional and educational areas neglected. Further, teachers often 'teach to the test', meaning that the learning outcomes are dictated by the narrow range of topics expected to appear on the standardised test. Further yet, examinations often focus on short-term retention of knowledge through this same rote learning: students remember rather than learn in order to achieve the grade. Teaching methods will of course then encourage this cycle, as teachers are under pressure to reach a grade or to uphold a school's reputation, hence the term 'high-stakes testing'. The narrowing of assessment expectations, Hall et al. (2004) argue, does not fit well into England's tradition of inclusionary principles since students who learn differently from the standardised prescriptions are disadvantaged and, as a result, perform lower on standardised tests. Simply put, by forcing students to endure experiences based on 'teaching to the test', and by further denying them the ability to participate in their own learning, we are denying them a critical capability and skill of being independent and self-regulatory.

Ineffective feedback. Hattie (1999) noted that, 'the most powerful single moderator that enhances achievement is feedback' (p. 9). Feedback can be defined as 'information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding. Feedback thus is a consequence of performance' (Hattie & Timperley, 2007, p. 81). This definition emphasises that

feedback may be developed with assistance from a variety of people. Explained by Sadler (1989), feedback is used to alter the gap between actual and reference levels and should have the capacity to influence learning outcomes. Both Sadler and Black and Wiliam (1998) agree that formative information used to generate a particular response is needed to highlight areas for improvement. Wiliam (2013) explains that feedback requires 'an additional condition, that it actually improves student learning, for it to be counted as good' (p. 4). Thus, by offering feedback on work, Sadler explains, students should be more able to understand their performance and find motivation for future work. However, Pauli (2010) found that most teachers are providing what she called 'low frequency feedback'; feedback that is given infrequently. She found that teachers are prone to moving on from question to question without fully explaining or acknowledging the correct answer, leaving the students' mistaken statements unaddressed. The most common responses were not feedback, but rather generic praise such as: 'good' or 'that's right'. Where Pauli found praise to be most common, Kluger and DeNisi (1996) found that this was the most ineffective type, owing to the praise's lack of learning-related information in most expressions of praise. Sadler (2010) extended this view by explaining that while great time and effort often goes into providing feedback, in effect the results are often insignificant.

In Chapter 1, it was discussed that an astonishing 97% of Head Teachers in England disagreed with the state of assessment as managed by the Department of Education due to its ineffectively management (National Union of Teachers, 2016). In recent a publication by the Independent Teacher Review Group (DfE, 2016), 53% of teachers acknowledged that marking work is a necessary part of assessment but believed "the excessive nature,

depth and frequency of marking was burdensome" (p. 6), striving to please adult audiences.

Kluger and DeNisi (1996) state that nearly one-third of feedback *negatively* impacts learning. In their systematic and comprehensive study of the influence of feedback interventions on performance, they found that, based on 12,652 participants taken from extracts from 131 preexisting papers, feedback's effectiveness is maximised when it corrects incorrect information and furthers thinking by providing additional detail to inform the learner. Thompson (1998) built upon this and found that unclear evaluative feedback – feedback that does not clearly stipulate the conditions contributing to meeting or missing the success criteria – is likely to cause negative outcomes and lead to diminishing academic attainment, since students are left unable to understand the causes of their poor performance.

Much of the research on assessment, including that by Hattie and Timperley (2007), neglects to stress the importance of feedback as a two-way interaction and a process that involves the input of teachers and students. Carless, Salter, Yang and Lam (2011), in their attempts to create a model for sustainable assessment practices, explain the many pitfalls of assessment and explain how most current feedback is not 'fit-for-purpose'. They stress the need for a sustainable model of providing feedback, a model that involves a two-way process integrating student self-regulation. This, they argue, relies upon students being positioned to benefit from feedback when they are given the tools and capacity to self-monitor: 'This development of self-regulative capacities is the essence of sustainable feedback' (p. 398).

Nicol and Macfarlene-Dick (2006) explained that, of the seven principles that guide good feedback, being student-centred and integrating self-regulation are keys. These principles will be outlined in Chapter 2, under the description of what makes 'good' feedback. The mounting definitions and suggestions to improve feedback continue, although most commentators clearly believe that good assessment is not readily occurring (Carless et al., 2011; Sadler, 2010).

Overemphasis on quantity rather than quality. Globalisation, as discussed above, has brought about change in diverse industries and sectors. Many countries, Hazelkorn (2013) explains, are being compared and judged to establish their geopolitical rank. The objective is for countries to gain status over others. Hazelkorn argues that education is a major factor, and this has had effects on the quality and quantity of education.

Black and Wiliam (1998) identified nearly twenty years ago that assessment had become more focused on quantity rather than quality of feedback, but the problem still exists within education (Carless et al., 2011). This can be attributed to the fact that teachers have large volumes of marking as well as workloads that inhibit time spent on good feedback (Glover & Brown, 2006). Shepard (2000) explains how classroom assessment is being driven by external high-stakes assessment that is contributing to the reduction of open-ended tasks and problem-solving skills. The quality of these tests is low and serves to 'drill students in preparation for traditional basic skills tests' (p. 35). It is producing data that works to de-skill the educator while also removing autonomy.

The model of swapping quantity for quality was embraced by Singapore in 2004 when the government adopted a policy that served to transform the way education approached learning. The idea was that, Ng (2008) explains, if teachers teach *less*, students might learn *more*. This involved teaching to the ability of each student, not the year level, and developing an ability-driven paradigm, eliminating the previous efficiency-driven one. This also involved minimising rote learning and repetitive tests and putting a greater emphasis on differentiation, critical thinking, holistic learning and building lifelong learning skills. Ng explains how Singapore committed to engaging learners who are proactive within the learning process, rather than the traditional model of taking in information and regurgitating it through rote learning. Ng states that although this model was not without its challenges, it serves as a starting point for assessment regeneration.

Stress of marking rather than progression. A last issue with assessment is that most systems are fixated upon measuring achievement by outcomes. Rowntree (2015) remarked that the majority of research on assessment focuses on marking and ranking. Rowntree argued that, 'Only a minuscule proportion considers how to use it [assessment] to enhance the students' educational growth' (p. 10). Shute and Kim (2014) explain how, too often, high-stakes assessments and tests are simply used for assessment purposes but 'not to enhance learning' (p. 311). Hattie and Timperley (2007) explain how teachers are using tests as a snapshot of learning rather than as formative information to direct learning. Teachers and students, they explain, would benefit from using these assessments as integral tools to direct the teaching and learning process, rather than relying on the numbers for marking. Many educational systems remain exam-oriented, whereby results and high-stakes examinations trump the use of formative assessment

(Black et al., 2004). Although outcome-based assessment serves to produce summative results and benefits students in certain facets of learning, it should not be relied upon as a driving force for assessment. The outcomes-based style of assessment is in direct contrast to the objectives of student-led assessment, where focus is placed heavily upon the learning that occurs as a product of the process.

Shortcomings in assessment – Final analysis. The above issues, key to the shortcomings in assessment, are each in their own a large question. The purpose of this section is to discuss the areas, numerous and complex, that are contributing to a problematic assessment system. Given the scope of this dissertation, they cannot be investigated exhaustively. However, these issues, distressing but unsurprising, bring us to question why the deficits persist and should push us towards developing a system of assessment that allows children to learn the skills of self-regulation and independence. By eliminating the one-size-fits-all approach, integrating beneficial skills, such as a learning trajectory that uses targets, feedback and student engagement to raise the levels of attainment, can definitely be achieved.

In addition to these practical flaws identified above, there is an ethical dimension that is often overlooked. From an ethical perspective, the instruments, systems and policies allow for 'powerful social consequences for key users such as children and young people' that often deny equal learning opportunities since the systems serve to benefit some but disadvantage others (Elwood, 2013, p. 205).

I would wholeheartedly agree that, 'there is something fundamentally amiss about building and rebuilding an entire system without consulting at any point those it is ostensibly designed to serve' (Cook-Sather, 2002, p. 3). Unfortunately, children's interests and perceptions within education and educational research, which are both a power issue and a rights issue, are often ignored or discounted. Regarding such power, Taylor (2000) explains how power relations within research are indicative of the power relations that also exist and confine children within society at large. Children's voices, often omitted, leave gaps in our understanding for designing an educational system and a process of assessment that ensures these same children flourish.

The UN Convention on the Rights of a Child (UNCRC), established in 1989, is now ratified throughout most of the entire world. This Convention demands the protection and respect of the rights of all children globally and states the extent of children's rights with regards to autonomy and their ability to make decisions that impact on their lives (Lansdown, Jimerson & Shahroozi, 2014). Although assessment and testing are not explicitly mentioned in the UNCRC, Article 12(1) states that,

> States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child. (United Nations General Assembly, 1989, p. 4)

Article 29 of the CRC also states that children's development must be upheld to the highest degree, ascertaining the values, skills and confidence that children need to acquire a democratic life. Lansdown et al. further that, 'Many children fail or drop out of school

because of a pedagogical environment that ignores their views and denies them opportunities for participation' (p. 4).

Elwood and Lundy (2010) have made a connection between testing and assessment, and children's rights; a connection that is rarely made by governments or policy makers and that lacks presence in educational research. They explain that the ways in which learning is assessed and how students perceive the impact of results has been well documented. This debate is aligned with the argument that children inevitably suffer through an over-exposure to testing culture and the adverse consequences this has on their educational career (HoC, 2008). In fact, the House of Commons Select Committee in the UK, recognising the pitfalls of the testing culture, complained that tests are being used for incorrect purposes and that this has had a damaging effect on the students as well as on the educational system as a whole. This is further argued by Klenowski and Wyatt-Smith (2013) who, when researching assessment and accountability, explain that, 'There has been a pervasive silence around the rights of the child/student and the ways in which they have been positioned by testing and accountability priorities' (p. 76).

By denying children an active role in their assessment and education, and subjecting them to a high stakes and high stress testing culture, we are not respecting their rights as individuals or as learners. However, allowing students an active role in designing assessment routines and instruments that are relevant to their individual learning objectives may help to empower students to be critical of their work while not succumbing to the 'social consequences of tests and assessments, given the structures and

the techniques used' (p. 209).

The next section, Chapter 2: Part II, will build upon the history and deficit areas established in Chapter 2: Part I by explaining what makes assessment effective and describing the tools teachers can use to maximise students' learning involved through assessment.

Chapter 2: Part II

Assessment as a tool for improvement

A call for self-regulation

Central to education is the debate on testing and assessment practices and policies, both within the UK and abroad. A key theme of the debate, Elwood and Lundy (2010) explain, is how the testing culture has shown adverse consequences for children's educational experiences and academic achievement. However, these adverse consequences can be overcome, they insist, by implementing more formative assessment practices in schools – a way, as Elwood and Lundy explain, to improve standards and attainment.

The argument presented in this dissertation follows the principle of Nicol and Macfarlane-Dick (2006): students must *practise* the skill of being self-regulatory and leading their own assessment in order to develop a critical skillset that then needs to be refined throughout all areas of learning. This dissertation is hence centered on the core concept that students should play a central role within assessment, and at a young age, be given a voice and be assisted in developing a critical approach towards their own work.

In this section, I will begin by providing a discussion on current research involving students and the assessment process before then analysing the different means of assessment, including formative and summative assessment, and the role that students play in contributing to a student-led assessment culture within a collaborative classroom. This section also discusses a variety of assessment tools and their benefits and disadvantages within education.

The current state of knowledge

This dissertation draws upon a developing field of research in which the child is actively engaged in their learning and is a critical part in the creation of knowledge and understanding. Although at the present time there is limited research regarding student led assessment, the concept of integrating student voice in primary education is gaining popularity and has a more established track record in research (Robinson, 2014). Thus, to begin the second section of the literature review, I will examine areas of current research available on student involvement in learning and offer perspectives into student involvement and voice in primary education specifically.

This study argues that listening to the voices of students is integral to building an assessment process and an assessment culture where learners are encouraged to be autonomous and active in their assessment and the benefits it yields for their overall learning. This process has high expectations of the capacity of students to work with sophisticated views of the assessment and reflection process. According to Hayward (2012), children in primary school hold fairly complex views of their learning and are able to reflect upon their learning environments with considerable insight. Students can

understand that teachers are key to their learning but also that their peers are a central integral source of new knowledge.

Earl and Katz (2006) contributed to the field of understanding by acknowledging that student learning is improved when students are active and critical thinkers who engage in regular reflection. They also argue that assessment should be an inclusive practice rooted in the idea that as students tie the learning into their current understanding, they expand and develop new knowledge and understanding. Doddington et al., in their 2001 study of the practices of assessment in primary schools, found that students were fearful of assessment when they felt unsure of its purpose, or when they believed assessment would only unveil their shortcomings. When they began to gather students' perspectives regarding assessment, Doddington et al. found that when children were involved in dialogue regarding assessment and its purposes, the students felt both less anxious and less fearful.

Flutter and Rudduck (2004) integrated student voice when analysing peer collaboration in primary classrooms. In their book *Consulting pupils: What's in it for schools*, they describe strategies by which schools can improve their integration of student voice and participation. They explained that when students took part in peer support strategies, the students reported that, as a result, their learning benefited. Furthermore, they found that Year 3 students could identify which peers were beneficial for them to work alongside and which had damaging effects on their learning. We can conclude from this that students as young as Year 3 are able to understand the practices of assessment and the dynamics of peer relations within this context.

Miller and Lavin (2007), in their study of 370 primary school children in Scotland, analysed students' perceptions of themselves as learners when *formative* assessment practices were employed within the classroom. Improved self-esteem and self-confidence, as well as enhanced work quality, were observed when students were more actively involved in their assessment.

More specific elements of student involvement in assessment have also been noted. Loughland and Kilpatrick (2015) found that, in a study of involving Year 3 science students, teacher questions and prompts were key in directing student understanding and launching beneficial peer dialogue. Loughland and Kilpatrick's study further emphasised the importance of using questioning to encourage students to take ownership of their learning and effectively monitor their own progress.

Leitch et al. (2007) discuss ways in which students can be more actively involved in school-related activities, including providing them voice in engaging with more participatory practices within the classroom. In Leitch et al.'s study, students were used as action researchers, gathering and co-interpreting data. Although their model involved students in Key Stage 3 (11 to 14-year olds), this is a prime example of how student voice and involvement in matters that affect them can continue to be enriched throughout their schooling experience.

Deconstructing feedback and assessment

In Chapter 1, I introduced a definition of assessment, as explained by Dhindsa, Omar and Waldrip (2007) who assert that assessment serves to collect information regarding

student progress. The data collected throughout school assessment varies, from tests and quizzes, in-class tasks and assignments, to projects and presentations. This data may be collected formally or informally, and serves to inform educators of the changes that student knowledge and understanding have undergone throughout the learning journey (Rowntree, 2015).

Feedback is also critical to student progress (Hattie & Timperley, 2007) and central to formative assessment (Gardner, 2012). However, as I argued earlier in Chapter 2, feedback is complex and difficult to achieve (Stobart, 2012), is often ineffective (Butler, 1987; Hattie & Timperley, 2007), and teachers find feedback far more useful than do students (Carless, 2006). That being said, there are many positive aspects to feedback and understanding its value is critical to the argument in favour of developing student-led assessment. Thus, for the purposes of this dissertation, the definition of feedback is taken from Askew and Lodge (2000) who explain it as, 'all dialogue to support learning in both formal and informal situations' (p. 1). This can further be simplified, with ARG's (2002) explanation that feedback provides students with, 'where they need to go to and how best to get there' (p. 3).

Feedback involves pupil motivation, goal setting and constructive guidance (Assessment Reform Group, 1999). This, too, can be said for assessment but the difference lies in that feedback highlights problematic areas and provides students with 'a clear understanding of what is wrong and achievable targets for putting it right' (Black & Wiliam, 1998, p. 6) – while assessment refers 'to all those activities undertaken by teachers – and by their students in assessing themselves -- that provide information to be used as feedback to

modify teaching and learning activities' (Black & Wiliam, 1998, p. 2).

The interplay between assessment, feedback, grading and marking is one that deserves attention and clarification. As explained above, within this dissertation assessment follows the definition by Dhindsa, Omar and Waldrip (2007) provided in Chapter 1, in that assessment is 'a systematic process for gathering data about student achievement' (p. 1261). This dissertation will consequently argue that expectations of mainstream assessment regimes can be realised by teachers and students, if the involved parties are provided with the tools and understanding for engaging in this process.

A part of the assessment process is feedback, which involves constructive and supportive responses to work, either by teacher, self or peer, that then enables the quality of work to be improved (Carless, 2013). Within this dissertation, the term grading has not been used. Instead, the emphasis is placed upon the term 'marking', which Elliot et al. (2016) explain as a process that is driven by informed judgement and aims to provide feedback that attests to student progress. Elliot et al. further argue that there is a variety of marking approaches used within schools, which include numerical grades, corrections to work, formative comments, targets, acknowledgement ticks, etc. The following section will consider how the above definitions play into the idea of 'good' assessment.

What is 'good' assessment?

Assessment is an area of education that is highly contested, because there exists a body of research that indicates highly variable, and often troubled, practices of classroom assessment (Black & Wiliam, 1998). Research points to a variety of definitions and tools

for successful assessment, for example assessment for/as/of learning, formative assessment – some of which coincides with these ideas (see, for example, Sadler, 1989), but much of which contradicts them (see, for example, Christodoulou, 2017). There exists, however, a far lesser amount of research that integrates *students* into the assessment and feedback process. Although varying perspectives exist, this dissertation serves to draw upon research that attests to the benefits of students engaging in the assessment process, or student-led assessment.

In this section, the word 'good' has been selected as a construct to question the fundamental structures of assessment, namely '*What does it mean to be 'good'*?'. Norcini et al. (2011), in their attempts to qualify the criteria for good assessment, argue that there cannot be a single set of criteria that apply to all purposes and contexts of 'good' assessment. They explain the need for assessment criteria that 'creates, enhances and supports education' (p. 206). Boud (2013) explains that recognising 'good' assessment can be difficult, particularly for students, and is related to understanding the success criteria, feedback and what makes satisfactory achievement. Going into the scope of tacit knowledge is beyond the scope of this dissertation, although it is argued implicitly that 'good' assessment would be difficult to separate from 'good' education. It should further be noted that 'good' is a constantly evolving notion, as teachers face changing policies, expectations and regimes to attain the arguably ever-changing notion of 'good' – for example, a changing curriculum makes for altered success criteria for a year group, causing a difference in expected outcomes. This study therefore looks at 'good' assessment through the lens of children, providing them with the judgement to construct and negotiate this term, shaping what 'good' assessment means as a concept.

Although the concept of 'good' assessment is debatable, the following section will analyse and highlight research that drives student learning and assessment by integrating students in the learning process through engagement, feedback and negotiation.

Keeping students informed and engaged. Boud (2013) explains that students require a developed capacity to engage with the success criteria and make judgements to enhance the quality of their work. Achieving this critical understanding, according to Boud, involves more than just their participation. It involves students being integrated into the entire process of determining what is 'good'. Norcini et al. (2011) argue similarly to Boud, albeit from a medical-education perspective, that all stakeholders, from regulator to learner, should have a voice in how criteria is set to determine how best to support learning.

From his research involving feedback and its interpretation by students, Sadler (1989) identified three conditions required by students for feedback to be considered effective: (1) having knowledge of the standards/success criteria; (2) being able to compare standards to one's own work; (3) closing the gap between the two by actively understanding and making changes. Sadler's conditions are aligned to the ideas of Zimmerman (2002), who describes self-regulated learning whereby students develop a strong awareness of self and learning, learning to hone their self-control and produce positive academic change. He further explains how students learn through three phases of learning. The three phases are *the forethought phase*, *the performance phase* and *the self-reflection phase*. Zimmerman explains, 'Although teachers also need to know a student's strengths and limitations in learning, their goal should be to empower their students to

become self-aware of these differences' (p. 65). I will return to these phases in Chapter 3 where I apply them to students participating in their learning.

Gibbs and Simpson (2004) argue that assessment has become too focused on aligning outcomes to specific success criteria and reliability, and that educational systems have lost their ability to support valuable learning. As a result, Gibbs and Simpson believe that assessment often fails to engage students with their learning. They explain that when students are given more active roles in their assessment, they are better provided with 'conditions under which assessment can support learning' (p. 8). Nicol and Macfarlane-Dick (2006) emphasise the importance of two points aligned with this dissertation: that self-regulation and self-assessment are among the most critical to student success and that active dialogue must exist between teachers and students. These ideas are supported by Black et al. (2004), whose study of 400 contributors over five years found that primary and secondary students playing an active role in self- and peer-assessment, as well as writing their own success criteria, experienced significant learning gains in their assessment for learning.

Providing 'good' feedback. Teachers play a critical role in providing students with good feedback and their developing capacity to self-regulate (Zimmerman, 2002). However, while feedback is vital to student success, Stiggins (2002) argues that little has been done to prepare teachers and administrators for the due emphasis on assessment quality.

In 2006, Nicol and Macfarlene-Dick wrote an influential article that noted the need to provide prior identification of success criteria and standards to students as a means of self-regulation within assessment. They defined self-regulation as, 'active monitoring and regulation of a number of different learning processes'. They then produced several examples – such as 'the setting of, and orientation towards, learning goals; the strategies used to achieve goals; the management of resources; the effort exerted; reactions to external feedback; the products produced' (p. 199). They explained from this that there are seven principles that guide 'good' feedback, which are needed for students to self-monitor their learning and which allow for a better understanding of the many elements involved in developing feedback and assessment. Feedback, they explain, should:

1. Help clarify what good performance is (goals, criteria, expected standards);

2. Facilitate the development of self-assessment (reflection) in learning;

3. Deliver high-quality information to students about their learning;

4. Encourage teacher and peer dialogue around learning;

5. Encourage positive motivational beliefs and self-esteem;

6. Provide opportunities to close the gap between current and desired performance;

7. Provide information to teachers that can be used to help shape teaching. (Nicol & Macfarlane-Dick, 2006, p. 205)

When students instate their own learning goals and generate strategies to support feedback, an increase in effort and engagement by the students themselves will contribute to a restructuring of the notion of teacher-driven assessment (Nicol & Macfarlane-Dick, 2006).

In a recent report by Robinson and Pedder (2018), a part of the National College of

Teaching and Leadership (NCTL), 11 commissioned research projects were analysed to

investigate ways to combat teacher workloads relating to data, planning and marking, and

find sustainable solutions moving forward. Part of 'good' assessment means that the

process works not only for students but also for teachers. Their report discussed the

importance of meaningful feedback that involved students engaging in dialogues and

teachers supporting peer- and self-assessment skills. Their report also drew upon reports

from the Independent Teacher Review Groups, including the 2016 report, explaining that

good assessment is about quality, not quantity and that it should be meaningful,

manageable and motivating (DfE, 2016).

Discussion and scaffolding. Elwood and Murphy (2015) explain that, from a

sociocultural perspective, learning is conceptualised when students begin 'appropriating

shared meanings through discussion and negotiation' (p. 187). The student, according to

Elwood and Murphy, is required to play a role in contributing to their own understanding

through conversation and active participation. They argue that assessment is being seen as

separate from the learner and they emphasise that 'assessment practice is both an aspect

of the social order incorporated within symbolic networks and a dimension of social

situations in the ongoing activity of institutions where people act together' (p. 183).

Moreover, Klenowski and Wyatt-Smith (2013) argue for the sociocultural theory that

students' learning is impacted by social, historical and cultural influences shaping their

construction of knowledge. These factors, they explain, involve building a community of

learners, both teachers and students, and the ways that formative learning and assessment

are then used within the classroom. Black et al. (2004) attest to the role that the learning

must play and outline three key practices required for the development of successful formative assessment approaches. Firstly, the student must play an active role in the learning, learning that should take place in social and communal discourse. Secondly, feedback on the student's work should focus on descriptive comments, so that the student reflects upon and responds to the comments. Thirdly, students should hone the development of peer- and self-assessment skills through regular exposure to this practice. All of Black et al.'s recommendations involve a two-way interaction between teacher and student or peer and student, rather than passive student learning.

This two-way involvement is outlined by Timperley and Parr (2009) in their empirical study of formative assessment and self-regulated learning primary classrooms in New Zealand. They analysed teacher instruction in 17 classrooms to examine how aligned the success criteria and feedback were to student understanding. Success criteria outline the goal of the lesson and enables both teachers and students to have an understanding of the principal aim or objective of the lesson throughout the learning journey. Success criteria sets out the learning objective prior to beginning the learning and also provides a basis for situating learning after the objective has been taught. Timperley and Parr found that students required teacher assistance to understand their success criteria to allow for self-regulated learning. For students to be successful with their writing aims and to provide more profound assessment features, teachers must clearly explain lesson aims and success criteria, attesting to the importance of clear teacher dialogue when students are engaged in their learning. This, Timperley and Parr explain, proves the importance of clear explanation, instructional clarity and scaffolding in building self-regulating learners.

The process, not the result. Boud and Falchikov (2007) argue that active participation in assessment, including being given choice in success criteria, design and critique, better prepares students for later successes. By being treated as active players, students will be better taught to organise their own learning and recognise solutions to learning-related problems. Kirby and Downs (2007) argue against superficial, marks-driven educational systems, such as those revealed in their focus on South Africa, and in favour of the benefits of a 'formative, low stakes, criterion-referenced assessment' culture (p. 490).

Looking towards a deeper approach to learning, Kirby and Downs identify self-regulated learning as key, explaining that self-assessment can improve student learning when it does not involve assigning a numerical grade to student work. Although their research showed that students could not accurately self-assess, Kirby and Downs continue to make the case that self-assessment must be further integrated into the programme of study to enhance meta-cognitive skills. They argue that, for students to be successful, they must be trained over a period of time to ensure consistency and to guide students away from a marks-driven culture. Carless (2015) extends this line of reasoning by detailing how assessment should focus more on the *learning* aspects involved; he favours a procedural process rather than an emphasis on the product. Carless focuses on learning-oriented assessment, which he defines as, 'assessment where a primary focus is on the potential to develop productive student learning processes' (p. 964). His study looked at five classrooms through participant observation and interviews with both students and teachers to highlight how learning can better enhance thinking, learning, understanding and feedback related to self-evaluative assessment. In his model of learning-oriented

assessment, Carless explores efforts and learning approaches in order to help demonstrate how students can develop a deeper breadth of learning. Although his focus is on undergraduate students, the notion that these skills can be taught to students is, in my opinion, transferrable to primary-aged students if the materials and instruction are brought in child-friendly, developmental ways, as was done in this study. This was also suggested in the works of Pajares and Valiante (2002), who found that primary-aged children were quick to adopt self-regulation and felt more confident than secondary students when applying it.

Sadler (2010) explains how a critical component of student participation in formative assessment is that educators involve themselves in the process and assist students with understanding quality in making accurate judgements of work. This, Sadler argues, allows students to understand the meaning of their feedback throughout the process of assessment, helping develop the background and knowledge to critically assess themselves.

Although Black and Wiliam (1998) expressed concern over students being ready to self-assess, they explain that once students develop this skill, 'they become more committed and more effective as learners: their own assessment becomes an object of discussion with their teachers and with one another' (p. 7). This underlines the importance of students gaining agency and committing to self-development as part of the broader experience.

Nicol and Macfarlane-Dick (2006), as mentioned above, explain that students who are engaged throughout the process of monitoring their own learning are able to take control of their learning and become self-regulated learners. Amplifying the definition from Chapter 1, the term 'self-regulated learning' denotes independent learning (Meyer et al., 2008) that involves students setting learning targets, then monitoring and regulating their ability to reach their targets through teacher guidance and feedback (Meyer et al., 2008; Nicol & Macfarlane-Dick, 2006). Nicol and Macfarlane-Dick argue that, for students to become self-regulated learners, they must often assess their own work and give themselves feedback, a skill that must be honed and developed through the process of self-regulated learning.

Comparing and contrasting formative and summative assessment

A key factor in student achievement is the teacher's use of assessment (Hattie, 2012). While both summative and formative assessment have a valuable and irreplaceable role within education, the delicate balance involves understanding the needs of students and how to meet these.

Assessing student work entails an evaluation of both the products and the processes that occur within the classroom, as Brown and Harris (2014) explain. In their research into student participation in assessment, they found that self-assessment should not be taken as simply assessment but rather, as one component of self-regulation. In order to influence student success, Hattie (2012), in his book on *Visible Learning*, synthesised more than 50,000 studies related to promoting effective classroom practices. Among his findings is the judgement that teachers must look at themselves as agents of change.

Hattie explains that teachers *do* have an impact on student achievement, exemplifying that differences between high-effect and low-effect teachers primarily relate to attitude and expectations in primary education. This, he explains, is related to providing effective feedback that integrates the learners alongside working together to attain common goals through self-monitoring and self-assessment. Hattie provided 800 meta-analyses from across the globe focusing on student achievement to support his claims and found that formative assessment is the most important influence for improving student outcomes.

Wiliam (2009) explains that the main difference between the two assessment practices, formative and summative, is *how* the data are used: *formative* directs the learning by being used throughout the learning, whereas *summative* comes at the end to assess what has been learned. Since 1998, research within education has begun to advocate much more strongly for formative assessment practices (Elwood & Lundy, 2010). Recent reviews of formative and summative assessment have shown that formative assessment is most often associated with a positive and beneficial role within education, while summative is perceived more negatively. In the coming sections, both formative and summative, and their role within student-led assessment, will be discussed.

Formative assessment. Formative assessment, following the definition of Moss and Brookhart (2010), is 'an active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement' (p. 6). Formative assessment involves formally and informally collecting data for the means of modifying and enhancing teaching and learning so that students are best supported and are able to

improve academic results (Black & Wiliam, 2006). It is often considered a low stakes and opportunistic means of stimulating learning, since the planning and practice is amended according to the data that is gathered (Norcini et al., 2011).

Wiliam (2009) explains that there exist different timescales of formative assessment – such as a long cycle, which spans a term or unit; a medium cycle which occurs within units, often cycling every one or two weeks; and a short cycle, which has the biggest impact on student learning, occurs within days and provides instant updates or progress. It is, Wiliam explains, the critical minute-by-minute updates that inform pedagogy and teaching.

Formative assessment can integrate a variety of techniques for improving standards – as opposed to judging final achievements – which includes self- and peer-assessment. Ultimately, Black and Wiliam (1998) explain that assessment 'must be undertaken by the student', since, they continue, 'a student who automatically follows the diagnostic prescription of a teacher without understanding of its purpose or orientation will not learn' (p. 54). Integrating these within the classroom is not necessarily a clear and direct process – rather it involves a pedagogy whereby both students and staff set learning goals, share their objectives and success criteria, then monitor their progress through discussions and self- and peer-assessment (Ofsted, 2011). Timperley and Parr (2009) posit that formative assessment requires dialogue and input from teachers to enable learners to understand goals and provide a platform for them to seek assistance and understand the feedback they are receiving. Through exposure, practice and training with

these skills, students move along the continuum of understanding and self-control as they develop the ability to understand and co-construct learning.

Although the benefits of formative assessment are well documented (see, for example, Antoniou & James, 2014; Hattie, 2012; Earl, 2012; Elwood & Lundy, 2010; Black et al., 2004), research points to sensitive variables such as 'which practices are most effective, when to deploy them, and why a particular combination actually worked for a particular student in a particular classroom' (Duckor, 2016, p. 28). Similarly, although a great deal of research has been done involving formative assessment, questions remain in relation to the function and application of current formative assessment practices. For instance, Daisy Christodoulou (2017) makes a cogent argument for radical changes in perception and practice surrounding assessment. While providing a summary of the decades of English assessment regimes and routines, she discusses the political landscapes that have helped and hindered educational practices. She explains that there has been, more recently, a lack of effective assessment, particularly through the implementation of AfL, across primary schools and calls for a paradigm shift in our usage of summative and formative assessment. She discusses the importance of effective feedback and the need to develop more relevant and specific skills to guide student understanding.

Summative assessment. On the other end of the spectrum we find summative assessment, which is largely based on accrediting or judging student work to reach an end result (Earl, 2012). Often, summative tasks contain multiple choice and/or short answer questions that make a case for the learning that has been acquired. Otherwise, summative assessment may include long-form instruments that are made to capture the taught skills.

It is often considered medium or high stakes and therefore corresponds to the demand for current emphasis on accountability (Norcini et al., 2011).

There are, according to Harlen (2009) positive aspects to summative assessment, given that it is used 'to summarise learning in order to report achievements and progress in learning to parents, pupils and other teachers [and] for tracking pupil achievement' (p. 249). The results, when used to a high potential, can help to inform many elements that affect learning and curriculum. Harlen details how valid and reliable data, based upon teacher judgement from low stakes assessments, allows for accountability and monitoring of results. As Earl (2012) explains, part of the feedback loop is that educators may use this information to review their teaching and learning programme, then move forward.

There is also, however, much criticism of how summative assessment and data are used. Harlen (2009) explains that often teachers feel constrained if they are obliged to test students on curriculum content or their teaching method in a rigid manner. Antoniou and James (2014), in their framework for developing assessment in primary schools, researched formative assessment implementation in grade three and four classes throughout Cyprus. They emphasise that summative assessment is part of national policies geared towards making school systems more accountable for raising their academic standards. Although educational policy acknowledges the power of formative assessment, it is not being fully implemented, they argue, because it is often considered less significant and powerful than summative results, accountability and benchmarking – topics of discussion that prove more relevant, especially in relation to the politics in education. Elwood and Murphy (2015), in their explanation of the two philosophies of assessment, explain how summative assessment is a part of the legacy of psychometrics

within the standardised testing and exam system. They explain how the model assumes that there are certain fixed qualities, or attributes, that affect the learner and the knowledge that is stored in the learner's mind. In this view of assessment, the idea that our learning and knowledge is socially constructed and is part of a dialogue is ignored.

In summation, while there are positive elements to summative assessment, discussed above, summative does not necessary provide the information needed for teachers to enhance teaching and learning within the current climate of assessment (Christodoulou, 2017). The next section discusses how assessment as, of and for learning can nevertheless integrate both formative and summative assessment concepts and practices, to further the learning potentials of students.

Assessment *as, of* and *for* learning

Assessment as Learning (AaL), Assessment of Learning (AoL) and Assessment for Learning (AfL) – are each very different but together make the principles of a balanced assessment system – are all part of the on-going process of gathering and analysing assessment in modern progressive systems (Earl, 2012). Aligned with the theories of formative and summative assessment discussed above, AfL is closely linked to formative assessment while AoL is situated further along the summative continuum. AaL takes a similar role to AfL in assessing the learning process with the aim to support and enhance learning, but it remains the least prominent in the literature. Earl (2012) explains how AaL is a 'subset of Assessment for Learning' (p. 28) and posits that AaL places greater emphasis on developing metacognitive and self-monitoring abilities. It is, in sense, an extension to AfL.

Taken together these three forms of assessment provide a systematic way of understanding the practice of teaching and learning in many contemporary classrooms (Berry, 2005). Moreover, AoL, AfL and AaL are closely connected to the concepts of student-led assessment because within them feedback, which these forms of assessment all entail, is vital to maximising learning (Wiliam, 2009) – as I will now discuss.

Assessment as Learning. Assessment as Learning involves monitoring and improving deficit areas through self-regulation by providing a task or activity that allows children to evaluate their work, then use this information to further their own learning. Assessment as Learning 'reinforces the role of formative assessment by emphasizing the role of the student, not only as a contributor to the assessment and learning process, but the critical connector between them' and furthers the notion that students are 'active, engaged and critical assessors', an action which occurs when 'students personally monitor what they are learning and use the feedback from this monitoring to make adjustments, adaptations and even major changes to what they understand' (Earl, 2012, p. 28). Similar to Earl, MacMath et al. (2009) state that AaL enables students to critically analyse their own work and requires that they develop an understanding of the success criteria and their level respective to this.

Assessment of Learning. Assessment of Learning, or summative assessment, is the assessment of student progression, in which the end result of learning, such as the mark on a test or quiz, is recorded. It may also be conveyed as a final grade or rank (MacMath et al., 2009). AoL can inform teacher records and reports to parents, as well as national assessment documents going to future schools (Harlen, 2009). As AoL tends to

be summative, standardised testing is among its most common instruments. In the view of many commentators, including Harlen and Deakin Crick (2003), the demands of standardised testing influence student motivations adversely, with the result that high-stakes testing works *against* the promotion of lifelong learning. The 'will to learn', including behaviours such as self-regulation, motivation and self-esteem, have been seen to decrease in the face of high-stakes testing (Harlen & Deakin Crick, 2003). Furthermore, standardised tests contribute to a narrowed curriculum and less generated subject knowledge because teachers are forced to adhere to rigid expectations and forgo high quality and high equity teaching to meet the demands of accountability and a testing culture (Hall et al., 2004; Klenowski & Wyatt-Smith, 2013).

Carless (2015) argues that AoL may be, however, a fruitful method of assessment as long as it strives to review and reflect upon learning with the objective of making future improvements. In ideal situations, it can also be used to direct formative practices, such as peer feedback, self-assessment and teacher feedback – although as MacMath et al. (2009) explain, it is routinely found on a report card to indicate that the learning has been completed for that term, which makes it difficult to integrate into an effective feedback regime.

Assessment for Learning. Considerable research into understanding Assessment for Learning has been made over the past twenty years (Carless, 2015), dating back to when Black and Wiliam (1998) published their seminal work on formative and summative assessment. Black et al. (2004) explain Assessment for Learning to be 'any assessment for which the first priority in its design and practice is to serve the purpose of

promoting students' learning' (p. 10). This body of research has contributed to a growing understanding of what makes effective learning and the importance and challenges educators face when implementing effective feedback (Carless, 2015). AfL has created an emphasis on evaluating tasks – more than simply reciting information. This deep understanding is what Earl (2012) describes as 'knowledge in action' (p. 41).

When used correctly, AfL involves interactions and discussions between the assessor and the one being assessed. It integrates the thoughts and interpretations of the teacher and directs these towards gaining a fully developed idea of how and what the students have learned (Berry, 2008). AfL has given rise to four interventions: *questioning; feedback given through marking; peer and self-assessment; and formatively assessing summative tests* (Taras, 2010). AfL is now commonly seen as a key for promoting student learning in many countries, since it connects the learners to the learning and assessment process by stimulating them to think actively and critically. It entails assessment practices that are ongoing and collaborative and seemingly well-attested in educational research (Earl, 2012).

The Assessment Reform Group, described in Chapter 2: Part I, has several published research-based guides that enable classroom practitioners to improve their use of Assessment for Learning, in an attempt to show that assessment for learning 'is one of the most powerful ways of improving learning and raising standards' (ARG, 2002, p. 3). ARG claims that through AfL, 'the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where

they need to go and how best to get there' (ARG, 2002, p. 2). As a result, learners can become more autonomous and independent.

Many might find that Assessment for Learning and formative assessment are inflections of the same basic concept but, as Wiliam (2009) argues, the key distinction between them is how the information they produce is used: Assessment for Learning is used to better student results, whereas formative assessment is used to improve teaching. Examples of AfL are questioning techniques, sharing and developing success criteria, self- and peer-assessment, descriptive feedback, and an elimination of grades or marks in favour of comments (Elwood & Lundy, 2010). These elements of assessment are related to the principle of student-led assessment, which this study has highlighted. The coming section will discuss student-led assessment and the means of implementing this within the primary classroom.

Fostering student-led assessment

As discussed in Chapter 1, Zimmerman's (2002) concept of self-directed learning, the concept of generating thoughts, feelings and behaviors that contribute towards learning goals, is but one essential key to fostering student-led assessment. Falchikov (2004), for example, discusses how, for students to play an active role in the processes of assessment, they must be involved in a transparent and clear marking process.

Throughout the learning process, there are a number of assessment tools that have been found beneficial for student achievement, such as student-generated targets (Berger, Rugen & Woodfin, 2014; Hattie & Timperley, 2007), critical thinking questioning

(Berger et al., 2014) and rubrics that involve students in co-construction (Black et al., 2004; Quinland, 2012). These strategies, which were all employed within this present study as a part of student-led assessment, fall into two overarching categories: peer- and self-assessment. The next section will examine these principles before looking more closely at the exact techniques and strategies used by the primary teachers and students within this study.

Developing skills for life through student-led assessment. In the twenty-first century, the skills that are required from students have shifted as the classroom now involves greater student participation and voice. The desired skills now emphasise a development of the capabilities and dispositions that enable lifelong learning (Harlen & Deakin Crick, 2003). Looking at the learning progress through this lens, Black and Wiliam (1998) calculated that students who were effective at understanding their learning and had developed self-assessment skills showed on average a two-year advance within their progress compared to their peers.

Many researchers point to the role of teachers as critical to helping students achieve self-regulated learning. Teachers who effectively foster self-regulated learning techniques in students are those who focus on fully developing emerging skills and assisting these skills through to mastery (Timperley & Parr, 2009). Students learn from social influences and their 'participation in assessment practices', through engagement with peers and teachers (Elwood & Murphy, 2015, p. 188). Through independently engaging with peers, students encounter the ability to analyse their own work and that of their classmates, honing skills such as reflection and developing an understanding of success criteria (Hayward &

Spencer, 2014). Furthermore, allowing students to generate the success criteria and self-assess their own work contributes to students creating more successful and effective work (Andrade, Du & Mycek, 2010). Fundamental to the approach is that students have access to the learning and are capable of deciding how to implement changes. Elwood and Murphy (2015) argue that assessment is part of a sociocultural script and that learning is derived from wider social interactions. They explain that, 'concepts are socially determined and acquired, and understanding is achieved through individuals appropriating shared meanings through discussion and negotiation' (p. 187). The concept of sociocultural scripts will be revisited when analysing the findings.

Given the benefits of self-regulated learning and teacher involvement in the development of related skills, below is a discussion of self- and peer-assessment, the benefits of each and their implications when used within student-led assessment.

Self-assessment. Self-assessment, as explained in Chapter 1, is a process whereby students evaluate or judge the quality of their work to determine strengths and weaknesses with the intention of improving future learning (Klenowski, 1995). It is a critical component of student-led assessment and one that was employed throughout the study, as I will discuss in the following section.

The importance and value of self-assessment within education is not a new phenomenon. It has been noted throughout the major policy debates, including through the Assessment Reform Group's (1999) follow-up to *Inside the black box* where the researchers stressed that self-assessment is an integral aspect of learning. The Assessment Reform Group

emphasised that students must ultimately be responsible for their academic growth since no one else can do it for them. Thus, Assessment for Learning must involve students, so as to provide them with information about how well they are doing and how to guide their subsequent efforts. Much of this information will come as feedback from teachers, but some will be through their direct involvement in assessing their own work. The awareness of learning and the ability of learners to self-regulate and direct their learning for themselves is of increasing importance in the context of lifelong learning.

There have been several longitudinal studies examining students' self-assessed work compared with teachers' marking (Boud & Falchikov, 2007; Dochy et al., 1999). These studies have suggested that students have the capability to judge reasonably the quality of their own work, although there will be some difference depending on their level of expertise. For example, students who have trained longer in academic areas were more likely to underestimate their abilities, while the opposite held true for students new to academic content, who were observed to overestimate, as they possess heightened senses of their academic ability. Further, Harris, Brown and Harnett (2015) stress that self-assessment, when applied to compulsory schooling, involves training and experience since there are consequences when students over- or underestimate during self-assessment. This is why this present study, along with other researchers (see, for example, Elwood & Murphy, 2015; Harris et al., 2015; Klenowski, 1995; Timperley & Parr, 2009), stresses teacher guidance as a critical component to using student-led assessment.

Klenowski (1995) noted how three conditions are needed for self-assessment to be beneficial: the teacher and student must negotiate the success criteria; the student and teacher must engage in dialogue that discusses evidence for judgement; and the assessment should contribute to a grade; all of these criteria were enforced throughout the study. Boud et al. (2013) remarked that honing the skill of self-assessment requires time and assistance. It requires consistent engagement over a period of time where the standards of work need to be interpreted and modeled for students. It also involves reflection, whereby students work with teachers to analyse their evaluations and reflect upon the accuracy of their judgements. Reflections, student-led and teacher-directed, were another key self-assessment tool utilised throughout the study, as I will discuss later in this section. According to Sadler (1989), 'providing guided but direct and authentic evaluative experience for students enables them to develop their evaluative knowledge, thereby bringing them within the guild of people who are able to determine quality using multiple criteria' (p. 135).

Peer-assessment. Another component of student-led assessment is peer-assessment, which also falls under assessment as learning (MacMath et al., 2009). Peer assessment can be explained as a student assessing and/or providing feedback on the work of another student. It is also a critical complement to self-assessment (Black et al., 2004).

Peer assessment provides 'a source of insights to the teacher', particularly when students are independently developing the success criteria (Rowntree, 2015, p. 146). Further, Black et al. (2004) explain how peer-assessment allows students to accept criticism of

their work in a language with which they are familiar – the language that students naturally use – rather than 'teacher talk', allowing them to make necessary improvements. Students may take criticisms more seriously if a fellow student offers it, as students tend to value the feedback of their peers differently from feedback provided by the teacher (Black et al., 2004). Topping et al. (2000) found that peer-assessment has been found beneficial for enhancing communication and collaboration skills. In their study of 12 postgraduate students, they determined that feedback from peers, although time consuming and intellectually and socially challenging, showed benefits in student work. They also attested to the role of the teacher as fundamental in providing a three-way interaction – class teachers, student and peer – which added increased value to collaborative interactions.

Within student-led assessment, peer-assessment is an integral component since it can be used throughout many avenues of assessment, including providing verbal feedback and targets, questioning and rubrics. These elements, among others, will be further addressed below.

Tools for assessment

There are a vast variety of tools, or techniques, that can be used to assess students, integrating both teacher-led and student-led assessment. Two overarching student-led assessment methods, self-assessment and peer-assessment, can lend themselves to the tools discussed in this dissertation such as, for example, rubrics, questioning and targets, providing additional ways to expose students to an awareness of their grades and learning. As Brown and Harris (2014) posit, where students are exposed to self-regulation

skills, including some of the tools provided here, through self-assessment, their self-regulation aptitude may also be enhanced. Further, if students' abilities and competencies are fostered throughout all levels of assessment, it will allow student-led assessment to become a common practice within the teaching and learning routines of the classroom, creating more enhanced Assessment for Learning practices (Taylor-Patel, 2011).

These tools, selectively paired with the rationale of this project, were used to scaffold the students' learning, as well as to provide some structure to the teachers' implementation.

Below, I will discuss some of the ways student-led assessment was used in this study by discussing each method and their implementation individually: questioning, rubrics, targets/goals, traffic lights, student-generated tests, student-assisted termly report writing and student-teacher-parent conferences.

Questioning. Using questioning as part of student-led assessment involves various techniques that allow students to critically assess their learning. There are many ways to check student understanding and to better involve them in the learning process. These checks can be categorised into the following headings: 'factual or brief-response checks', 'monitoring confusion or readiness', 'status checks', and 'probing deeper understanding and reflection' (Berger et al., 2014).

Simple questioning involves judging oneself and creating provisions for next steps. These initial stages of self-assessment are crucial in developing a more transformative and challenging approach to critical reflection (Boud, 2013). It involves scaffolding, where

the teachers would provide the steps for solving a problem and then allow the children the opportunity to try independently. Scaffolded feedback in the classroom includes modeling, providing cues, prompts and hints, as well as giving direct instruction to help the students more autonomously research the solution (Hartman, 2002).

Taras (2003), in her study of British undergraduate students and feedback as part of the self-assessment process, investigated student reactions to two types of self-assessment: self-assessment that came before their peer or teacher provided comments, and a process of self-assessment whereby feedback from a peer or teacher was integrated. The majority preferred the latter. Taras found that integrating a process of encouraging students to question their own work, as well as seeking peer questioning, created a relaxed but effective environment for facilitating self-assessment.

Loughland and Kilpatrick (2015) discuss the role students play in using effective questioning, such that questioning furthers work and elicits student understanding, is a key element of creating a classroom environment where 'students are encouraged to be responsible for and monitor their own learning' (p. 130). Loughland and Kilpatrick's study, although focused on science-based questioning, shows how questioning is crucial to reinforcing learning experiences.

Encouraging students to constantly question their work and their understanding was a routine process throughout the study. Students were also given a 'reflection box' where they had the choice of which self-assessment tool they would use to further their thinking, as I will discuss in the coming section on traffic lights.

Student-generated rubrics. More than an educational buzzword, rubrics have become commonplace among teachers globally. Rubrics provide students with the direction needed to achieve high marks by laying out, often in a grid-like format, what constitutes full marks and what each level requires (Quinland, 2012). Teachers use rubrics as a means of adapting their learning outcomes to the problems or topics that are being investigated. Rubrics are an educational tool that allows teachers and students to more precisely assess work provided the success criteria is presented. They provide 'guidelines for decisions for evaluation and assessment' (MacMath et al., 2009, p. 2).

Teachers may assume that students know what makes an outstanding piece of work but in actuality, understanding the criteria and steps for success is challenging for most students. Black et al. (2004) note that students acquiring understanding of the scoring rubric takes time but can be very beneficial for self-regulation. They suggest strategies for furthering student understanding that include giving students a simplified version of the teachers' rubric, allowing them to rewrite the rubric for clarity or, as was done in this study, allowing students to create their own rubric so that students can scaffold their learning from the success criteria.

Andrade, Du and Wang (2008), in their study of 116 Year 3 and 4 students in the United States, used the rubric writing process to scaffold the desired model before asking students to generate a list of assessment criteria and then create a draft. Their study suggested that this process, allowing students to generate the rubric and accompanying success criteria, allowed for more effective writing in primary school classrooms. This was again corroborated by Andrade et al.'s (2010) study of middle school students in

North Carolina, who were asked to generate success criteria and their marking rubrics for writing tasks. The results of 162 participants showed that more effective writing was produced when students were involved in generating the rubrics.

In this study, student-led assessment involved students partaking in discussing, designing and implementing the success criteria that was used to assess their work. Often, this began with a blank rubric or grid that led into a discussion with scaffolding to decide how to achieve maximum marks (See Appendix A for an example of a blank rubric). This is but one way that teachers use assessment, as rubrics are more comprehensive than simple checklists (Quinland, 2012).

There are two types of rubrics: holistic and analytic. A holistic rubric is used for comparing an entire project or task based on either the teacher or student's perception of that piece. An analytic rubric provides separate scores for each item or component being assessed. For this study, children were exposed to only analytic rubrics, as they were designing multiple elements to assess (See Appendix B for an example of an analytic rubric). However, both techniques could be applied to student-led assessment (Quinland, 2012).

Student-generated targets/goals. Another means of establishing student-led assessment within the primary classroom was through the application of student-written targets and goals. Goals or targets typically involve two characteristics: challenge and commitment. They allow students to track their performance and benchmark their efforts and actions, working towards a desirable performance (Locke & Latham, 1990). This is

most effective when students are committed to the goal and are expecting feedback towards the goal. Allowing students to integrate personal goals, such as a social target about being more patient with peers; or targets into their work, such as improving their maths standard by practising mental algorithms, affords students opportunities to alter the way which they self-monitor, self-control and self-discipline themselves as learners (Hattie & Timperley, 2007). The interplay between teachers and students when feeding back about their individual progress towards a goal is key for ongoing learning (Locke & Latham, 1990). Berger et al. (2014) discuss the importance of allowing students to 'own' their learning targets, meaning that students are 'invested in understanding standards and modifying or creative new learning targets to best help them' (p. 49).

However, one of the most challenging aspects of self-assessment, according to Black et al. (2004), is helping students with setting their own goals so that students are independently 'developing the capacity to work at a metacognitive level' (p. 14). Grant and Dweck (2003) explain how student goals are most beneficial when they focus on *learning*: goals 'where the purpose is to acquire new knowledge or skill' (p. 541). Goals that focused on learning, rather than performance, resulted in students who displayed better coping skills when confronted with challenges, sustained motivation and higher achievement.

For the purpose of this study, all students made targets for themselves at the beginning of Term 2 (see Appendix C for examples of the student-generated targets which were displayed in each class). They were given guidance on how to write their targets and these targets were then mounted on the wall as part of a 'target board'. Each teacher

presented the targets differently, depending on how the students saw fit. 'Goals for next time' were also used throughout the study as a means of encouraging students to reflect upon what could be improved in the next piece of work. Finally, targets were used as a part of their report writing, which will be discussed below.

Student-judged traffic lights. Traffic lights, Black et al. (2004) explain, are used as a means of student reflection and judgement on their learning. The exercise stimulates their learning by determining, first, if their learning is secure (annotated by green), or if there is a reason for concern (yellow or red). Subsequently, teachers or students may ask questions to probe thinking, gauge areas of misunderstanding and lead to students developing a plan to improve their learning. They explain how teachers may also amend their teaching plans in response to the feedback they receive from the students. This teaches students to critically examine 'what they know and what they need to know' (p. 20). Furthermore, as Brown and Harris (2014) suggest, this method is a useful tool but used for self-assessment, not peer-assessment. This method should neither be used in front of the class, as this leads to pressure from peers that may cause dishonesty.

For this study, traffic lighting was used in a variety of ways. It was used at the end of lessons as a mandatory task to be glued into their workbooks; it was used as an optional task as part of an 'reflection box' where students would self-evaluate their work upon completion; occasionally it was part of a display where students would rank their understanding of a given topic by placing a laminated biscuit in the green, yellow or red circle, depending on how they gauged their understanding. Traffic lighting was done as

part of a personal and private reflection. All teachers were provided with a traffic light stamp to be used on assessment pieces or worksheets. It was not used to rank others.

Student-written tests. Having students participate in their own test writing is a relatively unexplored area of self-assessment, particularly in primary education, and it proved difficult to find literature that pertained to this area. Nevertheless, the research that does exist suggests that students benefit from being involved in this seemingly forbidden area of assessment, as explained below.

Green (1997), for example, analysed the effects of student written tests when Canadian undergraduate students were given the responsibility of developing tentative test questions and test format for the students' upcoming evaluation. In total, 120 students participated by contributing potential questions for their final examination, one of which was guaranteed to be added to the final test. Moreover, a question bank of all submitted questions was given to all students prior to their exam. Green found that students had reduced test anxiety; the strategy involved students in a key process and it encouraged their reading and understanding. More recently, Sanchez-Elez et al. (2014), in their study of 769 students from 12 different countries, employed technology to encourage students to participate in their academic evaluation by providing them with the forum to create and upload questions to be solved by their peers. These questions were then selected for evaluation examinations. Their results showed that students who were most actively engaged were able to attain the highest on the tests. On these grounds, active participation in the assessment process proved beneficial for the students in Sanchez-Elez et al.'s study as student learning was enhanced.

Question-generation has been better documented within the research. Ness (2015) criticises the system whereby questions are too frequently asked by the teacher and rarely by the student. At age 4, a young girl will ask, on average, 390 questions per day. Ness asks why, as children get older, this tapers off. She looks to an education system which has teachers asking the majority of the questions. She explains that as students become more responsible for their learning and questioning, they become more able to independently and competently apply this throughout their learning. Furthermore, Ness explains a strategy called the Gradual Release of Responsibility where teachers are expected to model the questioning, guide the instruction, collaborate with the student then allow the student to independently practice. This cyclical pattern relies on the teacher as the main coach and encourages dialogue around the skill – this was also an approach adopted by the present study.

In this study, students worked in groups and determined the format of the tests for core subject areas. They discussed how many questions were needed and from what topic area. They provided some sample questions, which were also integrated. Student-generated tests involved a culmination of teacher-modeling, guided instruction, collaborative question writing in groups and independent practice (Ness, 2015).

Student-written reports. Student-assisted termly report writing was a culminating activity that integrated many of the skills the students had developed and honed throughout the term: targets; self-assessment across all subject areas; and in-depth, guided questioning. Despite extensive research on this theme, I could not find any past studies that focused on this area. As a result, this element will be a pilot study. I will

assess its success by the students' perceptions of its effectiveness in allowing them to understand and take ownership of their achievements, and by the teachers' perception of the benefits to the individual child.

For this study, students were fully integrated into the report-writing process. Students were given blank templates of their report and teachers explained to them each step of the report. They were then asked to fill in a two-sentence comment on their progress in core subject areas. The students were then tasked with ranking their achievement, effort and their level based on selected learning objectives from each strand. For their grade, their mark had already been set through our computer-generated software but it was important that students estimated where they felt their results lay. Finally, they were asked to write their own targets for the following term. Following this, each student held a conference with the teacher to negotiate his or her final report.

Students leading their own conferences. Research involving students participating in the reporting process is not abundant, although there has been a growing support from academics and practitioners as a means of enhancing communication between parent and school (Taylor-Patel, 2011). For the purposes of this research, student-led conferences can be defined as a two-way meeting between student and parent, moderated by the teacher, about the progress and targets from the given period of learning. Student-led conferences allow students to engage with their report and progress in a way that ensures they are a part of the process (Taylor-Patel, 2011).

Verlaan, Shull, Mims and Nelson (2016), in their study of parental involvement, analysed a Grade 5 classroom in the USA with a total of 40 students, where 90% of students fell into a low socioeconomic bracket based on parent income. They looked at student motivation and achievement in the primary classroom, and noted that 'student-led parent conferences' had positive effects on students. This included 'increased student achievement, greater student involvement in and responsibility for their own learning, increased parent conference participation, and improved relationships between parents and schools' (p. 44).

Further, Taylor-Patel (2011) argues that for students to successfully engage in student-led conferences, there must be 'professional development, effective teaching practice, assessment, and reporting systems to student-centred pedagogy, and be willing to redefine the roles of students and parents in the reporting process' (p. ii).

The teachers in this study followed Hackmann (1996), who explains that, for students to participate in a child-led conference, the teacher must provide instruction to the students beforehand, to allow them to gather relevant information and clarify any questions regarding their interpretations of the academic information. The conference should integrate information regarding process, learning goals, the student's level comparatively, and priorities for the future (Absolum et al., 2009; Black & Wiliam, 1998; Hattie & Timperley, 2007). For my research, all teachers prepared students for the conferences by giving them a template to reflect on, a suggested outline to follow (see Appendix D) and then had a practice trial with a peer before the actual conference.

Challenges of research and modifications to teaching

There are many researchers who advocate for the use of self-assessment in schools, many of which have been cited in this dissertation (see, for example, Brown & Harris, 2014; Boud, 1995; Butler, 1988; Falchikov, 2004; Harris et al., 2015). However, there are many issues that need to be addressed when promoting student-led assessment.

Brown and Harris (2014) explain that quality of self-assessment must be carefully monitored as students often have judgements that are unreliable or invalid. Having integrated self-assessment for many years with my own students, both as a teacher and in a leadership capacity, these issues are evident in practice.

Boud et al. (2013) found that when students were introduced to new topics and expectations, their ability to make judgements was lower. Their understanding gradually increased as the students gained experience and received feedback from an experienced marker. This suggests that the skill of self-assessment is not all encompassing and cannot necessarily be mastered with ease. Black and Wiliam (1998) warn that implementing the mechanisms for enhancing feedback and integrating self-assessment requires significant changes in pedagogical practices, as seen in this study.

There have been a number of studies, throughout both primary and secondary schools, that have analysed student involvement in the assessment process and they have produced a range of results. Sung, Chang, Chang and Yu (2010), for example, when examining peer- and self-assessment in their study of 116 Grade 7 students in Taiwan, found that low-achieving students tended to overestimate their progress or grade while high-

achieving students tended to underestimate their work. However, several researchers have pointed to techniques for improving accuracy of self and peer assessment. Gielen, Peeters, Dochy, Onghena and Struyven (2010) found that requiring students to leave comments, rather than simply grades, enhanced their ability to assess work. Sung et al. (2010) indicated that, by having multiple students rating the work, the validity and reliability of their judgements increased.

Motivation is also a challenge when analysing student engagement in the learning process. Black and Wiliam (1998) explain how the effectiveness of feedback is determined by the motivations and self-perceptions of the students it affects. This, they explain, is a factor of the content and engagement – both of which deserve careful attention. Skinner and Pitzer (2012) insist that teachers are highly influential in promoting children's interests towards feedback and instruction. They explain that teachers must create a classroom environment that supports self-determination for completing the learning task.

The next chapter will develop from the histories and principles outlined in Chapter 2 to further discuss the implementation of student-led assessment in primary schools.

Chapter 3:

Methodology

Chapter organisation

The previous chapter outlined the tools that help foster student-led assessment, including student-generated rubrics, self and peer and assessment, questioning, traffic lights, targets, student-led conferences, and student-assisted termly reports. Building upon these, this chapter will present the methodology used for this research study by, first, explaining the reasons why a qualitative, action research case study was chosen and, secondly, by elucidating the methodological underpinnings of the research. The chapter will then explain the setting, participants, age implications and participant demographics of the research. The methods of data collection will be discussed, including the phases of implementation. Chapter 3 will conclude with an examination of limitations of the study.

Methodological orientation

This study investigated the perceptions of both Year 4 teachers and students when introduced to student-led assessment. As described in Chapter 1, this dissertation arose from the frustrations of other educators and myself as a school leader with the confusing state of assessment. In response to this situation, the present study attempts to understand – and hardness to the student-led assessment ideal – the richness involved in the experiences of teachers and students affected by assessment systems otherwise beset with shortcomings. It then seeks to bring this experience into the public domain.

Methodological paradigm

This research, given its dedication to individual meanings and actions, predominantly draws upon an interpretivist paradigm, which lends itself to the individual interpretations and experiences of participants faced with specific situations (Taber, 2012). Interpretivism embraces the subjectivism present in the complexity of supposed truths and affirms that these truths arise from the interpretations, meanings, motivations and values of the actors, the teachers and students, associated with them and whose experiences embed and communicate the same interpretations. It recognises that many variables exist that affect events and actions, meaning that absolute truth is impossible to find (Creswell, 2012). This is because each person holds a unique perception of what is 'real'. As Smith (1993) points out, interpretivist research serves to 'elaborate what lies beyond epistemology and beyond the idea that there are special, abstract criteria for judging the quality of research' (p. 150). Furthermore, the interpretivist view holds that multiple perspectives and interpretations exist, which are experienced differently by each participant, and all together provide understanding and meaning (Stake, 2010). Within this study, each teacher and student provided their perspectives regarding student-led assessment, which was based upon their personal experiences and contexts. Given this foundation, interpretivism's bases of understanding, effect and assignation allow me to gather, analyse and interpret these declared perspectives and beliefs (Lincoln & Guba, 1985).

The study deliberately serves as a means of promoting change within assessment practice – and therefore seeks greater appreciation of the unique perspectives of those that it directly affects, most especially teachers and students (Stenhouse, 1980). My personal

beliefs as a researcher align with interpretive social theory because I believe that human behaviour is complex and influenced by choices. This approach allows me to answer my research questions understanding that *multiple* subjectivities guide each participant, student or teacher, through their experiences with student-led assessment – all the while acknowledging that this involves 'understanding something in its context' (Holloway, 1997, p. 2).

Developing an action research approach. For this study, an action research (AR) design was selected to reevaluate, improve and change the current assessment situation within my study of three Year 4 classes. As defined by Bresler (1994), action research is 'the study of one's own practice in order to improve it' (p. 12). It promotes the act of taking action and introducing positive educational change for the betterment of education (Mills, 2006). When applied to education, Mills explains action research as a,

> systemic inquiry conducted by teachers, researchers, principals, school
>
> counselors and other stakeholders in the teaching/learning environment,
>
> to gather information about ways that their particular schools operate,
>
> how they leave, and how well their students learn. (p. 6)

Action research also embraces the complications of factors that cannot be controlled, which may include, such as in this study, variables in different classes caused by different teachers' experiences and teaching styles, as well as different abilities and competencies of students (Mills, 2006). The abilities and experiences of both teachers and students create an interplay that presents itself in interesting ways in the study and which will be discussed in the findings and analysis.

Action research in practice. The role of an educational leader, throughout the past decades, has shifted from an autonomous, isolated and top-down style into a multifaceted and collaborative guide for change. As outlined by the principles of AR, three teachers and I worked collaboratively to enhance professional practice in the school – sharing ideas and improving our knowledge of assessment together. Essentially, we identified problems and worked to solve them (Denscombe, 2014).

Action research integrates democratic processes into the research – participants, both teachers and students, are able to influence the conditions of assessment examined within this study (Carr & Kemmis, 2003). At the present time, there is not a great variety of research available that specifically examines my field of interest: action research into student-led assessment with primary-aged students. Working through these principles of action research, I am striving to spearhead an approach that is not well documented in the literature but is in my view central to persuading teachers in practice.

Case study

According to Creswell (2012), case studies involve qualitative research that interrogates one or more cases within a bounded system. This dissertation involves several case studies, since there are three cases, or classes, being examined, all of which provide contexts for the analysis of teachers' and students' perceptions of student-led assessment.

In recent decades, case studies have proven to be a systematic tool within education for understanding and analysing events and information, focused upon the development of a holistic understanding of the construction of meaning (Montgomery, 2009). This research

follows McMillan's (2012) definition of case studies, in that they provide 'in depth analysis of one or more events, settings, programs, social groups, communities, individuals, or other bounded systems' (p. 279). Case studies take into account multiples interpretations of a single event and acknowledge that multiple explanations may be derived (McMillan, 2012) by integrating a variety of forms of qualitative data, including interviews, audio-visual evidence and observations (Creswell, 2012).

This dissertation therefore adheres exclusively to a qualitative research model to allow for a better understanding of the complexity of peoples' lives while acknowledging that multiple contexts influence both participants' experiences through and their subsequent *exploration of* their experiences (Stake, 1995). The case study approach in this context attempts to give meaning to experiences in a concrete and in-depth manner by explaining *if* and *to what degree* the student-led assessment changed the learning experiences of the teachers and students involved in the project (Taber, 2012). Specifically, qualitative research methods have proven beneficial in this situation because they provide a series of benefits in relation to a research study of this type, with its particular focus on children:

Experience is direct*. Qualitative research permits children the opportunity to provide a direct voice, capturing the resultant data in a way that could not be possible through numbers or statistics (Ritchie, Lewis, Nicholls & Ormston, 2013). Adults, Dixon-Woods et al. (1999) explain, cannot always give a valid account of a child's experience.

A more detailed picture is provided. The open-ended descriptions of experiences and exploratory accounts in the model allow the researcher to develop an in-

depth and rounded interpretation of the research topic and its context (Fraser, Flewitt & Hammersley, 2014).

Reciprocity. As in many styles of research, the researcher should be outwardly objective and neutral while conducting the data and dealing with the participants. In this interpretivist approach, the student participants are able to be reflexive with their views and opinions. The researcher can adapt questions to the direction of study, enabling a dialogue that is reciprocal and fluid (Ritchie et al., 2013). Such an approach allows for an accommodation of the range of understanding, abilities and experiences of the children (Darbyshire, MacDougall & Schiller, 2005).

Phenomenon exploration. Merriam (2001) explains how many people hold onto their recollection of phenomena differently and therefore gathering different perspectives affords a more vibrant depiction of the multiple perspectives involved in the construction of an event. This investigation focuses on an exploration of phenomena, emotions and thought processes that are difficult to deduce from quantitative data (Strauss & Corbin, 1998).

Researcher's role. Given my leadership role as Head of Primary, I was able to act as an active participant through the qualitative methods approach. The semi-structured interviews allowed me, for example, to tailor the questioning and flow to the pace of the children (Ritchie et al., 2013).

Complexities are understood. Within organisations such as schools, there are dimensions of complexity that can be recognised when those involved investigate and understand the hidden social truths of which they themselves are a consenting part. Uncovering truths involves collaborating with participants interactively and generating evidence based on first-hand experiences (Creswell, 2012).

Researcher's Positionality

Regarding my positionality within the research, I am a primary agent involved within the research study and have been throughout every step of the process. Given my role within the phases of research, data collection, analysis, interpretation and results, it is imperative that I acknowledge the existence of personal biases, values and views and their effect on the trajectory of this study (Merriam, 1998). I fully understand that my identity has been influenced by my past experiences and that full neutrality is difficult to achieve because aspects of my life have shaped my position on the concept of student-led assessment. In relation to my positionality, I would like to describe my personal and professional experiences within education for the sake of transparency.

I had been a classroom teacher for 6 years, in Europe, Asia and North America, before taking on a role as Head of Primary. I have always supported the fight for student's rights and the need for democracy and shared power to exist within the classroom as my education and upbringing were livened by supportive parents and several key teachers who nurtured a passion for advocating for what I believed in. My interest specifically in student-led assessment comes from several years of informally applying it to my teaching and seeing the involved role students could play. This led me to formally investigating

the concept with a group of students and teachers at my current school.

I acknowledge that I have and will play a central role in the research. However, within the data collection, I have chosen my stance and words carefully to ensure that each interview and focus group reflects an outwardly and sincerely neutral position. Regarding my role within the transcription and analysis phases, I have maintained the students' and teachers' words for their intended meaning. Observation has been rarely used in this study to ensure I have been a 'partially participating observer' – although I have been present, I had not taken notes of lessons but maintained a distance to allow teachers autonomy (Bryman, 2008). More regarding limitations are discussed in the final chapter, Chapter 6.

Trustworthiness of the study

Rallis and Rossman (2012) explain that trustworthiness consists of a set of standards confirming that ethical sensitivity has been observed by the researcher throughout. It ensures participants, topics and setting are appropriately respected, meaning that the researcher understands the nature of the conditions and follows accordingly. Because of the qualitative and interpretivist nature of my research, trustworthiness is imperative to the development of my case. Following Guba's (1981) four evaluative criteria used for judging the trustworthiness of qualitative research, I have achieved trustworthiness in the following ways:

1. Credibility (in preference to internal validity) involves ensuring that the sample is adequately representative (Lincoln & Guba, 1985). In my study, this involved having

several focus groups with both teachers and students to gather more credibility while triangulating the information using multiple methods (interviews, focus groups, observations, photo-voice), which are then added to the sources of data (Stake, 2010). This also involved prolonged engagement whereby I became familiar with the class, the teachers and the students to ensure open means of communication were established (Lincoln & Guba, 1985). Finally, I also called upon both my academic supervisor and a close friend from an external university, who served as peer debriefers with whom I could discuss and build my credibility (Rallis & Rossman, 2012).

2. Transferability (in preference to external validity/generalisability) in research involves the researcher providing detailed analyses of focus group and interview transcripts, descriptions of photos and observations, and purposeful sampling to provide appropriate context (Lincoln & Guba, 1985). Stake (1995) endorses Lincoln and Guba's argument but gives it a different title, referring to 'particularization' in relation to research that serves to develop an awareness of the uniqueness of the case study while acknowledging how other cases are different. By this method, the purpose of this case study is signposted as an endeavour to understand how assessment in the primary classrooms under investigation, while unique to this experience in this individual context, can have implications for informing and enhancing other similar environments. Providing multiple perspectives serves to show detailed views of the context and the situation being investigated.

3. Dependability (in preference to reliability) involves the thoroughness and dependability of the findings (Merriam, 2001). This would include the replicability of the

research with similar participants or in similar contexts (Lincoln & Guba, 1985). This was achieved in the research through several avenues. First, all permissions and ethical approvals were achieved well in advance and their protocols were rigidly adhered to. Secondly, throughout the study, a reflexive account of the events of my dissertation was captured. Moreover, audit trails from my research, including memos, emails, field notes and logs, were captured and referred to throughout the research and write-up (Merriam, 2001).

4. Confirmability (in preference to objectivity), as explained by Lincoln and Guba (1985) is the data and interpretation rather than the researcher's motivations or interests. Lincoln and Guba explain how this involves several steps to ensure an accurate sampling of the findings. Upon examining the data, the 'auditor' should look at the structure's 'clarity, explanatory power, and fit to the data', tracing this information back to the audit trail (p. 323). The various researchers whose works have been cited as additional support to my research also strengthened the confirmability in the study. Furthermore, the audit trail supports the research's confirmability by showing a pedigree of my methods and rationale at the onset of the study to further support rigour in the research rationale.

Research questions

In this research study, there were three main questions that were explored. They were each equally designed to allow for a critical examination of perspectives and experiences, in order to better understand student-led assessment in primary education.

Figure 3.1: This study's three guiding research questions

Q1: In what ways do students' understanding and appreciation of assessment change when student-led assessment practices are introduced to the primary classroom?

Q2: What can we learn from teachers' perceptions of the implementation of student-led assessment in a Year 4 class?

Q3: How can children's perspectives on the student-led assessment process enable us to understand more clearly our wider pedagogical practices?

The role of the researcher

My role in this research is complex. This practitioner researcher relies on the assumption that being an insider, integrating with people from the affected community, can orchestrate change by collaborating, empowering and providing voice to those in the action (McNiff & Whitehead, 2011). Stenhouse (1975) explains, 'Teachers and researchers need to research their own practice in order to enlighten curriculum development, improve professional development and become more reflective in their teaching' (p. 5). However, as my role changed from teacher and coordinator to Head of Primary, my research swayed from traditional practitioner research to focusing on the practice of others, allowing for three teacher participants to be the ones recognising the problems, effects and solutions within their daily practice.

Setting – A private international school

The research was carried out and data was collected at an international school in Kajang, Malaysia. It was a non-governmental and non-secular school located 20km outside the capital of Kuala Lumpur in a densely populated suburb. The school, which was only in its fifth year, was rapidly growing. It began in 2012 with 60 students; at the time of the study, there were 260 students in primary (Years 1 to 6) and an additional 200 in Secondary (Years 7 to 10).

The socioeconomic standing of families within the school was well-above national average, although tuition fees were mid-range compared to other international schools. According to The Office of Chief Statistician Malaysia (2016), the average income for a Malaysian in 2015 was RM28,000 (£4,860) per year, whereas tuition for this school was approximately RM30,000 (£5,400).

Of the families involved, 80% are Chinese Malaysians, 10% expatriate, 6% half Chinese Malaysia, half parent of expatriate origin, and 4% Malay. Many of the students' parents came from local Chinese schooling, a system that follows Confucian traditions of education whereby traditional ideals, culture, customs and habits, which affect the learning style and teaching of students, are followed (Littrell, 2005). However, many families have chosen a private system to provide their child with the opportunity to access a less competitive and rigid education system.

My work in Malaysia, and particularly at my current school, has shown me that student-led learning is a foreign and unfamiliar concept. Neither parents nor students had ever

experienced this and had many questions when the topic was initially introduced. Several parents openly expressed doubt but still participated while two other parents expressed opposition and chose not to participate.

Setting – Malaysia's education system

Since the 1990s, Malaysia has undergone rapid economic development that has shaped the political policies, educational initiatives and discourses of globalisation within the developing country. While 90% of children are enrolled in formal schooling – a stark increase from the mere 6% who completed secondary school before the 1957 independence – the quality of education is often questioned (Samuel, Tee & Symaco, 2017).

A major concern within the system is the low standard of achievement. According to the 2012 PISA results, Malaysia is significantly behind other Southeast Asian countries such as Singapore and Vietnam. Malaysia was ranked 39 out of 44 countries for the problem-solving testing component (Rauf, Ali, Aluwi & Noor, 2014). Further, Malaysia placed in the bottom 25% for Maths and Science – all of this despite the fact Malaysia's educational spending per student is amongst the top 10% globally (Ming, Abdullah, Tee, & Samuel, 2017). These poor results are often blamed on the centralised system of tight control that has prevented the expansion of improving and autonomising schools (Samuel et al., 2017).

Within the Malaysian education system, and under the tight control of the Ministry of Education, there are several schooling options. There are Chinese schools which, as Liu

and Littlewood (1997) explain, traditionally focus on rote learning and are teacher-centred and book-centred. This often leads to more introverted learners who receive learning from their teacher but do not learn to critically interpret what they have been taught. Sua and Santhiram (2017) explain that, regarding Chinese schooling in Malaysia, 'it is generally agreed that such a learning method has stifled the students' creative mindset' (p. 24). A second option is the national school system, which uses Malay as the language of instruction and is significantly more heavily funded than Chinese schools. The policies and practices used within the national system are greatly based upon Islamic culture and ideals, making it a less appealing option for non-Malays (Sua & Santhiram, 2017). The third option, which is not under the tight reigns of the Ministry of Education, is the international education sector, giving rise to international curriculum and private schools, such as the school within the current study. In response to the poor academic standard of government schools, there has been a boom within the international school sector since the country removed the ban prohibiting Malaysians from enrolling in international education. From 2002 to 2012, the number of students in private primary schools has risen from 0.9% to 1.8%, and in secondary schools from 3.5% to 7.7% in the same period. Given the market demand, there has been a massive increase in the number of international schools emerging within Malaysia within the last 10 to 15 years (Ming et al., 2017).

Since most of the students enrolled at the international school in this study have transferred from local schools – mostly from Chinese schools but increasingly more from national schools – students are habituated to the teacher having all authority, leaving students struggling to cope in an alternative situation. Asian education systems, as

perceived by several western researchers, contribute to the formation of learners who exhibit characteristics such as shyness, dislike for uncertainty or risk-taking, reliance on teachers for listening rather than contributing, and preference for gaining knowledge from teachers (Harshbarger, Ross, Tafoya & Via, 1986). This stems from local systems where 'the teachers are not properly equipped to change their teaching approaches and still continue with a rote system or an instruction approach with little real involvement and participation on the part of the students' (Samuel et al., 2017, p. vi). These trends, which I have also observed in my practice, suggest a dynamic that is related to cultural identity and a resistance towards student-led assessment.

Student-led assessment in this study is being introduced to students to allow them to be actively involved in their assessment and to be free agents in choosing *how* and *to what extent* to take part – a very new concept to many of the students in this study.

Participants – Year 4 students and their teachers

This study collected data from international school students following the English National Curriculum in Kuala Lumpur, Malaysia. Three teachers and three classes, totaling 42 students, were selected to participate. Teacher ages ranged from 27 to 45 years old while student ages ranged from 8 to 11 years old (see Table 3.1 for student demographics and Table 3.2 for teacher demographics). This larger than normal age range is due to the fact that some children had been held back or moved ahead of their normal cohort during the admissions process, more so when the school had newly opened. Most children in the study were born between September 2007 and August 2008; however, a total of five students participating in the study fell outside of this range.

The sampling for this study was purposeful, as all participants were selected based upon their registration as either employees or students. All Year 4 teachers were selected based upon Creswell's (2012) purposeful maximal sampling, since these teachers came from a diverse educational background with varying experiences and training. They were approached in September 2016 informally to gauge interest in the research, whereas students were asked to participate in January 2017. Merriam (1998) explains how this sampling strategy permits the researcher to create perimeters for participants that reflect the purpose of the study. By the onset of the research timeline, 28 students returned their signed consent form and agreed to participate.

All students from Year 4 participated in the student-led assessment since the teachers were introducing it as part of their teaching and learning for Term 2. However, only those with signed consent forms were interviewed.

Table 3.1: Student participant demographic data

Class Pseudonym	Number of Participants	Sex distribution	Nationalities
4A	6	Girls: 3 Boys: 3	Malaysia: 6
4B	13	Girls: 7 Boys: 6	Malaysia: 9 Australia: 2 French: 1 Scottish: 1
4C	9	Girls: 4 Boys: 5	Malaysia: 8 Australia: 1

All teachers had a variety of training backgrounds and experiences. In my time observing the classes, the teachers were frequently using the practices that we had discussed in our focus groups. However, it is impossible to assume that teachers delivered only the expectations of student-led assessment without deviance from our discussions because the teachers, too, were learning. Given the nature of our informal training and team collaboration efforts, it is possible to assume that all teachers had a strong understanding of their role, their assessment expectations and the skills needed to employ these in their classroom. Below, Table 3.2, describes the teacher participant demographic data. The teachers' names have been selected to conceal the gender of the teachers, to avoid identification of the one male teacher.

Table 3.2: Teacher participant demographic data

Pseudonym	Age	Years of experience	Nationality	Job Title
Jan	27	6	Scotland	Phase Coordinator /Teacher
Kelly	32	2	England	Teacher
Cameron	50	20	USA	Teacher

Sample considerations

This section will highlight three principal sample considerations experienced in this project: i) age of participants; ii) language of participants; iii) ethical considerations; iv) power dynamics.

Age of participants. The age of the participants was a consideration that was taken with great thought, as my methods strongly rely on children between the ages of 8 to 11 making decisions and electing options that reflect their values and perspectives regarding assessment.

With the growing demand in research for children's perspectives, the outdated stance that children should be 'seen and not heard' is increasingly seen as an inappropriate sentiment (Scott, 2000). Agendas focusing on children's rights, particularly within the last 15 years, have made strong cases for the integration of students' perceptions in research, decision-making and policy (Hattie & Timperley, 2007). In recent years, children more frequently have the opportunity to share their perspectives and some commentators consider them experts of their domain (Kellett & Ding, 2004) since their capabilities within research are being acknowledged. It has further been found that, within the school context, children held 'sophisticated views about a number of aspects of their school environment, their teachers, their peers, their lessons and their behaviour, as well as the importance of their education' (Aubrey & Dahl, 2006, p. 34). This was found true within this research. Children's views of the assessment process and their changing perceptions will be discussed in both Chapters 4 and 5 as a part of the findings. Bragg (2007), a British advocate for child and youth studies explains that:

> The new social studies of childhood have challenged the tendency
> to consider children either in relation to larger entities (such as families,
> schools, nations), or as 'becomings' (of interest primarily because of who
> and what they will become). Instead, new studies have argued for a view
> of children as 'beings', fully-formed now, whose present ideas,

approaches to life, choices and relationships are of interest in their own

right. (p. 14)

Bragg encourages researchers to consider the range of methods and methodologies that involve children and young people in the research process. She explains that the benefits of having young people feel involved and listened to within the research process, the system and the state. These benefits include legal factors such as those outlined in the CRC, political initiatives such as those outlined to safeguard children's interests, as well as academic, economic and social benefits to the children themselves. In this study, children's rights were guarded in that students were given a voice and were consulted regarding the matters that affect and involve their learning – their assessment.

Vygotsky (1964), a pioneer social constructivist and theorist in higher cognitive functioning in children, explains that children, when appropriately supported, operate within a 'zone of proximal development'. This zone balances the difference between what a learner can accomplish independently compared to what a learner can accomplish with appropriate assistance. This assistance – guidance provided by the three lead teachers – was imperative to obtaining the results in this study, because the teachers involved were constantly maintaining the structures and parameters to facilitate student-led assessment.

With regards to students playing an active role in assessment, Doddington et al. (2001) found that students in Year 3 were capable of expressing their views of assessment and 'holding and expressing views that were enlightening' with regards to the assessment process (p.46). Quinlan (2012) further explains how children in Years 4 and 5 begin

developing trustworthiness and dependability. At this age, she asserts, the concept of students engaging in assessment works 'exceptionally well' because 'as students gain an awareness of peer and adult expectations [of their] grades, they are quick to memorize the rules' of assessment (p. 46). This was consistent with what was found in this study, since most students showed a complex understanding of the assessment processes and could articulate their views of their experiences. The views of these students, who were two terms into Year 4, show that they could clearly explain their progress and development when these discussions were held in their classes. Chapter 4 includes the children's perspectives and thoughts from the focus groups. Constructing an education system whereby the values, thoughts and opinions of those who are most affected by its policies and structures – the students – would be to the benefit of our greater society.

Language of students. Given that the location of research is an international school in Malaysia, the main language of instruction is English. As introduced in Chapter 1, this stems from Malaysia's deep colonial history, since most students' level of English is at native or near-native competency. Until 1957, British colonial powers were dominant over Malaysia, at which time Malay people assumed their independence. Until 1970, English was the main language of instruction in public schools across Malaysia, after which it was gradually phased out, beginning with Year 1, and eventually being fully replaced by Malay in 1982 (Mohd-Asraf, 2005). Despite this, the average child in a public school continues to experience 11 years of English education before secondary graduation (Darus & Subramaniam, 2009). Because of the emphasis on English, it has persisted through the culture, making it a commonly used language. English continues to be widely spoken, making Malaysia one of Asia's top English-speaking performing

country. Anecdotally, this is evident through the language abilities of the parents and students at Eaton. Since most participants' parents and grandparents were educated in English-speaking schools, many families speak English as their first language. Further, the main language of instruction during the school day is English, as seven of eight learning blocks are taught in English, with the remaining block being Mandarin, Italian or Bahasa Malaysia.

Ethical considerations. My approach to ethics was systematic and transparent, firmly addressing prime ethical considerations and maintaining the safety of my participants. As the participants were part of a vulnerable demographic, great time and care went into investigating and learning the perimeters of researching with children. As Creswell (2012) explains, with all participants, the importance of respecting the dignity, rights, privacy and interests of my participants is key to ethical research. The Glasgow College of Social Sciences Research Ethics Committee, the British Educational Research Association (BERA) and the Economic & Social Research Council (ESRC) guidelines were regularly consulted, while also consulting with my supervisor, throughout the process.

Ethical approval was granted by the University of Glasgow's College of Social Science's committee in December 2016. Approval was also granted by the owner and principal of the school in September 2016 (see Appendix E).

A meeting with the teachers was held four months before the commencement to discuss the budding project, then again one month before to elaborate further and further gauge

interest. All aspects were fully explained, including the extra time and work that may be required. Teachers were given participant information sheets and consent forms which they signed (see Appendix F).

After the research was discussed with the teachers, parents were given an informal introductory message via our parent-teacher communication channel, ClassDojo. This gave details of the project and invited parents to a presentation where the research was outlined and explained (see Appendix G for the informal online message to parents). The following day, students were introduced to the idea during class and it was fully explained in child-friendly terms. Although 'consent', 'implications' and 'understanding' are difficult to assure when involving younger students in research (Gallagher, Haywood, Jones & Milne, 2010), the topic was explained slowly, clearly and with a lot of repetition. Following explanations to all parties, students were sent home with a copy of the participant information sheet, one in plain language English for parents and another in simple plain language for students and the accompanying consent forms. Parents were urged to read these thoroughly with their child prior to responding (see Appendix H for the above listed documents). The participant information was also available in Mandarin (see Appendix I for a sample). All participant information was then posted online for Year 4 parents and students to view.

Following ESRC guidelines, the children were required to sign with their parents individually if they were interested in participating. It was stressed throughout that participants were free to withdraw at any time without bearing on effect or judgement (Creswell, 2012).

Power dynamics. My role within this research as the main researcher, paired with my role within the school as Head of Primary, raised a number of topics related to power dynamics. Since I was in a position of trust and a longstanding member of the academic staff, I had to remain open, honest and fair with both the teaching staff and the students.

This involved me never using my power irresponsibly over the participants. All decisions within the research went hand-in-hand with the ethics guidelines and were carefully made to ensure the teachers and students best interests were at the forefront of the decision-making process. I should also underline that I was appointed to my post on the clear understanding that I would lead the school in accordance with my own professional values. My democratic leadership style has always prized honesty, respect and integrity.

With both students and teachers, I stressed that the project was collaborative and co-constructed. The participants and I were working jointly, creating a climate whereby teachers and students felt their voice truly mattered and felt confident to speak up. This meant that I took a more passive approach, listening to the ideas of the participants and following their lead. Participants were invited to use their own knowledge and experiences as a part of this collaborative process.

Data collection

To investigate the research questions of this study, three methods were used to collect data.

Figure 3.2: Outline of data collection methods

Methods of Data Collection		
Teacher Focus Groups → Once weekly → Involved developing strategies and tools for implementing student-led assessment → Similar to a working party	**Teacher Interviews** → One at the beginning, middle and end of the study → Involved the researcher questioning students and gathering perceptions	**Student Focus Groups** → One at the beginning, middle and end of the study → Involved the researcher questioning students and gathering perceptions
All methods were collaborated with photo-voice, photographs taken by students and teachers		

Focus groups. The study involved both focus groups with the students and the teachers. In total, fifteen focus groups were held with 28 student participants aged 8 to 11 and eight focus groups were held with three teacher participants over the course of the study (see Table 3.3 and Table 3.4 respectively). In regards to using focus groups with qualitative studies, these are regarded as advantageous since they are responsive – they provide the opportunity for both reflection and discussion of differences as they emerge through conversation. Since the study's objective is to explore students' and teachers' perceptions of assessment in a naturalistic setting, the in-depth questioning approach of focus groups aims to provide diverse information on assessment in similar terms. However, there are also downsides, in that focus groups provide less structure than interviews since it may be inappropriate to force a structure on group dynamics (Ritchie et al., 2013).

Involving students. In the past, accessing children's perspectives in research was relatively uncommon, as researchers would opt to ask either parents or teachers, as the cognitive ability of children was less fully understood (Scott, 2000). Focus groups involving schools and children are now being used more in research and children are generally comfortable and familiar with this process, making it an appropriate way to gauge children's views (Horowitz et al., 2003). Focus groups of four to six students were used in this research, because it was a useful number for providing an opportunity for ideas in relation to flourish while allowing the students to reflect upon and contrast their ideas to what others had said (Ritchie et al., 2013).

Table 3.3: Dates and durations of each student focus group

Student Focus group round 1			Student Focus group round 2			Student Focus group round 3		
Date	No student	Duration	Date	No student	Duration	Date	No student	Duration
12/01/17	6	16.45	24/02/17	5	18.00	4/4/17	5	16.08
12/01/17	5	14.23	24/02/17	5	20.37	4/4/17	6	14.14
12/01/17	6	18.48	24/02/17	5	14.51	4/4/17	7	18.04
12/01/17	6	20.10	27/02/17	6	18.28	4/4/17	4	12.31
13/01/17	5	17.04	27/02/17	7	21.57	4/4/17	6	14.18

Given the primary school has 250 students, the school community is small and tight-knit. This strong relationship allowed me to better break down the barriers and establish confidence early on in the focus group, developing a sharing climate with an informal atmosphere (Wilson, 2017). It also involved developing an open and sharing relationship

with the students in Year 4 in attempts to ensure a non-threatening atmosphere was created and maintained.

The focus group environment was friendly and familiar. The room selected provided a natural setting where discussion and ideas could be illuminated and unpacked (Ritchie et al., 2013). Throughout all focus groups, the child's class teacher would remain in the room but not directly involved in the conversation. This was to encourage sharing and allow children to feel that they could share their opinions, creating an atmosphere of confidence and openness (Scott, 2000).

Although the focus group script was semi-structured, it was necessary to ask the questions to the children in a free-flowing, less scripted manner. Any hypothetical questions were also eliminated to prevent misunderstandings. The questions were succinct and there was a lot of time left for prompting thinking, since unlike adults, children are less inclined to elaborate on answers given (Scott, 2000). The focus groups with the students involved a lot of 'think time', rewording and prompting, particularly during the first round of focus groups.

Throughout these focus groups, methods and research involving children were regularly referenced, as was my supervisor, giving due consideration to side effects, teacher presence, location, dynamics, peer pressure and developmental appropriateness.

Involving teachers. Teacher focus groups occurred each week that we did not have a teacher interview, totaling eight throughout the study. These focus groups

provided a weekly update on how the students were progressing as well as an arena to share ideas, tips, techniques and strategies. Specifically, these focus groups allowed teachers to share good practice, and discuss rubrics and assessment techniques that they had used, and display work they were proud of. These were loosely structured and depended upon that week's developments. These groups were used to as open-ended discussions and provided a platform for developing strategies together, although some prompting was needed.

Table 3.4: Dates and durations of teacher focus groups

Date	Duration
5/01/17	17.48
19/01/17	21.23
5/02/17	24.19
17/02/17	22.16
24/02/17	25.54
8/03/17	19.36
20/03/17	23.33
30/03/17	16.12

Interviews. The second method of collecting data was semi-structured interviews, which occurred on three separate occasions with the three Year 4 teachers involved in the study. These were in addition to the weekly focus groups with the teachers. These one-to-one interviews were semi-structured to bring about individual questioning and ideas that were not elucidated during the teacher focus groups. The script was more regimented, unlike the focus groups, because it involved particular questions and topics that were

relevant to our discussions and needed addressing (see Appendix J for the three teacher interview scripts).

With the three teacher participants, interviews were selected as a means of supplementing the focus groups because of the combined flexibility and structure of the format. Pre-selected themes could be explored while responses could be sufficiently unpacked and discussed. Furthermore, while their interactive nature allows participants to speak freely in a personal setting, the researcher may also in these groups penetrate the surface of questions and take the responses to greater depth. However, interviews can also be unclearly structured and miss the target of the research. For this reason, directing the interview and managing the situation are imperative (Legard, Keegan & Ward, 2003).

Brenner (2006) identified two interview approaches, inductive and deductive, that tend to capture the theoretical position of the research. Both are open-ended and are guided by predisposition constructs and both entail different elements of interviewing. My interviews were framed using a deductive approach, as I investigated the students' and teachers' perspectives of assessment, teaching and learning. Following Brenner, I began with more general questioning but followed a path that directed me to the understanding and experiences as they were directly related to my research interests.

Table 3.5: Dates and durations of the teacher interviews

Date	Pseudonym	Duration
	Jan	19.10

13/01/17	Cameron	15.57
	Kelly	25.09
24/02/17	Jan	18.03
	Cameron	16.56
	Kelly	15.44
4/04/17	Jan	13.03
	Cameron	18.51
	Kelly	17.33

Interviews always followed within two days of the student focus groups conversations in order to capture teachers' perceptions of student responses. All tapes were transcribed within three days of the interview, and this helped to maintain recollection of flow and pace. Following each interview, a copy of the transcription was given to each participant for review and accuracy check.

Photo-voice. The third method used in this study was photo-voice, which captures insight and understanding into participant perspectives by complementing their words with visual data (Darbyshire et al., 2005). Photo-voice allows participants to be further integrated into the research process, taking ownership of their role and their responsibility, shifting the power 'from the powerful to the powerless' (Booth & Booth, 2003, p. 432).

For the students, integrating photo-voice into the research process permitted students who were less talkative or less comfortable in English to contribute to discussions (Darbyshire et al., 2005). It also furthered my research by relying on more than just their bookwork,

and attempted to instill a sense ownership in the research process. For example, Year 4 students were asked at the end of the first focus group to begin to engage in photo-voice within the classroom. All students, using their personal iPads, were encouraged to take photos of assessment that struck them as either positive or negative and in many instances, explain their thinking during a focus group. This then allowed students to engage more fully during the research process by showing their photos and explaining their views more clearly. Students also knew that these photos would then be considered as evidence to help guide my research process.

At the time of the second student focus group, only a few students had taken photos, which left me without much concrete evidence from the children. As a result, the teachers decided to implement a feature on our ClassDojo that allowed the students to automatically upload their photos to a forum that their teacher, parents and myself could access. Throughout the second half of the study, a total of 97 photos were taken by the children (see Appendix K for samples of student-captured photos). During the focus groups, the student-taken images were drawn upon to spark discussion and engagement with both students and teachers.

During the final focus group, more students came forward with photos and were more eager to discuss them. However, this research method unexpectedly proved far more beneficial when applied to the teachers since it was the adults who captured most of the photos.

As the study unfolded, the teachers became increasingly engaged with photo-voice. Teachers regularly took photos of samples of work, including both successful and unsuccessful attempts at student-led assessment (see Appendix L for several examples). All photos were dated and annotated by me, the researcher, and saved securely by password protection.

Phases of student-led assessment

Following Zimmerman (2002), I adhered to the view that there are three phases to enable students to develop self-awareness and motivation towards becoming self-regulated learners. These were then key to the methodology of this project. The phases, as introduced in Chapters 1 and 2, are the *forethought phase*, *performance phase* and *self-reflection phase*. Introducing students to self-assessment followed this model, which is outlined below.

Forethought phase - Introducing student-led assessment to Year 4 students.

To introduce the concept of self-assessment, teachers were initially 'walked through' it (Boud, 1995). Drawing attention to the introduction and implementation of the processes of student-led assessment, it was critical that students understood the principles of self-assessment. Teachers learned that, first, students must be provided with a rationale so that they understand the purpose of student-led assessment. Secondly, explicit procedures must be given to allow students to know and understand their expectations. Thirdly, reassurance must be given to enable all students to feel confident and secure that the information they construct will not be used against them. Finally, collaboration should allow students to be involved in designing the success criteria (Boud, 1995). Educating

the teachers in these key areas allowed them to pass on the understanding of self-assessment practices to their students (Black & Wiliam, 1998; Elliot et al., 2016).

Performance phase – Students engaging with their learning. Proceeding forward throughout the trial period, students were educated and encouraged to be more actively engaged in the assessment process. This learning-oriented assessment involved, as Alkharusi (2015) explained, 'meaningful assessment tasks with moderate difficulty, providing them chances to improve their task performance, and giving them informative assessment feedback' (p. 46).

To introduce the project in an age-appropriate manner, students engaged in the 'Egg Game' – a stimulating way for students initially to take on board active participation in assessment. This served as an introduction to student-led assessment, student-generated success criteria and the research process. It involved students designing and assessing the success criteria for what they perceived as successful when an egg was dropped from a height of 5 metres. This idea, initially proposed by Beaman (1998), encourages children to think about the various factors involved in assessment, such as success criteria (height, creativity, materials used, etc.) as well as the weightings for each criteria. It enables children to understand process versus product, while raising 'any problems or issues such as collusion, fairness and validity' (p. 54). It also provided teachers with an initial look into the student capabilities, as well as spotlighting the introduction of student-led assessment to students.

From here, the students were actively engaged throughout all areas of their assessment. As introduced in Chapter 2, there were many tools that were used to allow student participation in assessment (see Table 3.6).

Table 3.6: Description of tools that were used to allow student participation in assessment

Student-led assessment method	Description	Frequency per term
Questioning	Students regularly engaged in self, peer and teacher questioning whereby students would question and critically analyse the quality of their work.	Regularly/daily
Rubrics	Students generated the success criteria and the scale using a grid. They would then assess themselves or their peers using the rubric.	Bi-weekly
Targets/goals	Students would set start and end of term goals. Students also wrote targets for 'next time' for both themselves and their peers.	Twice – Once at the beginning and once on the final report
Traffic lights	Students would gauge either the quality of their work or their understanding by using red, amber and green.	Regularly/daily
Student-written tests	Students were involved in the process by deciding the format of the test and suggesting questions as examples.	One termly for each subject area, totally five
Student-assisted	Students discussed the whole-school report	Once – last week

termly report writing	template with their teacher, dictated the comments, predicted their effort and achievement grades and wrote their own targets.	of term
Student-led parent-teacher meetings	Students were given planning sheets to structure their meeting but were then accountable for leading their meetings and discussing their progress.	Once – last day of term

Research points to numerous strategies to assist students with student-led learning and assessment. Alongside the Year 4 teachers, we therefore adopted Wehmeyer et al.'s (2016) approach, introduced in Chapter 1, which focuses on building positive learning through the promotion of student-led learning strategies. Wehmeyer et al.'s model emphasises that there are no 'wrong answers'; rather teachers acknowledge 'good tries' as they guide students through the process of learning to be self-critical. However, we were also firm about enabling students to be realistic with their level of performance (Brown & Harris, 2014). This aimed to increase both motivation and academic consistency. The model involved three components that were integral to its implementation:

Self-instruction. This involves students understanding the desired success criteria and using the information provided to create objectives for learning. With teacher prompts, students were supported in the development of understanding what made tasks successful. This provided students with the information to develop a sense of their individual targets or success criteria.

Self-monitoring. After determining the success criteria, students were supported with understanding each step by analysing their work to see if they had presented the desired success criteria or target.

Self-evaluation. The culminating task, self-evaluation, is when students assess their work to determine if they have reached the targeted or desired outcome. They assessed their work using a variety of tools, many of which they were asked to independently select, from those previously introduced – questioning, rubrics, self and peer assessment, traffic lights, targets, etc.

Wehmeyer et al.'s (2016) model of self-determined learning provided the foundations for students engaging in student-directed learning for the first time in this project. Discussions with teachers fostered their desire to introduce strategies that promoted gradual learning throughout the study period.

Self-reflection phase – Summing up the learning. Adoption of Zimmerman's (2002) self-reflection phase saw that students and teachers self-reflected throughout the learning process, which is also a part of Hattie's (2012) model of emphasis on the learning process.

For the students' reflection, they were encouraged to reflect frequently by, for example, revisiting their learning, engaging in daily concept checks, or evaluating if they had accessed a concept by colour-coding their understanding (traffic lights). Teachers also implemented longer-term reflection after work was completed. While using the rubrics, teachers added a reflection section at the bottom where students were encouraged to

discuss their 'next steps'. The feedback on their work was focused on realistic and more elaborate answers, avoiding general responses, such as, 'try harder next time'. Teachers followed Brown and Harris' (2014) advice, in that they were 'permitting some self-assessments to remain private from the teacher, not forcing students to display realistic but negative self-assessments in front of classmates, and encouraging students to share their self-evaluations with trusted people' (p. 26).

The reflection stage also involved photo-voice, where students took photos with their iPads, annotated them and uploaded them digitally to an online file-sharing platform.

Lastly, teacher reflections were relevant throughout this study, on the assumption that teachers had interesting and insightful stances on the involved issues. Topics from these discussions will be revealed in Chapters 4 and 5. Teachers were encouraged to reflect within focus groups and interviews, since their social and cognitive roles within the self-regulation of students was of great value (Zimmerman, 2002) and since they modeled all stages of the student-led assessment process.

It was through these phases that teachers described their introductions and implementations of student-led assessment in the classroom in a way that was routinely integrated and easily accessible to the children. The next section discusses how data were systematically interpreted to become more concrete findings of the project research.

Qualitative data analysis

According to Creswell (2012), data analysis occurs in stages. Within this study, four stages were used to analyse the collected data, which included: *transcription, organising the data, identifying emerging themes* and *thematic coding*.

      Transcription. Lapadat and Lindsay (1999) explain that transcription is a key element of both the product and the process of analysis. As the main researcher, I typed all of the audio files using a simple audio recorder and a computer as a backup – without any use of automatic voice recognition technologies. All transcriptions began within 24 hours of the interviews or focus groups. The transcription was done verbatim by a denaturalised transcription process, meaning that emphasis was less on involuntary sounds and more with the accuracy of words (Oliver, Serovich & Mason, 2005). This further contributed to an increased awareness of emergent themes within the data.

      Organising the data. Qualitative studies yield large amounts of data: interview transcripts, focus group transcripts, teacher photos and student photos. Interviews, which were transcribed in a timely manner, were transcribed in Word and then later added to Excel sheets for coding. Samples of students' work were photographed, annotated and arranged by date order in password-protected file. Images from photo-voice were used during focus groups to elucidate conversation and were then uploaded onto an online platform.

During the organising phase, initial noting began, where I examined the semantic content and language. During this process, a number of other themes emerged that were central to

my inquiry and were identified by preliminary codes. These were used alongside a number of preliminary codes and emerging codes (Creswell, 2012). From these, within this research, there were three descriptions, which at this point were elucidated from the data: *descriptive comments* (what has been said), *linguistic comments* (the language that the participant used) and *conceptual comments* (interpretive and interrogative topics) (Ritchie et al., 2013).

Emerging themes and descriptive coding. Emerging themes were identified through several rounds of manual coding using the technique of 'line-by-line' coding, which led to the development of more descriptive and concise themes (Thomas & Harden, 2008). During this stage of data analysis, I frequently referenced the research questions, analysing how the views of students and teachers could better allow practitioners to understand and implement the underpinnings of student-led assessment within primary education.

I opted to forgo speed and simplicity and rely upon manual coding using Excel to organise and retrieve themes with ease (Ritchie et al., 2013). Once a theme was identified through line-by-line coding, it was then organised into tabs related to each thematic area, which made up the narrowed thematic codes (Thomas & Harden, 2008).

By the end of the rounds of coding, the data were narrowed into three overarching themes, which were related to my research questions and used the steps above to consult past research into primary students and assessment for indicators. There were eight preliminary codes, which gave rise to a total of 27 thematic codes.

Table 3.7: Overarching themes, preliminary codes and thematic codes

Overarching themes	Preliminary codes	Thematic codes
Teacher influence and pedagogy changes	Teachers as learners Teachers as change leaders	New understandings New techniques Creating change Teacher communities of practice Rate of adoption Timing Curriculum demands Teacher explanation Teacher language Student participation
Student learning and changing pedagogical practices	Students as learners Students' role Learning aims	Feedback Questioning Targets Goals Student-generated rubrics Traffic lights Student-written reports Student-led conferences
Social influences	Motivations Peer work Independence	Understanding Control Engagement Interest Enjoyment Control Success Collaboration/group work

Next steps

This chapter provided a description of the research paradigms and methods used to conduct the study and present the findings. The themes, codes and further findings will be discussed in Chapter 4.

Chapter 4:

Thematic presentation of findings

Chapter organisation

As I have discussed in this dissertation, at the present time, the systems of assessment in England do not serve to maximise student attainment or benefit the learner (Christodoulou, 2017), since the assessment architecture is beset with shortcomings that hinder student progress (Black & Wiliam, 1998). Moreover, students are not presented with opportunities to engage in their learning through the assessment process (Taras, 2002). There are, as indicated in Chapters 1 and 2, many reasons why assessment is failing students – namely lack of teacher knowledge, ineffective feedback, an emphasis on quantity over quality and teaching and learning regimes that are afflicted with shortcomings. Furthermore, the area of student-led assessment is a relatively unexplored academic and professional topic. The research that does exist is not tailored to primary education and little attention is given to the voices of teachers and students. The purpose of this study is to examine the perspectives of primary teachers and students when shifting from teacher-led assessment to student-led assessment within the Year 4 classroom.

This chapter is the first of two chapters that discuss and analyse the findings from my qualitative, practitioner-based research and where I explore the perceptions of the students and teachers involved in this study. Based on the principles and structures outlined in Chapter 3, this chapter serves to present the findings derived from

investigating students' and teachers' perceptions of student-led assessment. To present these findings, this chapter consists of three main sections, each section devoted to the findings of each research question. Each research question is further divided into subsections through which the findings are discussed, including the similarities and differences between the opinions of the teachers and students, along with patterns or notable comments within the responses.

Teachers are referred to by pseudonyms, which are detailed in Table 3.2 in Chapter 3. Students are also referred to by pseudonym.

Findings and sources of comparative data

Using the data from nine interviews, eight teacher focus groups, three student focus groups and photo-voice, the results were explored and investigated in relation to the perspectives of the teachers and students. The data were studied and analysed to permit the elucidation of themes and understandings from the large quantity of transcripts and photographs using the method of manual thematic coding.

To develop an understanding of the dynamics of student-led assessment in this study, the research questions that were analysed are outlined in Table 4.1, along with the most prevalent and salient findings.

Table 4.1: Summary of research questions, major findings and sources of data

Major Findings	Sources of Data

	*I	FG	PV

Question 1: In what ways do students' understanding of assessment change when student-led assessment practices are introduced to the primary classroom?

Finding 1: Based on the students' and teachers' perspectives as well as photo-voice, the students showed an understanding of the benefits of student-led assessment and felt that their learning and understanding of their academic progress improved from this experience.

	*I	FG	PV
Theme 1A: Throughout the research, students developed a more advanced understanding of the assessment process and the steps involved in assessment.		✓	✓
Theme 1B: Student motivations were a fundamental theme from the focus groups, as students were clear regarding their opinions and perceptions of the student-led assessment process.		✓	✓
Theme 1C: Students understood that their role within the classroom had changed and they now had more control and more voice in creating change.		✓	✓

Question 2: What can we learn from teachers' perceptions of the implementation of student-led assessment in a Year 4 class?

Finding 2: Teachers found both successes and challenges when implementing student-led assessment in the classes.

	*I	FG	PV
Theme 2A: Timing, initial student confusions and rapidly changing student understanding were the largest themes that emerged during the initial weeks of the project.	✓	✓	✓
Theme 2B: Discussions of each tool used (student-generated rubrics, self- and peer-assessment, questioning, traffic lights, targets, student-led conferences, and student-assisted termly report writing) were regular themes that emerged and provided unique perceptions of student-led assessment as interpreted by the teachers.	✓	✓	✓
Theme 2C: Teachers perspectives regarding student-led assessment became altered throughout the study, gaining an advanced understanding of new tools for learning.	✓	✓	✓

Question 3: How can children's perspectives of the student-led assessment process enable us to more clearly understand our wider pedagogical practices?

Finding 3: There were both similarities and differences among the three classes that student perspectives brought to light throughout the study.

Theme 3A: There were striking similarities between the classes, which was one of the initial and clear observations. The main themes that ran across all classes were: student perceptions of the idea of 'assessment', and students and feedback.	✓	✓
Theme 3B: There were differences between the classes, which was one of the initial and clear observations. The main themes from these differences were: late adopters, teacher explanation factors and language and student/teacher interest.	✓	✓

*I = Interview

FG = Focus group

PV = Photo-voice

One of the aims of action research is to involve the student in the study, to probe their thoughts and hear their voices through various strategies and sources (Bresler, 1994). The following sections will further investigate this.

Research question 1: Changing perspectives

The first research question asks, 'In what ways do students' understanding of assessment change when student-led assessment practices are introduced to the primary classroom?' This section explores how the perspectives of the students on student-led assessment can furnish insights into understanding teaching and learning. Student perceptions are absolutely central to this dissertation and, in keeping with the tenets of action research, it is crucial to begin with student voice since this has a large bearing upon the findings uncovered in this study.

Several themes were common to each student focus group. They can be grouped as: *their*

changing perceptions of assessment, their motivations throughout the study and *their*
understanding of student control with regards to student-led assessment.

Theme 1A: Changing student perceptions of assessment. Throughout the
research, the children across all focus groups had evolving views of assessment. This
may be attributed to the fact that teachers had begun dedicating increased amounts of
time introducing, discussing and analysing the ways assessment is used within these Year
4 classes.

It emerged from the first focus group that students had not developed an understanding of
assessment. This may be accounted for by the fact that their past experiences had not
provided them with the understanding to appreciate or explain an encompassing
definition of assessment. At the onset of the study, all student focus groups identified
assessment as simply 'tests' – as one group explained:

> *Kate: What does 'assessment' mean to you?*
>
> *Students: Tests (all students agreed upon 'test').*
>
> *Kate: Is that the only way that you do assessment?*
>
> *Students: Silence.*

From the 28 students, 23 thought assessment was all or mostly all tests. Students held
narrow views of what assessment entailed. This conversation was nearly identical across
all focus groups in the pre-study discussion. When probed about the definition of
assessment, one focus group indicated the following:

> *Kate: How does your teacher assess your work?*
>
> *Emily: She writes what's wrong and what's right.*

Sean: Yeah, like ticks, ticks, ticks.

Bryan: She writes words in our book.

Kate: Do you enjoy assessment?

All students: No

Many of the students perceived that the comments that teachers left were simply for producing their final grade and students seemed to have no concept of formative assessment. Many of the students did not realise that these comments were made for the students' benefit. This may be related to the introverted, didactic, outcomes-based style of Confucian education that many students had experienced and that was, for many of them, ingrained in their home culture too (Littrell, 2005).

With every initial focus group, I had a sample of student books and, with the children, we flipped through to discuss their Term 1 work and feedback. The children in each focus group were able to identify rubrics – such as teacher designed and marked success criteria – as assessment, although some groups needed prompting. None of the groups recognised the targets, peer-assessment or written teacher comments as part of the assessment.

Stemming from research reported in Black and Wiliam's (1998) *Inside the black box*, students were then asked if they felt that the writing or the grades were more important. As Black and Wiliam explain, this has a bearing on student motivation and the ability to improve their own learning. Most students said that the writing was more important, but many openly acknowledged that they did not use the written comments to further their learning. Some students admitted that, even if they understood the comment, they would

not read it formatively. Many acknowledged rubrics as important but when asked how teacher-marked rubrics impacted their work, one focus group explained:

> *Kate: Who thinks that rubrics help to make their work better?*
>
> *Students: (Silence)*
>
> *Kate: Always?*
>
> *Students: (No response)*
>
> *Kate: Sometimes?*
>
> *Students: (2 hands up)*
>
> *Kate: Never?*
>
> *Students: (4 hands up)*

Most students did not hold positive perceptions of the rubrics and most did not understand their function. The responses from students showed that they failed to understand criteria that were meant to help them raise their attainment.

Between the first focus group and the second, six weeks of teacher guidance had transpired. Teachers worked through Zimmerman's (2002) three stages: *forethought phase, performance phase and self-reflection phase*, to gradually increase the students' understanding of success criteria and assessment in preparation for creating their own rubrics. Teachers had regular discussions with the students and integrated the foundations of student-led assessment into their daily practice. As the term continued, students began to develop more *concrete* understandings of assessment and began to develop more *complex* understandings of assessment. In this sense, concrete understandings mean that the students had firmly grasped what assessment entailed and how they were expected to

engage, while complex understandings mean that they were beginning to think about the issues more independently. In Week 6, for example, one focus group explained,

> *Kate: When you make the rubrics, how is it?*
>
> *Janey: It's better. You know you can improve by doing those*
>
> *things and you know what things not to do.*
>
> *Kate: When you write your own success criteria, do you pay*
>
> *attention to what you're doing?*
>
> *Brad: Not really.*
>
> *Four remaining students: Yes.*

This transition, and the realisation of the importance of their role in assessment that it entailed, gradually became clearer to students, especially as the teachers emphasised more clearly the importance of the self-reflection phase. This action involved constant reemphasis on what was learned and the steps to improve next time. By the time of the final focus groups (Week 13), which was the third focus group of three, the students were clear about what they were learning and were able to describe student-led assessment in detail:

> *Kate: What does 'assessment' mean to you?*
>
> *Bryan: It's like, things that test your understanding of the subject.*
>
> *Kate: Tests?*
>
> *All students agreed not just tests.*

Of the 28 students across the five sessions of focus groups, 24 had said that, at the end of the trial, assessment was more than tests, some even adding in terms like self-assessment, peer-assessment, rubrics and marking.

Students also held more sophisticated and positive views of the assessment system as a whole. Later in the same conversation, a student explained, '*We do our targets and talk about what we need to do better and what we need to work on.*' Two other students added, '*We know what our targets are*' and '*We know what we did wrong and we can fix it.*' Students' perceptions of their roles within assessment had greatly evolved from the initial focus group, displaying more aptitude for, and understanding of, student-led assessment. This is supported by research that shows that feedback which provides clear and understandable success criteria, including targets, is a promising response for improving student performance (Elliott et al., 2016).

Theme 1A: Motivations as a central issue. The impact of assessment on student motivation was a changing theme throughout the study. Students were motivated to engage in certain parts of the study – though this was variable, naturally enough, from student to student. The concept of motivation was also closely linked to their changing perception of assessment.

Initially, the students showed low motivation towards the study – an issue that teachers attributed to a 'fear of the unknown'. As children became increasingly familiar with the routines and standards, most became more confident about student-led assessment and were motivated to get involved in designing the criteria.

By the time I organised the final focus group in Week 13, the students' knowledge and understanding of assessment had greatly changed and this had affected their motivation

towards and interest in assessment. When asked about what was different about Term 2 assessment, one focus group explained:

> *Alice: If we do the rubric ourselves, we can learn more.*
>
> *James: Yeah. It's because when we are peer editing someone else,*
> *we get to see what their corrections are and what they need to do*
> *so they will make the corrections.*
>
> *Lucy: I like doing peer and self-edits. You can see what others do*
> *well and you may have done it wrong too. If you see what they did*
> *wrong, you shouldn't be wrong.*
>
> *Janey: Because we can see our corrections for our story and then*
> *correct it.*

Students expressed *enjoyment* in writing their own targets, which occurred several times throughout the term. As the culminating activity, when students wrote their targets on their final report, teachers were adamant that the students pick objectives that were already outlined in the curriculum, meaning that the students could not have free-reign over which targets they set for themselves. This displeased the students and several explained that they did not enjoy having a narrow set of targets. Billy explained, '*First I was thinking that we could write our own targets but we had to write it from the board and we got to choose the one we most needed to work on.*' When I asked the students if they felt ownership towards their end of term targets, Alexander explained that he struggled to remember them: '*We had to choose them off of the board so they weren't ours so we couldn't quite remember it.*' This meant that the students lost the autonomy in integrating their voice freely, as the curriculum often does not use terminology that students would use. The children were on point with what research suggests: when

students write their own targets or, at a minimum, rewrite them in their own words, targets have increased effectiveness (Elliott et al., 2016).

During the last focus group (Week 13), the students were asked about their feelings towards returning to teacher-led assessment, and their responses were enlightening:

> *Kate: What if I told you that we were going back 100% to where*
>
> *the teacher does it all: No more peer- and self-assessment or*
>
> *rubrics or traffic lights. What would you say?*
>
> *Janey: I would prefer that we still do some like we do*
>
> *Liz: I would prefer to do traffic lights and peer- and self-*
>
> *assessment.*
>
> *James: It feels much better to help with assessment.*

The same question was put to another group, to which the students replied:

> *Jacob: No way.*
>
> *Dani: It was more fun doing our own self-assessment.*

The students' attitudes towards their learning are aligned with the self-efficacy theory, which suggests that when students are involved in their learning, a more positive attitude towards learning results, as well as increased self-regulation and motivation (Klenowski, 1995). This also supports Martin and Marsh's (2008) theory of academic buoyancy, discussed in Chapter 2, whereby instead of embracing students who are innately able to succeed in school, educational systems should focus on motivating and nurturing efforts and incremental achievements. This is how we get more children engaged, motivated and

self-regulating.

There were, however, students who would have preferred to return to teacher-led assessment. Some students felt that student-led assessment was too challenging for them. As one student, Chloe, explained, '*I would be happy if we didn't have to write the rubrics but if we got to see it. And I would be happy if we could tell the teacher if we don't agree say, 'for number four, we got this.'* I then prompted Chloe further and asked, '*So, you want to control it but you don't want to do the work?*' to which she replied 'yes'. This indicates that the students realised that student-led assessment was not easy – it involved time and effort on their part.

Students were asked if anyone wanted to return to entirely teacher-led assessment. All the students but one said '*no*'. I prompted further and asked, '*Why do you want to go back to teacher done corrections?*' to which Zeon replied, '*Because I'm lazy. Too hard.*' The remaining students were happy to continue with student-led assessment and expressed this eagerly across all focus groups.

Although students had varying opinions about their motivations towards student-led assessment, all within the normal and expected responses, most students expressed interest in continuing with student-led assessment in Term 3. However, the root of the challenge remains that we must find solutions for those students who take a passive approach by, for example, fostering goal-orientated and motivated learning – a topic that will be discussed in Chapter 5.

Theme 1A: Student control. Another central theme was the concept of students having and feeling that their voices mattered in teaching and learning. In the initial focus groups, students explained that, within the classroom, there were few opportunities that allowed them to make decisions regarding the operations of the class. Nearly all students agreed that they are not given a choice in matters that affect their school life. In Week 1, when students were asked about what decisions and choices they were allowed to make about school – such as their homework, their in-class learning or their timetable – most were silent and were unable to think of anything on which they were consulted. With prompting, some were able to explain that they wanted have a role in choosing what they read, the educational games they could play or the homework they were given. However, in general, the students felt as though they had little to no involvement in the choices that affected their school day.

This perception had changed by the time the final focus group came together. Students in one focus group had some notion of student choice and explained:

> *Kate: What are some things that you are able to control in your*
>
> *classroom?*
>
> *Alice: If we want to eat healthy food in the class.*
>
> *Jolie: Who you want to be with in a group.*
>
> *Brian: Sometimes what will come on a test.*
>
> *Celine: Like, if we want to we discuss the answers, then*
>
> *[teacher] takes it up.*

> *Armand: Whether you want to change the tables where you sit. If*
>
> *you change the tables, then you need to sit with the people you sit*
>
> *beside now.*

The students understood that their involvement had changed since the initial focus groups and that their role within the classroom had increased. Another group of students expressed a slightly more advanced view and explained,

> *Kate: How does it make you feel to be able to control or have a say*
>
> *in these things?*
>
> *Jacob: Sometimes we pick what assessments we do.*
>
> *Oliver: Some assessments are hard and I don't get the questions.*
>
> *Genie: We get to choose comprehension. [The teacher] will ask us*
>
> *if we want to do poetry or a story one or one with facts.*
>
> *Jacob: And then we get to choose if we want to do it on the iPad or*
>
> *on paper.*
>
> *Kate: Do you have any say with your tests?*
>
> *Genie: Yes, multiple choice, short answer or long answers.*
>
> *Kate: Did that help you when you were studying?*
>
> *Students: (All agreed that it helped)*
>
> *Laurie: Also on the reflection table there is a toolbox for writing, with*
>
> *adjectives, verbs and all of the other stuff and a dictionary for the words*
>
> *and how to spell them.*

The students also held more advanced views than previously of their involvement in the workings of the class, which suggests an improved sense of understanding of collaboration.

> *Kate: Did you have a say in the reports?*
>
> *James: Yes, we got to write our targets.*
>
> *Isabelle: Yes, we tried to look back on our assessment and on our*
>
> *reports, we got to write what we thought we would get, as in A or*
>
> *B.*
>
> *Kate: What were you going to say?*
>
> *Jolene: Same.*

Students realised that their involvement within the assessment process was more prominent. They understood that they held a role in the assessment process, suggesting that they were beginning to self-regulate their assessment. This enhanced understanding was likely because the students were more collaboratively involved in the process and found themselves more motivated to participate.

Research question 2: Teacher perspectives of good practice

The second research question, 'What can we learn from teachers' perceptions of the implementation of student-led assessment in a Year 4 class?' played a critical role in providing a comprehensive analysis of student-led assessment in the Year 4 classes.

Teachers were interviewed three times during the study after they sat in the student focus groups. Teachers also participated in weekly focus groups where we collaboratively brought forward concerns, comments and ideas to enable student-led assessment. This section will discuss the perspectives of the teachers before, during and after the project by means of two overarching themes: engagement with student-led assessment (Themes 2A) and student-led assessment tools (Themes 2B).

Before the project began, all students engaged with teacher-led assessment and the opinions and ideas of the students were not integrated into the assessment process. From the outset and throughout the study, the following were identified as themes that resulted from the teacher interviews and focus groups: *teacher hesitation, initial lack of student understanding, changing abilities* and *struggling students*.

Theme 2A: Teacher hesitation. Initially, the teachers displayed hesitation towards the introduction of student-led assessment and felt that their participation in the project would decrease the amount of teaching time and thus their ability to meet curriculum objectives. All were worried about the children's learning and how the study would affect them. One teacher openly expressed the view that they did not believe that student-led assessment would be effective and possible within the Year 4 classroom. As Cameron explained, '*My biggest concerns are getting through the curriculum that we have to get through and planning the rubrics.*' Kelly also explained that the study may negatively impact teacher preparation time: '*We've all got a lot on so I am worried that it [integrating student-led assessment] will to add to my workload.*'

With regards to students making rational choices, two teachers expressed doubt that Year 4 students would be able to make sound decisions in relation to student-led assessment. Kelly explained that the project involved '*adding quite difficult concepts at quite an early age.*' The teachers all expressed misgivings that the students would not be able to identify areas that required marking and felt that their termly marks would not balance and truly reflect the students' levels of achievement. Cameron, in doubting the students' ability to make decisions about their work, asked, '*But can we not just make that decision because*

we need that mark in the markbook?' Cameron was fixated on awarding grades and less so on leaving students with a formative understanding of attainment. This bias, research suggests, 'does not give pupils the information they need to improve' (Elliott et al., 2016, p. 10).

While integrating student involvement within the regular day, Kelly expressed uncertainty about how to get the students actively involved in assessment. When speaking about assessment, Kelly explained that student-led assessment was '*a bit above my playground now because I'm still working out how I can make it work for me as a teacher.*'

The teachers' past experiences showed interesting perspectives on their hesitation about the project. One teacher, Jan, had experience with student-led assessment and had taken professional development courses on fostering self- and peer-assessment. Jan was the most eager to engage with student-led assessment. Jan initially expressed the opinion that students in Term 1 had not performed particularly well and was hopeful that student-led assessment would help to develop more positive behaviours in the children. As Jan explained, '*I think that we need to instill a sense of ownership so that they see it [assessment] is a life skill.*' On the other hand, Cameron, with 20 years' experience, had had some exposure to student-led assessment but mostly with the student-led conferences. Kelly was a new teacher with little experience but a positive outlook: '*I'm not a skillfully trained teacher but I am mentoring and working on it.*' Kelly also felt taken aback by the student-led conferences and explained, '*I've only done a few parent*

teacher conferences in my teaching career so I'm not sure I can say what's usual; I can only say that these are like no other conferences I've really experienced.'

Teachers felt uncertain about the start-up of the project and were often stopping me around campus or writing emails to clarify their questions regarding the processes of assessment and issues they encountered, particularly in the initial weeks. Frequent questions included Jan's '*For tracking it, do the children decide what goes in the markbook?'* and '*Must it only be rubrics? Is that what they have to make for everything*?' Or Cameron, referring to a piece of work for which they created a rubric, *'What should we put?'* Teachers were somewhat hesitant to take control of the project for the first four weeks, which was clear through their frequent questions and concerns.

Theme 2A: Initial lack of student understanding. All teachers agreed that, when introducing the success criteria to the students, the students initially struggled to understand what made the task successful. Kelly explained, '*I found that the task itself just confused the kids. Despite the guidance I gave them, the idea of assessment was difficult. The "why" confused them, it wasn't the "what"*'. Jan further explained that a lot of guidance was required for the student-generated rubrics and that, '*It was tricky to write the exact criteria. They enjoyed the experiment but getting them to write and apply the grading was what was hard.'* All three teachers agreed that the majority of their students struggled to understand the success criteria – a finding that was unsurprising given the students' lack of experience with student-led assessment. This meant that additional time was needed to explain and re-explain.

> *Kate: What percentage of your children could wrap their head*
>
> *around the success criteria?*
>
> *Cameron: Majority could not. Maybe 10%.*
>
> *Jan: 5% to 10% for me.*
>
> *Kelly: I had one group that could. So, 25%.*
>
> *Jan: But that could have been one child leading the group.*
>
> *Kelly: Yes, maybe. One student really grasped the concept.*

This initial stage of student-generated rubrics was, for the teachers and for the students, one of the most challenging stages of the project. It provided revealing insight into their levels of understanding with assessment since, as the teachers explained, nearly all students were unable to identify or explain, using the rubric, the features of a good task and qualify them accordingly. At this point, teachers emphasised that students had a low understanding of success criteria and generating rubrics. Given that students had never previously been involved in the process of student-led assessment, the concepts of decision-making and evaluation as part of the assessment process were challenging (Quinland, 2012).

Teachers also observed that students were initially resistant towards the idea of them taking the lead with assessment. Kelly, within the initial weeks of the project, expressed the following view:

> *I'm interested by the lack of reaction from students. We*
>
> *are effectively saying, "You can decide your assessment*
>
> *and mark. You are allowed to decide your own success*
>
> *criteria". Maybe they are too young to realise the power*

that they are holding. Maybe they are not mature enough

to realise it. They would be much happier if I just told

them the answers and did it for them.

Two of the three teachers made remarks about the students' perceived lack of enthusiasm

for the project. Yet even when it came time to writing their own reports, the students took

this as natural and went along with the process without realising the scale or importance

of their role within the assessment process (See Appendix M for a sample of the report-

writing template). What is more, Kelly's comment shows that teachers may perceive

treating students as passive recipients of education as a simple solution. Empowering and

educating students is often not the easy route.

Theme 2A: Student progress. By the fourth and fifth weeks of the trial, teachers

were beginning to notice differences in their students' working habits and independence.

This appeared to be a critical point for the teachers, as they noted that students had begun

to understand the concept of student-led assessment but struggled with the actual process.

As Kelly noted,

My students have got the idea of assessment but they can't do the

metrics to save their lives. They know how to grade themselves but

they don't know how to make the levels individualised. They can do it

sometimes, but not all of the time.

Although the start-up phase was challenging, the teachers slowly began to observe

positive changes with the students' understanding of and ability to work with student-led

assessment. Cameron noted, '*They enjoy student-led assessment more because they*

understand it more. Now we're talking about it more and they're realising that it is peer,

self and teacher and they recognise it.' In the same discussion, Kelly added, '*They've got the general idea but they're struggling with the actual process*.'

Six weeks into the study, during a discussion on the general observations teachers had made, all three teachers remarked that the students' effort level had shifted. '*I'm not sure if it goes along Year 4 and Term 2 or this, the effort is good, really, really trying, good quality work and studying now. The openness of assessment is doing well for them.*' Cameron then replied, '*My class too. Everyone wants to finish everything and do well. I don't have to tell them to stay in. They want to come in and do work. They say "Can I come in and finish?"*' Kelly noticed that giving students a voice affected their confidence levels and that more students were speaking up more. Teachers remarked that, in comparison to Term 1, students were more motivated and more eager to work. Teachers also remarked that their problem-solving abilities had not changed since the introduction of the project and that this remained an area that teachers needed to develop.

Eight weeks into the study, perceptions continued to shift with regard to the progress the teachers felt students were making. Jan noted, '*I feel that the children have grown up a lot over the past term and are now taking more ownership of their workload and learning – there is a real desire to get better and achieve things which wasn't always there.*' Jan also touched upon the differentiated profile of classroom learners and how they had been adapting to the changes. Jan explained, '*For some children, it has shown a mature side of them, whereas some are still hesitant and think they need they teacher's input and feedback at all times - and some are just lazy.*'

Since students naturally learn differently, the next section outlines how some students found the concept of student-led assessment more challenging than others.

Theme 2A: Struggling students. The trial was not without its struggles. Kelly noted, '*The lower ones conceptually don't get it. The kids that get it, get it but the ones who don't haven't yet grasped the idea*.' Both Cameron and Jan noted that there was a divide between the students who caught on early and those who were further behind. Cameron noted that, '*My guys are good at being able to judge themselves but creating it is, right now, where it breaks down. A bit beyond them*.' All teachers commented on challenges and worries when creating rubrics during the first six weeks. However, as noted in Chapter 3, many of these students originate from Confucian education systems, where the style of learning is more traditional and didactic (Littrell, 2005) – meaning such students were new to this style of learning. This may be one reason why the students required time to situate themselves with the culture of student-led assessment.

From the above themes, it is evident that all three primary teachers were eager to assist and were interested in the idea of integrating student-led assessment, but they all expressed apprehension because of factors such as timing, curriculum demands and student-preparedness. This coming section, which discusses Themes 2B, examines teachers' perspectives of the values of different avenues for student-led assessment by looking at the tools used to develop it: self- and peer-assessment, reflections, student-generated rubrics, questioning, traffic lights, targets, student-led conferences and student-assisted termly report writing. These tools, as explained in Chapter 2, were used to scaffold the project into more manageable methods, intended to facilitate the

implementation of the project and were fundamental to ensuring that the project ran smoothly. They were also key to our discussions about the successes and challenges of student-led assessment. It was through these same tools that Zimmerman's (2002) three phases of self-regulation were analysed and observed: forethought phase, performance phase and self-reflection phase. This section finishes with the teachers' remarks on the entire the project.

Theme 2B: Self- and peer-assessment. The integration of self- and peer-assessment became, for all teachers, near synchronous within their teaching. This broadly involved students correcting their own work and the work of their peers. It also entailed coaching students through the forethought phase to ensure they understood the expected outcomes (Zimmerman, 2002).

Teachers noted that the students 'loved' and appreciated self- and peer-assessment. Two teachers insisted that self- and peer-assessment benefits the students' learning while also minimising their workload outside the class. Jan noted that,

> *They love peer- and self-assessment, they go mad at the pens, and it*
> *has made my life a lot easier. They were all about crosses if they got*
> *something wrong but now they use arrows. If I write a comment, they*
> *have to write me back.*

In the above comment, Jan is referring to coloured pens that the teachers requested to be given to all students. The three classes used a mnemonic to help them remember how to give and read their feedback: '*Pink to think. Green to be seen'*. Feedback written in pink denoted areas on which the student could improve – 'next steps'. Green comments

denoted work that was good. What was encouraging to see was that the students took on board these ideas and began shaping them to suit their classroom. Existing methods and procedures, such as the pink and green mnemonic, were harnessed into the project by customising and indiginising the innovation that was offered to them, to which they then adopted their own personalised variation by adding stars for each bullet point. In a longer time frame, these may be expected to multiply.

Cameron noted how the students had improved their ability to self- and peer-assess: '*With their self- and peer-assessment, they are looking at "how can I help my friend?" and not just right or wrong. They want to give good feedback, like a growth mindset.*' Cameron explained how using self- and peer-assessment alleviated the teacher's workload because the children were motivated to correct the work. Instead of relying upon the teacher to correct all pages in their workbook, Cameron felt more confident in their skills: '*I also do a lot of peer- and self-assessment where they look at their own work and correct so we talk about it as a class. I don't do through their books as much with correcting.*' Cameron was surprised at their ability to self and peer correct, adding, '*When they correct their own work, they are more critical and they won't make that mistake next time.*' When I prompted further and asked how much Cameron felt the students were benefitting from self- and peer-assessment, he added: '*I'd say a lot.*' This is supported by research by Black et al. (2004) who found that, when students become participating in self- and peer-assessment, significant learning gains resulted.

Theme 2B: Reflections. One element that was integral to the project was reflection. This is what Boud (2013) describes as using questioning to think back upon

work and create a pathway for next steps. It is a key element in Zimmerman's (2002) theory of self-regulation, since the self-reflection phase includes evaluations and causal attributions as well as reactions such as self-satisfaction.

With appropriate teacher guidance, students were asked to reflect upon their assessment and self, peer or teacher feedback. At the initial introduction of these reflections, the children found it hard to grasp what to write to make a meaningful reflection. As Kelly explained, '*My kids are finding reflection hard. I've been telling them what we're working on, they are just repeating exactly what I said last term. They just need to be told what they are working on.*' Cameron also noted during the initial stages that the students needed more reflection on their learning, especially since the teachers did not use student-involvement in assessment. Cameron attributed this to the fact that, had the students had greater exposure to these tools in previous terms, this may have helped to lay the foundations of understanding. The radical change in assessment practice as introduced for the present study, which involved children critically reflecting upon their work, showed that the student-led assessment was a shift in classroom culture and less of a simple intervention. The students were not only being asked to determine what they knew about the subject but also *how* they knew and how they compared to the standard. This involved a far deeper level of comprehension (Earl, 2012) and was not an easy feat to bring into the skillset of the teacher (teacher training and bringing student-led assessment into schools will be discussed in Chapter 4 and 5, respectively).

Even 4 weeks into the project, students were struggling with developing meaningful reflections. Cameron explained, *'With the reflections, even though they got top score according to the rubric, they wrote, "I did good but I can do better." Okay, but how?'*

Towards the end of the project, teacher perceptions of reflections had shifted. Cameron, in the final teacher interview, expressed strong enthusiasm for this style of student engagement and noted, *'I love self-reflection. Having the kids go back and look at their own stuff. What did they like? What did they not do?'* Cameron noted that, not only had the students made improvements in this area, but that teachers had as well. *'I am using more student-led materials and reflection. I hadn't been using these elements but this term has brought it back.'* This shift occurred as the teachers began to see greater autonomy in their students. They became more appreciative of the benefits as the students gained ability and independence.

All teachers also noted that students were becoming more accountable for their work. Kelly observed that the students were becoming *'more motivated and more up for it [student-led assessment].'*

Theme 2B: Rubrics. The generation of rubrics was aligned to all of Zimmerman's phases: the forethought phase involved strategic planning and outcome expectations; the performance phase involved task strategising, self-recording and self-experimentation; finally, the self-reflection phase involved self-evaluation and self-satisfaction.

Initially, teachers explained how students struggled to generate the rubrics, since they could not decipher what success criteria constituted each level of the assessment rubric. As well as this, students struggled to determine what success criteria was most relevant to the assessment piece (see Appendix N for a sample of the first joint teacher). They struggled to list success criteria (such as, for example, what were the learning outcomes). They needed a lot of guidance with indicating what made a Level '4', which was the highest rank for the learning outcome, and what made a Level '1', which was the lowest score for the outcome. It was around the 4-week mark when teachers began to notice some progress with student understanding, when they observed a transitional improvement:

> *Kate: Would you say that they have a better concept of making a*
>
> *rubric now than four weeks ago? Or are they working at the same*
>
> *level?*
>
> *Carmen: They know what it is but getting the words and ideas, we are*
>
> *still working on that.*
>
> *Jan: They know what 'successful' looks like and what it doesn't look*
>
> *like, which, for a lot of them, that's where it's important, the*
>
> *acknowledgement that it's okay but it still needs work. Seeing the*
>
> *process, seeing how it works and how we mark it. For them, it's still*
>
> *right and wrong. They don't see progression.*

During the one-to-one interviews, the teachers noted that other teachers involved in the study were using the student-led assessment techniques slightly differently. Cameron noted how one teacher, Kelly, was focusing heavily on the student-generated rubrics and the effect this had on the practice of all of them: '*Kelly uses a lot of student-generated*

rubrics but I use them mostly for writing. But I think I've gotten smarter with this, where they've generated one that fits many kinds of writing and suits the writing process rubric that suits generated on their own.' Cameron expressed frustration with the rubrics on numerous occasions because they were taking away from teaching time and students did not understand what they were or what they were designed to achieve. During week eight, Cameron explained, '*These rubrics are driving me up the wall. They are time consuming and the students don't really know what they want to say.*' Cameron stated that it was too time consuming to continuously create student-generated rubrics, so the class would have to reuse older ones that the students had made. This gave students less exposure to the process, thus preventing them from fully developing the skills to create student-generated success criteria that the other classes were experiencing. However, Cameron perceived this as mastery of time management, explaining '*I tried to get smarter with that.*' What Cameron's observations are revealing, here is an issue central to the idea of rubrics and the challenge of time. The problem emerging here is that teachers may be inclined to simplify the process but this decreases the students' ability to practice and thus master the concept of generating rubrics since they are not being allowed to regularly think for themselves and exercise their voice in the decision-making process.

Towards the end of the project, the two other teachers, Jan and Kelly, felt that their students were able to construct the rubrics independently and with good accuracy. However, Cameron felt that the students had not yet mastered the skill of generating rubrics. Probing further, I asked Cameron what the most challenging part of rubrics were:

> *Cameron: Creating them. To create the end product, the standard, they*
> *don't yet get that.*

> *Kate: Do some of them get it?*
>
> *Cameron: Some do to a degree but not completely.*
>
> *Kate: Are they picking it up slowly?*
>
> *Cameron: Some of them yes, the higher ability ones. But the lower ones*
> *aren't there. Certain kids in my class just come to school to get by and*
> *pick up a few things.*

Cameron admitted that rubrics were not being done as frequently in class since other methods of assessment were preferred. '*For rubrics, I am not doing as many. The other ways* [traffic lights, questioning and self and peer assessment] *are faster.*' Black et al. (2004) acknowledge that rubrics can be time-consuming, but they insist that they are helpful in terms of students understanding the clarity and expectations of the work. In skipping this process, Cameron may have deprived students of valuable learning experiences.

Theme 2B: Traffic lights. Early in the study, Jan discussed having a 'reflection table' where a variety of assessment activities would be laid out. Upon completing their work, students were expected independently to select a traffic light to self-assess their work. '*Having a table to reflect has been good… It's just the idea that they are responsible and should reflect… They seem to like to idea of helping out, "What colour should be box be? What should we do to assess?"'* The other two classes also adopted this after sharing practice during the teacher focus groups. Jan's class began the reflection table in Week 3, whereas the others started it in Week 5.

Initially, although teachers stated that most students understood the concept of traffic lights, some students struggled to give themselves an appropriate ranking (red, amber or green). Jan explained, '*One [student] put red but got it all right so that was a bad one because he didn't realise he did well'*.

All teachers used traffic lights to encourage students to note how well they understood the topic under study. Kelly noted,

> *We're doing self-assessment at the end of every exercise. They are*
>
> *starting the traffic light and the idea is that they assess this, then*
>
> *look at the next assignment. Each new task, they need to turn back*
>
> *so it's ongoing self-assessment.*

Teachers noticed that when the students were given a choice about what assessment pieces they would choose, they often opted for the less time consuming ones. Jan observed, '*They know the traffic lights are quick but the writing ones take long [sic]. I need to encourage them to pick different ones.'* This indicates that the students enjoy the more instant gratification of student-led assessment, particularly when it is entirely an independent choice. This may be because they were new to the different varieties of rubrics and thus were opting for one they felt more confident using. This is to be expected at the initial phases, since students were still in the initial months of student-led assessment.

Throughout the project, teachers worked to develop the language skills required for students to assess student-led assessment. Midway through the term, teachers noted that language was still a factor affecting traffic lights. When discussing which student-led

assessment was used most frequently within the classroom, Kelly said, '*Traffic lights. I think that it boils down to language skills. It requires a certain level of language sophistication.*' Jan agreed and added, *'And these kids haven't been trained in this either. So, it's almost that we need to add picture and make them kid-friendly. That's what I'm finding with my lot.'*

All teachers observed that the colouring, red, yellow and green, was appreciated by the students and helped them to understand their progress and contributed to self-reflection. Jan had a large visual traffic light in front of the classroom. Jan explained,

> *Having the visual one with the red, yellow, green, they like that too. They like colouring and they understand that assessment can be simple and moving their name. They like that it is visual, not always written. They like that it is physical too, moving things.*

All teachers used traffic lights throughout their study as a low-stakes method of having students assess themselves, their learning and their areas to develop. Traffic lights helped the students to think about what knowledge they had obtained and what more they need to know (Black et al., 2004) and teachers found this to be beneficial.

Theme 2B: Targets. Targets were used throughout the study as a medium-level student-led assessment. These were linked to Zimmerman's (2002) forethought phase as a key to goal setting and strategic planning. There were two main opportunities when all three teachers asked their students to make targets: the start of term as a goal throughout the term and the end of term on their reports for the coming term.

All teachers had used student-generated targets in the past and so it was not a large topic of discussion for the students or teachers because by now they felt relatively comfortable with this process. The targets were drawn from the curriculum itself as teachers were worried that students would pick simple and overly direct targets rather than clear and distinct ones. As a result, the teachers agreed that this process would involve *'having the outcomes and then scribbling out the ones we didn't do and allowing them to select the ones they feel they need to work on.'* This was done by posting the targets from the curriculum, translated into child-friendly language, and then allowing children to pick from discrete objectives that they felt they did not meet. This was because the objectives as written in the curriculum use mature language. By breaking them into child-friendly terms, the children could better connect with the meanings.

Initially, the students were given free reign to select targets and were not given the curriculum to guide them. For example, students could pick any English topic or Maths targets, but these were not based upon any guiding document. Kelly described what happened when students were not given constraints: '*I tried to elicit comments from the students. The problem was that targets that are in the syllabus were very specific but their comments were general.*' Kelly explained that the process needed refining and that the students needed more teacher guidance: '*They are good if you give them the ideas but as for free analysis, they aren't there yet.'*

Jan described the experience of student-generated targets:

> *With the targets, I said to the others, some of them are wordy, so I*
> *made them child-friendly so I put a few easier words so they*

understood. I also put numbers next to it, since we only had 40

minutes. Then they put the number into their report. It was the

discussion that was important.

The students had experience with writing targets since this was a key part of the study and teachers agreed that this was quite simple and direct. With their targets, Jan explained, *'They knew how they did on their assessment and we could link it because it was fresh so they chose their targets based on that.'* Although the teachers perceived this as 'child-friendly', as explained under Theme 1A, the students lost motivation for writing the targets when the teachers controlled the process.

Theme 2B: Student-assisted test generation. Towards the end of term, students were told they would be assisting with the generation of tests. This involved students breaking into groups and deciding what format the test would take, what types of questions should be asked and providing sample questions. It involved discussions with the class, followed by individual group work and finally, a class discussion.

Initially, the teachers expressed apprehension that the students would be silly or get carried away. Jan reflected, '*Actually, when you told them that it was like that, they were quite good. Then they were like "Okay, we can do this" and they could easily get back on track.'* Kelly agreed and felt that the students were very able but needed some guidance. However, the level of guidance they required was a difficult balance for the teachers to master. Cameron explained, '*It was about getting our heads around what it is going to look like and how much ownership and guidance we give them and how much we steer*

their thinking.'

Jan also explained that the test-writing process was not as difficult as they initially thought: '*We've been talking about assessment all of the time. They helped me to choose what stories and reading comprehension that went into the tests.'* The students were able to make a list of the different components that could be offered as options and then selected the ones they felt were most appropriate.

The teachers were all particularly impressed with the Science test that the students generated, since the students independently thought of generating a two-part test that integrated theory – the principles they learned – and practice – the steps involved in conducting experiments. Kelly guided their thinking by prompting them: '*They said, "We want this" and I said "Okay, how do I assess that?" Then, they realised it wasn't an assessable outcome and chose something else. I didn't even need to guide.'*

In all, the teachers agreed that this process was far easier than they had imagined but, aligned with the findings of Sanchez-Elez et al. (2014), it was not without searching deliberation regarding challenges and doubts experienced in the process. Sanchez-Elez et al. used student-generated tests as a way to integrate the students into the assessment process and thereby promote autonomous learning – a skill that teachers in this study saw increase throughout the trial period.

Theme 2B: Student-assisted termly report writing. Having students alongside the teacher when generating end of term reports was a high-stakes activity that caused a

lot of excitement and anxiety among students and teachers. Teachers showed the students the report templates, and assisted students in picking targets (as described above) that the students believed reflected their Term 2 learning. Students wrote their own comments for each subject, which were transcribed by the teacher into the school report template. Students also predicted their achievement and effort grades before discussing their results with their teacher. Teachers were asked how they would integrate this process and Jan explained that the teachers agreed on *'pulling them [student], finding a time when they can do individuals, asking them how they did.'* Again, timing was an issue that teachers had to grapple with. Jan explained, *'The only problem with that is finding the time to do it. I think it will be easier for Maths or English but we haven't decided how we're going to split it.'*

All the teachers commented that they were impressed with the accuracy of the students' comments and estimates. This was likely attributable to the fact that teachers had been working with Zimmerman's (2002) phases and their reports involved all three: *forethought, performance* and *self-reflection*. During a focus group, the teachers all experienced similar results when the children finished writing their reports:

> *Jan: It was interesting to see that many children were spot on.*
>
> *Kate: What percentage would you estimate were spot on?*
>
> *Kelly: 80%.*
>
> *Jan: 85%. The others put themselves lower and I put them higher.*
>
> *Cameron: Yes, same.*
>
> *Kate: Had you not done any of the lead up with assessment, do you*
>
> *think they would have been able to do this in Term 1?*

Cameron: It wouldn't have been done correctly.

Jan: They might not have cared.

Cameron: It's a package. It's the assessments, reflections, then having thought about it, talked about. You cannot do one piece without the other.

Of all the teachers, Jan was most interested in this aspect of the project. Jan had experience with formative assessment and some elements of student-led assessment, but it was the high-stakes assessment that had the largest impact on Jan's perceptions of the project. Jan said, '*We got to ask them how they felt and only writing two sentences allowed them to add their input. It wasn't always positive but it was honest.'* The fact that students were mostly accurate in their predictions showed that the students were aware of their progress and ability level – a positive sign within the development of their skills as self-regulated learners.

Theme 2B: Student-led conferences. The final element of student-led assessment was encouraging students to lead the parent-teacher-student conference after end of term reports had been issued. This acted as the culminating activity since it integrated all three of Zimmerman's (2002) phases – forethought, performance and self-reflection – and entailed the students having to have a strong understanding of the process to be able to report on their abilities. One teacher, Cameron, had prior experience with this and had taken a leadership role in guiding the other two teachers. Together, the teachers developed a template to guide the students through the conferences (see refer back to Appendix D). They then had to identify areas that they wanted to improve on, set

individual goals relative to these, and tell their parents how they were going to achieve these goals.

Preparing for the conferences took time. As Cameron explained, '*They [students] had to think carefully and then reflect on their pieces of work. They had their books with them too. They had to choose pieces from their book that they wanted to show.*' Kelly asserted that the student-led conferences '*demonstrated really nicely that the students understand their own learning, can set their own realistic goals, and that they understand where they are as learners.*'

Cameron spent a bit more time preparing than the other two teachers. Cameron explained, '*It took a few days. We will have to start a bit earlier because we were a bit rushed this time to get them together.*' Both Kelly and Jan explained that they wished they had given their students more time but felt stressed about meeting curriculum objectives as the end of term approached.

All teachers found that most parents allowed their child to speak openly. Jan explained that the parents who sat back and listened led to children who '*felt more confident. You could tell.*' Jan had two students who were reluctant to speak in front of their parents, attributing this to the fact the parents had a domineering presence. Jan explained, '*I don't want to generalise but maybe there was more pressure from the [more dominant] parents. They were hesitant to speak about what they found challenging and their improvements.*' Both Jan and Cameron noted that many parents were eager to engage. Jan noted, '*Parents were quite good and they did question their children.*' Although this

finding is interesting, the parental factor will not be further discussed in this dissertation, since it has far-reaching implications beyond the scope of the present research.

Regarding timings of the student-led conferences, each slot was 15 minutes, which required that the students explain their report card, describe their term's achievements and discuss their targets. Students had prepared for the meetings following a template (refer to Appendix M), which they independently filled in. Although the students had rehearsed their student-led conference, the teachers agreed that this made it feel rushed. Cameron explained, '*For student-led, 15 minutes is good but 30 minutes would be fantastic. Most were done in 20 minutes.*'

Teachers agreed that this was a good culminating activity and that several parents made comments about how much their child had grown in Term 2. Kelly, having spoken to several parents afterwards, explained that parents felt they were able to experience '*a bit of an insight into the process of formative assessment and also saw their child as a interested, self-motivated learner.*' Cameron proudly explained that after, '*Every single meeting, the parents left saying thanks and that their child has grown so much.*' Cameron reflected, '*They [the parents] all loved hearing their kids present and their own learning.*' This is consistent with Taylor-Patel's (2011) study of student-led conferences, where over 80% of parents were impressed with their child's understanding of their learning.

Theme 2C: Changing teacher perceptions. Towards the end of the project, the perspectives of the teachers had shifted significantly. All had taken to the various aspects

of student-led assessment. The final round of focus groups resulted in frustration, as the teachers all reported that they wanted to prepare their students for the student-led conferences rather than complete the final round of focus groups. By email, Cameron wrote, '*I am not sure how we can fit this in [a focus group meeting] as we are finishing our Geometry unit assessment and prepping students to do their 3-way student-led conferences. Our schedules are very tight.*' By the end, the teachers were more hesitant to commit to the research process than to the student-led assessment because of time constraints caused by the curriculum demands.

As remarked above, the teachers observed changes with regards to student understanding in many of the student-led assessment strategies. One concluding question of the final teacher interviews asked each teacher to explain what they would take away from this research project. Cameron explained,

> *I will still do some student-led assessment but not as much. They do like being involved but I probably won't give them the chance to write their rubrics but I will walk through the rubrics with them, explain them, give them beforehand. In Term 1, I didn't do this and I haven't in the past. They seem to know where they're going when they do that.*

Cameron noted that students are more able to critically examine their work, showing an improvement in their understanding of student-led assessment. Cameron explained, '*I think now they like most of the model, grading their own work and we talk about it. They can see where and how they went wrong.*' Later in the conversation, Cameron added, '*They've grown so much and they know a lot more about what it's about.*' Regardless, Cameron still identified time as a constraining factor that influenced the willingness to

use student-led assessment within the classroom: '*I found it time consuming and our curriculum is too tight. I just don't have the time to give.*'

Cameron also remarked that, although she liked using self and peer assessment, she felt too much of the assessment process was student-led: '*I don't feel that there is enough teacher assessment. I would like that it be a lot more teacher-led, than just mostly student-led. I like more balance.*' On numerous occasions throughout the study, Cameron expressed doubts with the amount of control students were given. The issue of teacher control is one that occurred throughout the study. This will be discussed in Chapter 5's section on enhancing teacher understanding.

When asked in what ways the students' learning has changed, the teachers identified several key themes, including motivation and interest in learning. Jan explained,

> *They are just so interested and connected with their learning. In*
> *Term 1, they showed up, did what they needed to do and went home.*
> *This term, I feel like they are so interested. They want to know more.*
> *I feel their growth. I see their growth. That's the same feedback I got*
> *from the parents. Every single one.*

Although teachers could see the student progress, the emerging theme is that teachers felt pressure from the curriculum and from the fear of not making enough progress towards curricular objectives. More will be discussed in Chapter 5.

Theme 2C: Teacher roles. A key part of this project was allowing the teachers to take ownership of the project and to share good practice in our weekly focus groups.

They were often brief, 20 to 30 minutes, and involved a discussion of what teachers had observed that week. These provided a lot of meaningful data for the project as they allowed me, the researcher, to understand the progress and perspectives of the teachers. The teachers also noted that these were essential. '*I like it [weekly meetings] because we bounce ideas off of each other with regards to self-assessment. We think in different ways and we share ideas*.'

A main role of the teachers was to ensure the students were engaged. Jan showed more enthusiasm about the study than the others, as Jan was eager to embrace this new method of assessment. Jan also introduced new ideas and actively researched the project independently. For example, Jan took the initiative to introduce the 'Reflection box' described above, and worked to integrate the students into the project – an instrument that fitted the model of student-led assessment and seemed to have an impact on the students. Moreover, a larger proportion of Jan's class returned the consent form (87.5%), unlike the students in Cameron's (50%) and Kelly's (64%) classes. A further example was that Jan's students knew greater vocabulary and had a greater grasp on the concepts we were discussing (as will be described under Theme 3B: Terminology) – which goes to show the influence and deposition that teachers carry with teaching and learning.

Research question 3: Understanding student perspectives

The final research question investigated was, 'How can children's perspectives of student-led assessment enable us to more clearly understand our wider pedagogical practices?' This question has considerations and implications for practice that will help in the analysis of several key themes that arose throughout the study. This section may

allow us, as practitioners, to develop a clearer understanding of the effects of student-led assessment on teacher professional development. To investigate this question, the students sat through three rounds of focus groups to gather their perspectives. Teachers also provided insight into the general views of their students through their weekly interviews and focus groups.

There are two parts to this section: the first part discusses trends that emerged between all three classes (Themes 3A) – namely, perceptions of assessment and feedback. The second part analyses trends seen only within one class but that are key to developing our understanding of student-led assessment classes (Themes 3B) – namely, adoption rate, teacher explanation, language and student/teacher interest. The findings were gathered from the interviews, focus groups and photo-voice and, taken together, have provided some interesting perspectives into pedagogical practices, as I will discuss.

Theme 3A: Student perceptions of the idea of 'assessment'. At the onset of the study, the teachers and I were surprised by the students' fear of the concept of 'assessment'. Beginning at age 5, and even earlier for many students, the children had endured a repetitive pattern of termly tests, monthly quizzes and teacher-assessed work. Students had learned to fear assessment without being sure what it entailed. When describing the issues that hindered the students' ability to initially grasp the concept of student-led assessment, Cameron explained, '*Their fear was the main thing. The unknown. How to do these assessments.*'

Students across all focus groups expressed fear and anxiety over the word 'assessment'

and held negative perceptions of any change relating to assessment. Jan's class group described this anxiety:

> *Kate: Is there anything else you think of when I say assessment?*
>
> *Casey: It's frightening because your teacher hasn't taught you enough about assessment yet and then suddenly one day you have assessment but you haven't practiced enough.*
>
> *Amber: Yeah, it's like wanting to escape from school*

Students across all five of the focus groups expressed a dislike or fear of the concept of 'assessment'. One of the groups explained:

> *Kate: What does 'assessment' mean to you?*
>
> *Charlie: Test.*
>
> *Bea: Test.*
>
> *Ella: Test.*
>
> *Greg: Your grades.*
>
> *Kate: Anything else that can be assessment other than a test?*
>
> *Bea: Studying.*

It was through our understanding of this fear, and the misconceptions underpinning it, that we were able to devise a plan to change the students' perspectives. Throughout the study, students became more willing to try new ideas because the teachers and I had learned how to address and discuss their fear. Our weekly teacher focus groups would involve discussing how to implement student-led assessment in child-friendly ways.

With time, the fear seemed to dissipate as the students became more familiar with the routines and processes of student-led assessment. This was evident through the students'

willingness to speak openly about assessment, rather than immediately showing fear and resistance. In the final focus group, one group explained:

> *Kate: What does 'assessment' mean to you?*
>
> *Jenn: It's like, things that test your understanding of the subject or something.*
>
> *Kate: Just tests?*
>
> *All students agreed 'no', not just tests.*

Children adopted with enthusiasm the diverse elements of student-led assessment, including rubrics, peer and self-assessment, traffic lighting, targets and student-generated tests. However, towards the end of the study, one element struck the children as very difficult: student-led conferences. Although the students became more familiar and accepting of student-led assessment, all teachers found that the students struggled with bringing this concept to their parents. Cameron added, '*When we talked about student-led conferences, their faces went white.*' Although they became more fluent with the concept of student-led assessment, students still maintained some fear, particularly as this element involved the face-to-face conference with their parents.

After this study was completed and the students had finished their student-led conference, Cameron noted, '*I don't think they'll be afraid next time.*' The students were able to tackle all challenges that the teachers delivered – often without thinking twice.

Theme 3A: Students and feedback. Across all groups, teacher feedback was relatively consistent because of the weekly focus group conversations, as well as the close proximity of our working situation, allowing for regular contact and updates. The initial two focus groups involved many questions from the teachers, as they were still

dependent on each other and on me to make early decisions. As the dialogue developed and the structure of the research became clear, the teachers became more willing to offer suggestions and independently execute the research.

Interestingly, this process was similar to that which the teachers experienced with the students. Initially, teacher feedback to students was heavily guided across all three classes. Kelly noted that students required a lot of guidance in the first weeks: '*they just need to be told what they are working on.*' Teachers also noted that students required a lot of guidance. Moreover, within the initial two weeks, when explaining a reflection to a student-led assessment activity, Jan noted, '*Only upon reflection did they understand. But at the end, I think a lot of that is training.*' In the same conversation, Jan was discussing a lengthy conversation that Jan had with the children. A student began to inquire about the rubric format, which prompted a group conversation on rubric making. Jan reflected upon the dialogue, '*It showed me that slowly some light bulbs are starting to go on.*' This is consistent with research by Taylor-Patel (2011), where she explains how involving students in the assessment process entails professional development and responsive dialogue. This is supported by researchers such as Black and Wiliam (1998), Elliott et al., (2016), Zimmerman (2001), among others, who all attest to the importance of dialogue when scaffolding and supporting student learning.

Initially, when students were asked about what they did with teacher feedback, the results were mixed. For example, when asked about what students do with written feedback from teachers, one student, Erica, explained, '*We read them and then we can get better on our work.*' When prompted further, by a show of hands in the focus group, of the 28

participants, only six students in the focus groups admitted that they '*always*' read the feedback that teachers leave. The great majority of students admitted that they '*sometimes*' read the feedback, while some admitted that they '*never*' read the feedback. In the same group, only two students believed that the assessment that teachers leave in their books helped to improve their learning. This was characteristic of all focus groups – students in all groups admitted that they did not read the feedback. Furthermore, students said that, when they did review their comments, about half of them understood the comment and knew how to make it better, while approximately one third said they rarely understood what steps to take to improve their work. This showed a big deficit in our assessment practices, which will be discussed in the coming chapter.

By the very end of the study, the findings revealed that students were interested in their assessment, including their feedback, and were learning from peer- and self-assessment. In all focus groups, most students agreed that reflections, rubrics, and peer- and self-assessment helped them improve as learners and understand their work.

In addition to the similarities, noted above, there were some significant differences between the three classes since each teacher had slightly differing approaches to student-led assessment. Below, the following findings were observed as areas of difference between the classes: *delayed adoption of strategies, differences in terminology used, levels of teacher enthusiasm, student dependence on teachers* and *teacher experience*.

Theme 3B: Late adoption. It became clear early in the study that one teacher, Cameron, was a late adopter of many of the strategies – Cameron would introduce topics

and initiatives only after observing the other teachers' implementation whereas the other two teachers immediately introduced these after our discussions. This resulted in some students' exposure lagging behind the other two classes. One example of this was the 'Reflection Box', which Jan initially introduced to the group. Jan explained, '*What I've thought is that I would embed it little by little by creating a box and a table in front of my desk with rubrics. It would be beside their finished work tray and it is all labeled as "What went well today".*' It proved to be time consuming to launch since it involved having a selection (roughly 14) rubrics copied and organised for the students to select. This idea was well received and all teachers agreed to adopt this. However, four weeks on, Cameron had just begun to implement it, which resulted in less exposure and choice for the students.

Cameron was quick to admit in interviews that the ideas and topics we discussed were yet to be introduced to the class. Although Cameron grew to appreciate the concept of student-led assessment, she was the least involved of the three teachers and, as discussed, the last to adopt strategies. Cameron being less involved in the project and less eager to take on new challenges affected the students' rubric-making skills, making them less fluent in the terminology that the other classes were using. The children in Cameron's class had a clear lack of exposure compared to the other two groups.

Theme 3B: Teacher explanation and language. Another strong theme that emerged was that teachers were using differing vocabulary and spending different amounts of time on explanation across the three classes. For example, there are terms that were key to the research and were used within the teacher focus groups and these were

modeled in our discussions. 'Traffic lighting', for example, was a term used in the teacher focus groups to denote green, amber and red self-rankings of student understanding. Yet, two focus groups from the same class were unaware of this term. When prompted further, one student noted '*Oh, those things. Yeah, we don't call them anything*', even though the students were using them regularly, nearly daily, in their books. This is significant because it shows that the students were not engaging in the full dialogue and discussion needed to help them with the terminology and details of student-led assessment. Further, during the focus groups in Week 6, one class in particular, Jan's class, was noticeably more aware of the terminology than students in the other classes and was able to discuss student-led assessment with greater confidence and understanding. For example, when I asked Jan's students about assessment in their classroom, the students were clear about what processes were involved:

> *Kate: What assessment do you do in your classroom?*
>
> *Justine: Self-assessment, peer-assessment and teacher assessment;*
>
> *Izabel: And we wrote a lot of rubrics.*

When asked about success criteria and marking, nearly all students said that they understood what that was and how to write it. I then probed further:

> *Kate: What does assessment mean to you?*
>
> *Grace: Marking.*
>
> *Jason: When you assess you own work and someone else's.*
>
> *Kate: Why do we do assessment?*
>
> *Grace: It's making you better at what you need to improve.*
>
> *Jeremy: To notice your mistakes.*

From the dialogue above, the students in Jan's class showed a more developed understanding of student-led assessment. However, during Kelly's class's Week 6 focus group, when asked about assessment in their classroom, a student said, '*Tests*' – even though the students had not had any tests in the six weeks of Term 2! With probing, they acknowledged self- and peer-assessment but their responses demonstrated less of an understanding and less clarity than students in Jan's class. For example,

> *Kate: How is assessment done in your class?*
>
> *Chancy: Some questions are very easy and some are super hard.*
>
> *Jacob: Sometimes I have to practice at home and it's very hard;*
>
> *multiplication and division.*

Even with prompting, the students in Kelly's focus group were unable to develop a working explanation of assessment during Week 6 of the study.

However, the levels of understanding became progressively better across the trial period. During the third focus group in Week 13, one of Jan's students explained that, '*We have success criteria and [teacher] would ask the class what would be good for the assessment. We would do pair writing or group thinking to decide the criteria*.' This was in contrast to the students' unawareness during the initial focus groups, as they had previously no understanding of terms such as 'success criteria' and 'assessment'. The above quotes came from students in Jan's class where, throughout the study, more student-led assessment was discussed and embedded into the lessons. This will be discussed further during Chapter 5.

In summary, there were two main similarities: student views of assessment and students' reactions to feedback; and four differences: late adopters, teacher explanation, language and student/teacher interest, that provided insight into how the students' perspectives allow us to better understand student-led assessment. These above examples suggest that, although measures were in place to maintain consistency across the three classes, there were several factors that influenced the findings, such as teacher willingness to adopt the practices that we had discussed.

Chapter summary

Chapter 4 discussed the major findings and sources of comparative data that arose from the themes that were elucidated from the interviews, focus groups and photo-voice. From this chapter, there were three major findings: teachers experienced major successes and struggles during the implementation phase; teacher guidance and teacher willingness were key in enabling student-led assessment practices; and finally that inconsistencies in teaching had an effect on the students' understanding. Chapter 5 will now use the above-presented information to analyse the findings gathered throughout this study. Chapter 5 also will apply the themes to the six deficit areas identified in Chapter 2.

Chapter 5:

Discussion of using student-led assessment as a means of overcoming the deficits within education

Introduction

This study focused on the perceptions of three primary teachers and 28 students in three classes in Key Stage 2 in a qualitative analysis of the introduction of student-led assessment during a 13-week study period in Term 2 (January to April) of the 2016/17 academic year. In order to obtain first-hand data, I conducted three series of focus groups with the students (three rounds with five groups, thus a total of 15) and 10 focus groups with the teachers. I also conducted three one-to-one interviews with the three participant teachers across the study period. Additionally, I examined photographs of assessment taken by the students and the teachers throughout the trial period.

After comparing participant responses from focus groups and interviews, as well as photographs from the participants' photo-voice, patterns were analysed to elucidate commons themes and influences. In the presentation of the research findings in Chapter 4, several themes emerged that answered the research questions regarding the perceptions of the implementation and value of student-led assessment. These findings revealed both challenges and successes of the introduction of student-led assessment in the primary classroom that lead to insights into the research questions posed in Chapter 1.

This research points to three important areas of development and understanding regarding

student-led assessment: first, there were significant differences among the teachers' preconceived knowledge of assessment practices, their opinions of student-led assessment and their ability to teach this pedagogical tool, all of which had differing effects on how they subsequently embedded and used student-led assessment within their classrooms. This, in turn, affected the perceptions and perspectives of their students on the value of student-led assessment for learning. Secondly, and despite the variation in practices, from the teachers' perspective, the students' understanding and independence improved as the study unfolded. This was displayed in the data from teacher interviews and focus groups where all teachers agreed that students became more able to conduct student-led assessment accurately and assess their own learning accordingly. An examination of the tools that students used as part of their student-led assessment – rubrics, self- and peer-assessment, questioning, traffic lights, targets, student-led conferences and student-assisted report writing – brought forward the teachers' perceptions of the improvement in student capabilities and successes. Thirdly, when students were provided with good guidance, the students understood and could explain the benefits of student-led assessment. This improved the understanding of students and teachers, which created changes within the students' motivations and their roles in assessment.

This study revealed that sharing good practice among practitioners helped to create interesting ideas about assessment, although previous knowledge and experiences of the teachers seemed to have a significant bearing on their participation. It was clear that the teachers' *beliefs* about assessment, teaching and learning contributed to their reactions towards student-led assessment practices within the classrooms. This, in turn, appeared to have affected how the students viewed the study and their progress, as I discussed in the

previous chapter.

The study has also highlighted the importance of regularly sharing good practice to bring new ideas into the classroom. It has shown that fruitful advances could be made within student learning when practitioners share for the purposes of empowering and motivating children to be active participants in their assessment. However, the study has also brought to light the fact that continual professional development and teacher training may be less effective, depending on teachers' preconceived beliefs in the area of student control within the classroom. This will be further explored below.

Chapter outline

The purpose of this chapter is to further examine the research findings by providing a summary of the findings from Chapter 4 and addressing the findings through a discussion that will compare the teachers' and students' perceptions against academic research to date involving student-led assessment.

Through an analysis of the categorisations and specifications for student-led assessment and their implications within the existing research, I will explore the five deficit areas identified in Chapter 2: *providing feedback that is effective and reinforces achievement; enhancing teacher understanding; increasing effective formative assessment; improving the overall quality of assessment and learning;* and *emphasising quality progression over quantity*. These five factors contribute to the major shortcomings within the assessment system and will be applied to the themes that were extracted from the findings. This is not to suggest that student-led assessment will be an instantaneous 'fix' for the problems in

assessment. Rather, I want to suggest, based on research, how assessment can be enhanced when students take ownership of the assessment process. The aim is to provide discussions and insights contributing to our current knowledge of student-led assessment.

Effective feedback

Feedback is a critical influencing factor in determining student success (Carless et al., 2011). Chapter 2: Part I discussed how providing effective feedback improved the understanding of students, a fundamental objective of all education (Boud et al., 2013) and a key aim of this study. This section will discuss how the findings from Chapter 4 may help us better understand the importance of feedback by analysing current research on effective feedback practices.

The findings presented in Chapter 4 suggest that, before learning about student-led assessment, the students were unaware of assessment as learning and only viewed assessment as a means to an end – 'tests', as the students described them, in order to achieve high marks. The students could not fully explain why teachers used feedback or how it contributed to their learning. What is more, the majority of students admitted that they often did not read or understand the feedback left by teachers. This may be because, as Hartley and Chesworth (2000) explain, students frequently have difficulty interpreting what the teacher is trying to say and that feedback coming after the learning has ended becomes irrelevant to the learner.

The findings from this study were consistent with the research that feedback is most effective when it explains to the pupil 'how we move from where we are to where we

want to get to' and the steps to arrive there (Stobart, 2012, p. 239). Teachers initially found that student-led assessment was difficult for students to take on, particularly during the first four to six weeks, because the students' lack of exposure to wider varieties of assessment prevented them from accessing the core concepts involved in student-led assessment. However, teachers found that, with regular practice, students became more able to engage in the process, and used it to monitor their progress. This is consistent with the findings by Gibbs and Simpson (2004), who found that frequent and regular feedback allows for better monitoring and self-regulation. They further argue that, if students are given a more active role in their assessment, they can better understand the 'conditions under which assessment can support learning' (p. 8). Black et al. (2004) posit that when students played an active role in their assessment, the assessment of their peers and generating success criteria, the students' academic results showed higher attainment levels since their understanding of the process greatly increased. Although this study did not measure attainment quantitatively, teachers were clear that the students showed an overall improvement in their academic abilities.

All three teachers remarked that teacher-led feedback kept students one step removed from the learning process. When feedback is unclear and does not stipulate why the student met or missed the learning objective, it is likely that negative outcomes, such as diminishing academic attainment resulting in poor performance, will occur (Thompson, 1998). Feedback is most effective when it enables the learner to rectify incorrect information (Kluger & DeNisi, 1996). However, since two of the three teachers had been accustomed to using entirely teacher-led assessment, the change for them was more

difficult to embrace.

Although teachers had used detailed rubrics and left comprehensive feedback, the students felt that this was of little value to their learning. This is consistent with Hattie and Timperley's (2007) findings that the type of feedback and how it is delivered can be detrimental to its utility. A key theme that Hattie and Timperley emphasise is that feedback must be at a level that is appropriate for students, since there is often a disparity between what the student knows and what the teacher is requesting of them. This trial eliminated this discrepancy by ensuring that the students were involved in all aspects of the assessment and that assessment was written in student-generated terms. It was clear throughout the trial that students had developed more complex understandings of assessment and could explain this to their teacher and me. Teachers observed the gradual shift in understanding of assessment as well as student-generated success criteria that was used throughout the trial period. This is consistent with Nicol and Macfarlane-Dick's (2006) first strategy of effective feedback, which explains that pre-defined criteria are needed to increase the quality of feedback. Further, the implementations of formative assessment and feedback should be 'focused on helping students to improve [and] share criteria of quality' (James & Pedder, 2006, p. 110).

Giving effective feedback involved the teachers learning new practices as well, since the teachers and I agreed to avoid empty praise, such as 'good work'. Teachers were guided towards eliminating these instances of 'low frequency feedback' – feedback that is infrequent and often unrelated to the learning (Pauli, 2010). To avoid this throughout the trial, teachers asked students questions, prompting them for their perceptions and ideas to

further elicit thinking and feedback dialogue. Findings from the present study suggest that changing the approach to feedback was beneficial for both teachers and students. Initially, all teachers agreed that students 'just need to be told' what to do, but as the descriptive feedback became more frequent, which included analysis and 'next steps', students were forced to reflect upon their work and the necessary steps, which resulted in students who were more able independently to improve their work.

On using rubrics to self-assess, the student feedback was mixed. Most students understood that this was important for their learning and these enabled them to better understand the success criteria, but many students stated that the process was long and often cumbersome. Although the process was not easy, many teachers noticed a difference. This was supported by Andrade et al. (2008), introduced in Chapter 2, who provided evidence that the process of student-generated rubrics is beneficial to students. They found that teachers who guided their students through the process of generating the success criteria resulted in better quality student work. Involving students in the process, they explain, increases skill acquisition since students understand what is expected. Furthermore, Kluger and DeNisi (1996) found that, for assessment to facilitate learning, students required an informed response that stipulated discrepancies between the actual and desired work – clear success criteria and feedback. Although this study did not specifically look at what skills were developed, teachers found that students had developed a far better understanding of their work than before. Focus groups with the students indicated that they held more detailed recollections of what went well and what they wanted to improve and were able to better articulate these, since, as teachers noted, two students took the time to negotiate the success criteria and were more able to relate to

the language used.

In the initial focus group, two students said they enjoyed assessment, four students said they did not mind assessment and the remaining 22 students said they did not like idea of assessment. From this same focus group, 23 were fixated upon 'assessment' equating to simply tests. This suggests that the feedback students were accustomed to receiving with assessment tasks was not clearly linked, in their minds, to assessment. By contrast, having open and regular discussions with students about assessment and feedback seemed to lead to a clearer understanding of assessment practices. This is consistent with Carless et al.'s (2011) explanation of dialogue feedback between student and teacher where, 'interpretations are shared, meanings are negotiated and expectations are clarified' (p. 113). The students also showed development in the area of sustainable feedback, and their ability to analyse and enhance their work independently (Carless, 2013). After weeks of being trained by teachers to participate in the assessment process, the students' autonomy in self-regulation, assessing their work as well as the work of their peers, increased. Increased autonomy, Zimmerman (2002) posits, comes about because teachers play a fundamental role in providing students with the feedback and learning needed to develop their ability to self-regulate. The students' development of self and learning, a skill related to self-control and contributing to positive academic change, was a part of Zimmerman's three phases as outlined in Chapters 2 and 3, namely *forethought phase*, *performance phase* and *self-reflection phase*. It was through these phases that assessment became clarified to the students throughout the trial period.

Another element of vital development related to motivation was the students' use of targets or 'next steps' to more autonomously determine what they could do to improve their own work. This involved a goal-oriented learning approach that had students engage with the assessment criteria and standards through which they could understand and explain their courses of action (Sadler, 1989). The 'next steps' were emphasised through student-generated targets to allow students to better understand how they could achieve the next benchmark in their performance. This resulted in students being more able to set realistic targets towards the end of the study period. The finding was consistent with Locke and Latham's (1990) study of 400 experimental students featuring 40,000 participants in eight countries. In Locke and Latham's 'goal setting theory', setting specific goals that were realistic and attainable was more effective when feedback was given. Through regular discussion, teachers' focus groups looked carefully at developing the tools that allowed students to become more autonomous and self-regulated learners. Teachers would then implement these techniques to provide meaningful feedback towards the students' targets.

The students who were most exposed to the student-led assessment, as relayed by the teachers, were from Jan's class. This class, in turn, had the best grasp of the concept of student-led assessment, as confirmed during the focus groups, where they were more aware of the terminology, more descriptive in their understanding of the processes and more clear in their responses – consistent with Locke and Latham's concept of 'goal setting theory'. Bransford, Brown and Cocking (2000) also found that a goal-oriented approach to learning motivated students to understand the standard and develop their desired performance outcomes. Furthermore, independent learning can also affect

motivation towards academic engagement (Meyer et al., 2008). Not all children in this study were motivated, however, as several described the process as too time consuming. However, Bransford et al. explain that motivation is related to the overall time that students will spend learning. This is consistent with Grant and Dweck's (2003) idea that students who are learning-oriented and have active learning goals will spend more time on challenging tasks and worry less about making errors.

Integrating student-led assessment emphasised that students must be adaptive to issues in their learning and seek ways to overcome any difficulties. Part of the feedback from teachers involves scaffolding and providing a sense of direction by contrasting their current work and the desired standards. Teachers accomplished this by presenting the curriculum objectives in child-friendly terms and allowing the students the time to compare their work with the set objectives and generate their own targets. This collaborative involvement, teachers found, helped to improve student performance because the teachers noticed a difference in their target setting ability and overall improvement in student independence. This was further elaborated upon through the questioning techniques teachers used, as described in Chapter 2, in which a variety of cues and prompts were used to encourage student thinking (Hartman, 2002).

The findings also suggested that ineffective marking can also reinforce underachievement, since feedback is generally outcome-oriented and fails to appreciate the learning process, or what the child has learned between tests (Earl & Katz, 2006). As students were exposed to self-marking and the processes of student-led assessment, they learned from the teachers to become more able to identify areas of personal struggle. This

is unsurprising since research indicates that students are able to develop strategies for marking that allows them to reduce the achievement gap between their level and the expected standard. This involves giving students regular and useful feedback that includes actionable comments to explain how to improve their performance (Clarke, 2001; Sadler, 1989).

Utilising assessment as learning allows teachers to recognise students as active participants within the assessment process, ensuring that they are integrating previous learning and critically assessing what needs to be done (Earl & Kratz, 2006). A major tool in allowing students to realise these capabilities involved using feedback dialogue, a method of formative assessment that 'emphasises the social nature of learning and its temporal qualities' by bringing past work and future goals to the forefront of discussion (McArthur & Huxham, 2013, p. 101). Having a dialogue as a part of the assessment process was beneficial and continuous throughout the trial period. Students engaged with other students, their teacher, their parents and themselves as part of the process of learning. This principle is explained by Carless et al. (2011) who advocate for sustainable feedback practices and the reconceptualisation of feedback through self-regulation. Carless et al. explain that the current model of assessment is failing learners because it is suited to the teachers and not the students.

In all, the role that feedback plays in developing the students' capacity to self-regulate and to participate in student-led assessment was vital throughout this study as motivation and attainment are affected by student involvement. As a result, teachers noted that the student performance increased, as did their overall independence and motivation within

the classroom.

Enhancing teacher understanding

Students do not learn to become effective learners independently – teachers must promote the skills through scaffolding, monitoring and feedback to coach students to self-regulation (Meyer et al., 2008). Within this study, teachers were taught to understand their roles and the expectations of them as leaders of student-led assessment, the lack of which, as I identified in Chapter 2, is a source of weakness within many schools systems, especially given that teachers are among the most influential factors affecting student success (Hattie, 2009; Visscher & Coe, 2013). The issues within the system indicate that 'teachers rarely think proactively about what they need to do to use assessment to promote student self-assessment and self-regulation' because they do not, in general, have the knowledge or training to effectively engage with this style of assessment (Earl & Kratz, 2006, p. 124). This cyclical pattern of lack of training is a fault in our professional education system that has negative effects on formative assessment practices (Antoniou & James, 2014). Thus, students require *correct guidance* but that can be subjectively interpreted. The present study involved providing teachers with the necessary tools to scaffold learning through rubrics, traffic lights, sharing good practice, assessment expectations – an explanation of the maps and journeys that are required to make student-led assessment teachable. Recognising this, the present study not only educated the students but also worked to educate the teachers. Teachers' professional development, as I explained in the Methodology, involved regular meetings, frequent chats and repeated emails correspondence. Its true significance gradually became obvious.

As explained in the findings, Chapter 4, initially teachers were worried about their ability to provide effective feedback if students were leading the assessment. A great deal of time and effort went into ensuring that the teachers felt comfortable with fostering student-led assessment and providing appropriate feedback. This is consistent with research that suggests teachers are key to facilitating student involvement in assessment (Timperley & Parr, 2009). Doing so involves 'fostering effective self-regulation and realising the benefits of formative assessment' whereby teachers 'help their learners understand the learning goals to provide the opportunities for them to seek and receive feedback on progress towards those goals' (Timperley & Parr, 2009, p. 45). This requires that teachers learn to provide the conditions for students to communicate their ideas (Timperley & Parr, 2009) and learning in order to develop clear, specific goals and commitments from students (Kluger & DeNisi, 1996). As such, in this study, teachers were required to provide feedback that promoted monitoring and the regulation of their own thinking and learning goals at a deeper level (Zimmerman, 2002). The fact that teachers believed the students had made good progress in this area aligned with Timperley and Parr's (2009) findings that the structure of the learning has a strong effect on the students' ability to understand and respond to their assessment, since the learning in the present study was highly structured around new tools and techniques to further student learning.

As part of the professional development within the study, the most important aspect was sharing good practice. Previous research in education claimed that 15 years was required to master developments in teaching skills (Van der Hurk et al., 2016). However, recent research by Van der Hurk et al., introduced in Chapter 2 and described using Figure 2.2,

employed a model of cyclic data-driven teaching for students enrolled in a masters course and which found that six weeks of training had a considerable impact on their developing teaching skills. This model involved reflection, discussion, planning and re-evaluating the learning and skills employed in the classroom by the teachers themselves. In my belief, intensive training *can* improve the practice of teachers and their assessment methods. In my research, both the teachers and I accepted that we were not 'masters' of assessment, but were open to discussing what worked most effectively by constantly revisiting the strengths and inadequacies together. The findings from the present study suggested that, when teachers followed this iterative pattern of teacher professional learning, their individual practice improved. The first weeks showed hesitation from the teachers, since they were constantly seeking feedback and questioning their methods. However, after four weeks, when their level of comfort had improved, teachers became more able to use feedback from me and the other teachers to further their professional development, chiefly because they were able to interpret and use the learning and data that they were gathering from the research project itself (Van der Hurk et al., 2016). This is supported by Ianos (2017) who suggests that feedback is a critical component of the teaching and learning process. Teachers learned to adapt their teaching techniques to suit the students' needs and enhance the quality of their teaching methods in response to the student-led assessment and the feedback that was discussed throughout our weekly meetings.

Within the assessment process, teachers should do more than simply give feedback on content. For feedback to be effective, it involves promoting the learning and understanding of the lesson objectives (Hattie & Timperley, 2007), and allows students to develop a toolkit of strategies to self-regulate their own learning (Sadler, 1989). The

findings from this study suggest that, for students to develop a variety of skills relating to student-led assessment, teachers have to introduce students systematically to the many facets of the practice. Jan, who introduced the greatest variety of student-led assessment techniques and who held the most conversations and discussions involving assessment, had, by the final focus group, the greatest number of students who could explain assessment and their role in their assessment. This relates back to the effectiveness of the teacher as the most influential factor in student learning (Hattie, 2009; Visscher & Coe, 2013).

Although teachers learned new skills relating to student-led assessment, the findings in this study suggest that teachers could not completely relinquish their habit of leading the assessment process. The differences across classes – namely the rate of adoption, teacher explanation and language and student/teacher interest (see Chapter 4) – might be related to the teachers' previous experience with these approaches to assessment. Jan had the most prior experience with self- and peer-assessment and had also taken CPD (continuing professional development) in this area. There are many means of informing teachers' teaching and learning in assessment. However, teacher-ingrained ideals regarding the customary role of the student were seen to be relevant and influential factors. As explained by Marshall and Drummond (2006), some teachers greatly value student autonomy and as a result, use it regularly in their teaching. This means that some teachers more readily have what they called 'the spirit of AfL' (p. 174). It is quite rare that professional development or policy changes take into account the individual perceptions of teachers – something that should be analysed when discussing new innovations and strategies (James & Pedder, 2006). An investigation by James and Pedder, which

surveyed 558 teachers in England about their views of differing classroom assessment practices, found that individual perceptions were a prominent factor that influenced their findings (and see Chapter 2). This is corroborated by the present study. For instance, from the onset, Cameron had reservations about the amount of control that students were given. Although nearly all of the discussed strategies were put into effect in Cameron's classroom, their execution was different from Jan's and Kelly's because Cameron quickly sought out shortcuts to the procedures in preference to taking the time to fully deliver student-led assessment as discussed within the focus groups. Although we were working to ensure consistency across the three classes, teachers were often making judgements based on their intuition – their 'knowledge in action' was unavoidable (Wilson, 2017, p. 4).

Within the study, shifting ratios of control were problematic for at least one of the teachers. Losing the hierarchy of control seemed to make Cameron very unsure, and Cameron often expressed doubts about allowing students to share the authority of decision-making. Allowing the children to take on more leadership within the classroom involved the teachers becoming better at listening, adapting to change and engaging with the children throughout their journey (Robertson, 2011). From the findings above, it was clear that Cameron was most resistant to allowing children the power to use their knowledge and reflection in the assessment practices. Since Cameron had been teaching for 20 years, it may have been that Cameron felt robbed of a sense of identity. Only one teacher, Jan, was comfortable fully relinquishing power and allowing the children to take a prominent role in decision-making. The experiences of the teachers across their careers act as lenses through which they filter their understanding and views about assessment

practices. This, in turn, influenced the framework from which they then established the feedback conditions in their classrooms (Sadler, 1989).

There were also several teacher comments about students who were struggling to understand the fundamentals of student-led assessment. Given this, there were learning differences between those who easily understood and those who did not. Teachers had to provide feedback to students that intended to close the gap between their current and desired performances, meaning that teachers had to work consciously to address deficit areas and provide greater formative feedback to generate criteria that benefited each student (Sadler, 1989). All teachers discussed how some students in the class were struggling to successfully critique their own work or that of their peers. These students required extra guidance in terms of following the outlined steps for effective assessment as per Hattie (2012), which were discussed in full in Chapter 2. But the research design took into account that not all students have an innately equal ability to self-regulate and that teachers have to provide individualised attention to students in order to foster their independent learning skills (Meyer et al., 2008). Meyer et al. explain that since students are not equally predisposed to shared learning practices, nor to self-regulated learning, integrating this model of learning into education, particularly in primary, may require that students are provided with more time to develop and enhance the underpinning skills of self-efficacy, self-motivation and self-regulation.

Research also finds that teachers who are trained to encourage student-centred and formative assessment are also most likely to impact on student performance across the curriculum (McDonald & Boud, 2003). These teachers incline to involve themselves in

the process of assessment more generally by assisting students to make accurate judgements of their work (Salder, 2010). Their preconceived knowledge, in this case, was a potential limiting factor for one of the teachers. However, this also worked to benefit the students with the two other teachers, Jan and Kelly, who held strong beliefs about students as autonomous and able thinkers. Their beliefs helped empower the students and they felt strongly that they could rise to meet the high expectations of the study. Jan and Kelly, in the focus groups and interviews, showed a greater awareness of students as independent, capable beings, which resulted in a greater commitment from these teachers to the principles of student-led assessment. Cameron, on the other hand, took the traditional view that students had to be led in the assessment process, believing that they lacked the skills, understanding or desire to lead their own assessment. Some teachers have conceptualisations of how students learn, views that are not aligned to the principles of independent learning and which may inhibit the learning of students (Meyer et al., 2008; Wilson, 2017). It is important to support teachers in developing new skills and an understanding that self-regulated learning does not undermine the role of a teacher, but rather puts emphasis on the importance of good coaching and guidance (Meyer et al., 2008), which involves teachers feeling confident in surrendering traditional forms of control.

Teachers are the central players in initiating student learning and progress, because their lesson delivery and approach affect how students take on learning (Meyer et al., 2008). This is why it was important to develop a consensus on acceptable standards in the three classes in the research so that teachers moderated using similar criteria and expectations. One fundamental part of this was judging assessment criteria and standards through

'judgement practice' – an understanding of how teachers arrive at their judgements through explicit, tacit and meta-criteria orientations. It entails the 'changing role of the teacher in developing students' evaluative experience through them in judgement practice' (Klenowski & Wyatt-Smith, 2013, p. 119). It can also be affected by how teacher judgement is developed. One way this was maintained in this study was through social moderation, when teachers 'come together to meet in curriculum-specific or cross-curriculum groups within a school, or in collaborative networks of schools…both for diagnostic and improvement purposes' (Klenowski & Wyatt-Smith, 2013, p. 103). Through the cyclical focus groups, the participating teachers were able to sharpen their teacher pedagogy. Using such styles of social moderation, in which learners engage in social practices that allow skill acquisition through direct or first-hand learning experiences, is one way to enhance teaching practice and judgement within a school (Klenowski & Wyatt-Smith, 2013), and it was found to be a beneficial teaching practice within this study. Having teachers openly discuss, critique, question and provide feedback upon the previous week's happenings while discussing future implementations, provided a key opportunity for reflection, understanding and next steps.

In hindsight, while the teachers developed in their professional practice and were learning in action, teachers would have benefited from more concrete examples of student-led assessment prior to starting the action research. This assessment is supported by Black et al.'s (2004) finding from their reviews, that 'teachers needed "a variety of living examples of implementation"' during their examination of self and peer assessment, as well as student written success criteria (p. 10). Since I could not find a study that completely matched the one I undertook here, I was not able to find direct concrete

examples to show teachers. We had a working bank of success criteria and we followed the outlined practices of Hattie (2012), but providing teachers with training that involved previous case studies would have helped to clarify the expectations.

In all, there were many factors that influenced the teachers' understanding and responses in this study, such as previous training and experiences, implicit beliefs regarding student-led assessment, teachers' ability to convey expectations, and students' developments and progress. Teachers had a key role within the study and their professional development was fundamental to making the entire project feasible.

Increasing effective formative assessment

In order for assessment to be formative, it should also inform the pupil of their areas of strength and set targets for improvement by being specific, clear, repetitive and frequent (Christodoulou, 2017). The teacher's role is to support students in making correct judgements and to inform students' understanding on how to improve (Hattie & Timperley, 2007). This study views formative assessment as part of student learning and not simply a focus upon summative results.

As noted, prior to the onset of the study, formative assessment was not being used effectively, meaning it was not directing the quality of student work to enhance future learning (Sadler, 2010). Rather than implementing formative assessment, the students were accustomed to assessments that were summative, leading to students internalising their results and potentially hampering their potential because they believe their 'score' is a reflection of their maximum potential (Reay & Wiliam, 1999). High-stakes assessments

and tests are frequently used for assessment purposes, rather than contributing to the students' learning – potentially causing a detrimental reversal to the quality progress of student-led assessment (Shute & Kim, 2014). Through student-led assessment, there was a natural drift away from summative tests and high-stakes assessment, turning to advantage the students' habitual aversion to tests.

By the end of the study, the Chapter 4 findings showed that teachers were impressed with the independence students had begun to show. These findings are aligned with Brown and Harris (2014) with regards to the consequential nature of the students' role and the importance of formative assessment as a part of learning. Students in this study, as in Brown and Harris', were given voice and control of moderate-level decision-making processes (tests, peer ratings, targets) rather than highly consequential decision-making (curriculum planning, study topics). Brown and Harris found that, for formative assessment to be successful, teachers had to be engaged in providing feedback that contributed to learning, which was also the case in this study. Teachers were also in a position to disagree with students if their assessment did not meet the teachers' expectations for their criteria. Under these conditions, Brown and Harris argue that 'student self-assessment of their own work and processes are useful for raising academic performance and self-regulatory skills' (p. 22). Further, Kirby and Downs (2007) explain in their study of university Science majors in South Africa, self-assessment leads to a deeper understanding of learning, namely enhanced self-regulated learning and metacognitive skills. Their study remained positive about student involvement in assessment, cultivating a deeper understanding of learning, self-regulation and metacognition. They found that students who were not fully involved in the negotiation

of the assessment process and criteria were not able to self-assess accurately. Kirby and Downs acknowledge that for students to play a role in assessment, training, practice and regular feedback by an informed practitioner are necessary. They argue for a 'formative, low stakes, criterion-referenced assessment' (p. 490), such as was used throughout this study.

Students also created individualised learning goals and discussed the steps to achieve these goals (Black & Wiliam, 1998) to encourage them to develop the skills of self-monitoring, self-control and self-discipline (Hattie & Timperley, 2007). By the end of the study, students held more sophisticated views about their targets and the steps to achieve them. Interestingly, students noted that it was more beneficial for them to have complete control over their learning targets rather than having teachers provide a bank of targets from which they could pick. This suggests that students were willing and able to set targets relative to the success criteria, a key component of self-assessment and self-regulation (Zimmerman, 2008). Teachers also felt, by Week 6, that students were becoming more able to self-monitor and growing more able to reflect upon their work and discuss the necessary changes. Furthermore, by the end of the study period, students had developed the confidence to take charge and create their targets without being confined to teacher control. Eshel and Kohavi (2003), in their study investigating teacher and student control, self-regulation and academic achievement in Sixth Grade students, found that students were most able to self-regulate when their level of control was high and the level of teacher control was low. With the students' targets in the present study, they were less able to self-regulate and express their views when their teachers began to exercise their control by limiting the students' ability to make judgements. This in itself

is very interesting and would merit more research.

As another moderate-level decision, rubrics were key to the formative assessment process. Initially, students greatly struggled with this process (see Chapter 4). Cameron felt that students struggled with the thinking skills involved in creating the rubrics. This was likely due to the fact that this involves self-generated learning which is a 'complex, multi-faceted process that integrates motivational variables (e.g., self-efficacy, task interest) with other self-processes (e.g., goal-setting, use of learning strategies, self-recording)' (Cleary, 2006, p. 308). These processes, which all entailed scaffolding by the teachers as well as integration of the diverse tools of student-led assessment, allowed students to understand their role in assessment. As students began to develop the skills to self-regulate and monitor their learning, they gained a formative understanding of how their work related to the expectations of the teacher and the success criteria set out in the curriculum. Through active participation in the assessment process, namely by being given choice in designing and critiquing success criteria, students became better prepared to organise their learning and recognise solutions to learning-related problems, creating better informed learners (Boud & Falchikov, 2007).

As discussed, by the second and third focus group, students were more able to discuss their work and more clearly understood their role and their successes. This is consistent with McDonald and Boud's (2003, and see Chapter 2) findings that students who played a more active role in their learning observed positive influences on their performance. In their experimental group of 256 participants, those who were trained on how to enhance self-assessment skills displayed considerably higher performance in each curriculum area

than those who were not trained. Although the present study did not have a control group, the findings are comparable since the teachers found that the students were more able and more motivated, which caused an increase in their performance during the trial period. Klenowski (1995) also found that student engagement in assessment lead to increased motivation, as well as improved engagement and self-efficacy.

Although there were several students who were quiet during the focus groups, nearly all students voiced their ideas. Black and Wiliam (1998) explain that students must be carefully questioned and that discussions should involve all learners – not simply those who are eager to speak. This emphasises the need to build academic resiliency in all students – not simply those who are endowed with the traits that the educational system actively seeks (Nagy, 2016), such as being willing to speak openly about their perceptions. Integrating student-led assessment ensures that all students learn to formatively assess their work, take ownership of their learning and analyse the features that make their work successful. From the findings discussed in Chapter 4, it was observed that all students participated in this process, even those who were academically weak or had English as an additional language (EAL). However, the rate of adoption of AfL by the students was varied, because, as teachers indicated, students who were academically low achieving tended to initially struggle more with regulating their learning, which is consistent with research in this area (see, for example, Cleary, 2006). Regardless, teachers felt that all students could, to varying degrees, access the concepts of student-led assessment. This was because teachers provided individualised feedback to each pupil, rather than general feedback to the group. As Black and Wiliam (1998) explain, conversations between students and teacher, 'should be thoughtful, reflective,

focused to evoke and explore understanding, and conducted so that all students have an opportunity to think and to express their ideas' (p. 8). This dialogue opened communication, influencing student perceptions and making them more aware of their learning (Crooks, 1988). This can be tailored to the individual needs of students to target their respective levels.

Becoming learning-orientated, as Carless (2015) explains, is fundamental to allowing students to develop their potential as productive learners with a wide breadth of learning aptitudes. On the evidence of this research and the findings of the present study, this dissertation argues that students should be integrated into the assessment process as part of their development and learning, allowing them to gain the tools to formatively analyse their work, enhance their ability level and contribute towards the end product – their achievement and learning.

Improving the overall quality of assessment and learning

Much of the research involving students as active participants in assessment stresses that it must be realistic and verifiably accurate self-assessment for increased academic attainment to result (Boud & Falchikov, 2007; Brown & Harris, 2014). Developing this kind of assessment took time. After the initial discussion with the teachers, we constructed a model of assessment that would permit student engagement while following our ideal pedagogical beliefs for beneficial classroom evaluation. We followed Hattie's (2012) model of placing a strong emphasis on evaluation throughout the learning process, and which involves the following five steps:

> Step 1: Begin by discussing the learning outcomes (the

success criteria) of the unit. Discuss with children what they

want to achieve through this unit of learning.

Step 2: Negotiate this assessment at the start of the unit.

With the children, discuss and decide upon the best way to

measure the unit (rubric, presentation, 'two stars and wish',

verbal comments, targets, numerical grade, then peer-, self-

or teacher-assessment, etc.)

Step 3: Conduct the teaching.

Step 4: Present the assessment at the end of the lesson/unit.

Step 5: With the children, reflect upon the assessment. Ask

children to reply to the feedback, asking themselves what

could have been improved and how will it be improved

for the next assessment. (Hattie, 2012)

This structured method was selected because it placed assessment at the forefront of teaching and not teaching methods or delivery. It followed an incremental and direct way of introducing the methods we discussed. This cohesive approach to active participation in student-led assessment came from hours of discussions and meetings with the three teacher participants and me. This, we believed, contributed to the understanding and learning of the students.

Initially, this model looked suitable and easy to use, which is why the teachers and I selected it. However, it needed modification and further thought. It required regular discussions about what makes a task successful and how to achieve this. Hattie (2012), in his meta-analysis of 800 factors that affect student achievement, noted that integrating the

success criteria into student learning was among the most important elements related to achievement. In this present study, using the success criteria proved beneficial for transforming student understanding of what assessment involved. This is also aligned to Doddington et al. (2001) who found that having discussions with students regarding assessment practices relieved anxieties and fears, making students more confident and comfortable in the assessment process.

Initially, in the present study, I saw that students could not explain what a rubric was and why it was used. They also struggled to explain success criteria, even though one class had been using success criteria throughout Term 1. By the end of the study, however, most students could explain why success criteria were needed and how it helped improve their learning. Hattie (2012) noted that using the success criteria as a part of student learning is critical to ensuring that students are 'engaged in and enjoying the challenge of learning. It is challenge that keeps us investigating in pursuing goals and committed to achieving goals' (p. 57). The present study supports this claim.

The work of Hattie (2012) is also related to the concept of self-regulated learning, where the learner must understand and situate their learning to be able to set goals and overcome challenges. Teachers in this study committed to the model of self-regulation by ensuring their assessment practices regularly nurtured this skill. This is also related to Zimmerman's (2001; 2002) research, which explains the process of self-regulated learning as motivationally, metacognitively and behaviourally stimulating. The present study acknowledges that there are several dimensions to student-led assessment and that these, in culmination, enhance a student's ability to succeed. Zimmerman (2001) argues,

'Student perceptions of themselves as learners and their use of various processes to regulate their learning are critical factors in analyses of academic achievement' (p. 2). He explains that, despite the external factors that apparently enhance a student's ability to learn (for example, socioeconomic status or overall quality of education), there are always some students who fail to make the standard. Although socio-economic status was likely not a factor in this study, parental input likely was, as many students have parents who work late and collect students past 5pm. Many students have nannies or maids who mind them. Perceptions of self and their ability to self-regulate their learning are factors that enhance a student's success – these factors can be further enhanced by metacognitive and motivational strategies. These, Zimmerman continues, can relate to social learning that includes peer- and self-assessment. The development of said strategies that enhance student success are, in my opinion, best taught to younger students so that students can learn the foundations of student-led assessment in developmentally appropriate ways. This may involve simple traffic lights or rubrics, and peer- and self-assessment, so that students can begin to self-regulate from a young age (See Appendix B, C, D, K, L and M for examples of developmentally appropriate activities for self-regulation in Year 4).

Relating to student ability, teachers found that students who struggled academically also tended to struggle with the concepts of student-led assessment. Isaacson and Fujita (2006), in their study of 84 graduate students in the United States, found that when students were presented with weekly tests in which they could choose questions themselves and predict their results, the higher ability students had an advantage over the lower ability students. They found that higher achieving students were more accurate in predicting their achievement and results and more able to produce realistic goals. This

was consistent with our initial findings, where some students had a stronger initial ability to participate accurately in the student-led assessment practices. Teachers in the present study felt that with increased exposure, more students became able to self-assess and assess the work of their peers with a confident degree of precision. This is aligned with the findings of Kostons et al. (2012), who tested secondary students in Holland and found that, as students become increasingly exposed and trained in the area of self-assessment, their ability to do so with an accuracy triangulated with other measurements improves. They concluded that students who were trained in self-assessment and task-selection skills were better able to self-regulate and gain knowledge from their learning. Furthermore, Boud and Falchikov (2007) found that there was a reasonable agreement between what teachers and students marked as their achievement grade, with students with higher grades able more accurately to pinpoint accurate marks. Students in the study were, on average, very good at predicting grades, although teachers felt some students, particularly students who would normally attain lower than average grades, were less accurate in their predictions, particularly at the beginning. Teachers found that the rate of accuracy of the students increased towards the end of the study, when students were exposed to student-led assessment for the longest period. These findings suggest that, with practice and exposure, students across the ability range are more able reasonably to predict their outcomes and achievements.

In order to improve the overall quality of assessment, teachers had to overcome some of the challenges related to student-led assessment. One source of stress for the teachers was the time taken away from teaching curriculum content. This was particularly relevant early in the study when student-led assessment involved longer periods of class time

since both students and teachers were unfamiliar with the expectations or routines of student-led assessment (and see Chapter 4). However, teachers and students quickly developed the skillset needed to generate quality success criteria, targets and assessment knowledge. Klenowski and Wyatt-Smith (2013) call for recognising quality over quantity in this area by enabling learners to identify this themselves and apply it to their own work by 'front-ending' assessment. This involves using Assessment for Learning throughout the process, rather than putting assessment at the end of learning where it is treated as a discrete element of the learning process. In front-ending assessment, the teacher makes connections with the assessment as an integrated part of the curriculum and learning – similar to classical versions of Assessment for Learning – which improves assessment by blending it into the process of learning, making the assessment itself educationally beneficial. Furthermore, integrating Assessment as Learning keeps students actively engaged throughout the process so that they are better able to review and reflect upon the process to enhance their learning (Earl & Katz, 2006).

According to Elwood and Murphy (2015), there exist different theories and perceptions of learning and learners, which continue to influence beliefs about assessment. They explain how 'assessment is a historically produced discursive construct, which acts as a resource to constitute practices' (p. 183). They also explain that understanding assessment and what it is for, as well as its ontological and epistemological preconceptions underpinning it, are factors of cultural identity that have been ingrained in educational systems globally. In the case of Malaysia and as explained in Chapter 1, the style of teacher-centred and book-centred education may limit interpretation and expression of opinions (Liu & Littlewood, 1997). These vital sociocultural considerations

were discussed with teachers prior to commencement of the study, so that they were aware of the differences within Asian culture and education, particularly as the teachers had been trained and previously worked in at least one Western country.

Since appreciating cultural differences is a part of our daily job, our assessment regime considered the meanings and social structures that influence students and their parents. International schools are relatively new in Malaysia and the students' parents are mostly from Confucius traditional schooling. Most children at our school had previously attended a local, traditional school (see Chapter 1). Our Mandarin and Bahasa language classes also follow traditional book-centred learning so all students have experienced Confucius education styles. Teachers noted that children were not risk-takers and had expressed uncertainty about their abilities to lead assessment. This is typical of a sociocultural script that had previously shaped learners. However, the present study showed that, with teacher guidance, the students could adopt new scripts and embrace new teaching and learning methods.

There is also a sociocultural perspective that exists when students participate in their learning, creating a sense of belonging and ownership as students develop into autonomous learners (Black & Wiliam, 1998). The present research involved both teachers and students participating in their own learning, *changing their perspectives* on teaching and learning to work collaboratively. The role of the teacher shifted to become more focused on empowering the students by enabling them to develop the skills and tools required to become self-regulating learners. Since the students had little to no experience with student-led assessment prior to commencing this study, this process

involved teachers enabling students to develop emergent skills through teacher formative feedback – a point Timperley and Parr (2009) stress requires 'considerable teacher pedagogical content knowledge' (p. 68). Learning, Hayward (2012) explains, is part of a sociocultural process whereby knowledge is co-constructed within a community of learners. This process, Elwood and Murphy (2015) posit, begins when teachers pass on their knowledge and students learn through these social influences in a sociocultural fashion whereby 'concepts are socially determined and acquired, and understanding is achieved through individuals appropriating shared meanings through discussion and negotiation' (p. 187). Teachers learn to use tools as part of developing a philosophy of education that enables them to improve the students' learning and acknowledge the relationship between that students' learning and the context of the learning. Learners, Hayward explains, learn by working with one another, such as through peer-assessment. This was also the case for the teachers in this study, who were also immersed in the shared learning process, as well as for the students, who were taking up and utilising the tools as learned and crafted by their teachers.

As such, the teachers became guiding mentors through constructive, direct and iterative feedback, working to better the students' understanding of their capabilities and their confidence in themselves as active, engaged learners. Findings from this study were, therefore, consistent with the idea that the acquisition of knowledge was part of the social practice adopted by teachers, since teachers soon realised that students developed their understandings at different rates and that teacher pedagogy had to be tailored to each. This is because, as described by the teachers, some students, approximately 10-20%, were able to learn the concepts of student-led assessment 'very quickly'. Others,

approximately 70%, developed the skills to self-assess within the 13-week trial. The remaining 10-20% still struggled at the end of the trial period and, as explained by Kelly, needed '*more time and training*'.

The discussion on sociocultural learning also gives rise to the notion that assessment as a pedagogical tool enables the teacher and student to form a partnership in learning (Smith, 2015). It is the tools of assessment that allow teachers to develop an understanding of the theories, since "assessment is a core pedagogical tool for strengthening a broader concept of learning than what can be measured by standardized tests" (Smith, 2015, p. 174). However, as Smith argues, to embed assessment as a tool, student learning has to be embedded in the culture of schools, namely through using AfL and enabling students to acquire understanding through the process of learning, as was done in this study.

The conflicted nature of some of these approaches seems always destined to be revealed in their enactment in diverse school settings where school cultures may well have a predetermined emphasis on particular models of knowledge acquisition, attainment, qualification and parental expectation. In all cases, teachers have to work within these environments in ways which respect those environments but nevertheless pursue faithfully values and insights into effective learning which properly support their students.

Heitink, Van der Kleij, Veldkamp, Schildkamp and Kippers (2016) also underline the need to examine the many factors that influence the *quality* of assessment, including the role of the teacher and the student, as well as the nature of the assessment and the context

in which it is designed and takes place. In their systematic study of 60 suitable, evidence-based AfL studies occurring after 1998, Heitink et al. analyse those factors relating to AfL that either enhance or hinder its effectiveness. The factors that contributed to enhanced assessment and targeted feedback were: *teacher interpretation of assessment; student participation in their assessment;* and *teacher autonomy and collaboration*. This is a promising complement to the findings of this study, as Heitink et al. stress the importance of fostering student autonomy by 'helping students learn how to learn' (p. 51). The concept of teaching students *how* to learn has been a long-time goal of Black and Wiliam's (1998) work and was a fundamental element of this study. As feedback is regularly given by the teacher to the student, Elwood and Klenowski (2002) explain that students begin to develop the skills to engage in their assessment and learning, as well as that of their peers. This is also reinforced by the role of AfL, which ties together the role of the student and the teacher in furthering understanding of assessment.

Emphasising quality progression over quantity

Black and Wiliam (1998) argue that the quality of student and teacher interaction is vital to teaching and pedagogy. Throughout the last 20 years of education, assessment in the developed world has largely been focused on producing favourable results with a corresponding overemphasis on quantity over quality (Carless et al., 2011). Often, teachers are subjected to prodigious workloads that include providing copious individual feedback and marking assessment – a factor that can, of course, inhibit their ability to give 'good' feedback (Glover & Brown, 2006).

In many schools, there is, for example, an expectation that every page of a workbook

should be corrected – a significant workload issue, leaving teachers feeling overwhelmed (Henton & Brennan, 2017). In fact, in a study that surveyed 1,382 teachers in England, 72% responded that they wrote targets for students on all or most pieces of work. This does not include identifying and correcting errors, which 50% of the respondents said they also do (Elliott et al., 2016). Such detailed marking is not only time-consuming for the teacher but almost certainly counterproductive, since the findings in this and other studies suggest that the students often do not read the comments from teachers. Students in this study admitted that they often did not read the comments made on their work, meaning that much of the teacher assessment was being paid no attention by its audience. This makes a stronger case for student-led assessment.

As noted above, the teachers involved in this study commented that the student-led assessment initiatives that we discussed were time consuming. Their sentiments are closely connected to research that suggests gathering formative information related to student progress is always a time consuming process, leaving few opportunities to integrate alternative assessment techniques (Earl, 2012). Although time consuming, Marshall and Drummond (2006) found that when teachers introduced Assessment for Learning through questioning, feedback, self-assessment and shared success criteria, the assessment was found to be much more useful and of higher quality, contributing towards greater student autonomy. This was also found by the teachers in this project, who observed that, although their workload was increased and more lesson time was spent working with the students on assessment, the students greatly developed into more independent, motivated and able learners.

Having embraced the core values of the project, the teachers repeatedly expressed how important it was for student-led assessment to be integrated throughout the curriculum and across learning, and not simply 'done to be done' – so that students could benefit from an 'Assessment for Learning' environment by discussing the expectations, asking questions and gaining a grasp of how their work related to their objectives. The teachers' views are supported by Havnes, Smith, Dysthe and Ludvigsen (2012), who explain that assessment methods should 'not relate only to written feedback on formal assignments, but also to developing feedback practices that are closely integrated into classroom instruction and are not viewed as 'added on' activities' (p. 27). The need for activities to be embedded into the curriculum and learning was also expressed by the teachers in this study, potentially alleviating the pressure they felt from working towards goals that were not, apparently, curriculum-derived. However, this also suggests that teachers still viewed assessment as a separate task, unrelated to curriculum objectives and learning. This explains why many discussions involved how to tailor the project into their normal learning routines. As the performance phase progressed, timing remained a topic of concern, albeit less so than at the onset of the study. Despite this, the teachers continued, even at the end of the study, to feel as if meeting curriculum objectives and maintaining the standard was more important than embedding beneficial quality learning from the project philosophy. While this was in certain respects disappointing, it shows clearly that in some instances a significant shift in thinking may be needed for teachers to value pupil autonomy at levels commensurate with best, student-led practice (Marshall & Drummond, 2006).

The teachers' devotion to the curriculum may stem from the accountability culture that

has mushroomed in global education, particularly in centralised organisations where decisions are made at the top and are adopted throughout the entire organisational structure (Heitink et al., 2016). This may also account for some of the quantity or acknowledgment marking. Our schooling structure, although decentralised, was still not enough to subdue fears about prioritising objectives over learning even though the teachers agreed that the students were making strong progress and that student-led assessment was indeed beneficial to their learning. Initially, teachers felt that spending a 40-minute learning block on a rubric was 'a waste' because they could not pay the time towards checking off a prescribed curriculum objective. This perception shifted with two of the teachers, although Cameron remained firm about not using class time for rubrics and student-generated success criteria. Changing this would involve a mental shift, as teachers would need to see that the foundations of student-led assessment contribute towards more autonomous and self-directive students in the long run. It would also involve teachers leaving behind transmissive teaching styles, and recognising that for some adopting new, creative styles may be uncomfortable, time consuming or stressful. I am hopeful that effective student-led assessment may be able to break up the performativity culture that is at the heart of these neo-liberal practices. Such a culture, based upon maximising efficiency over effective learning, is, as much research suggests, deeply ingrained in education. Assertively, promoting the shared power and responsibility of assessment may be one way to break open these constricting regimes, to allow for new possibilities to enfranchise and extend autonomy and creativity back to the protagonists – students and teachers.

Conclusion

Throughout this dissertation, student understanding was checked through regular questioning, initially by only their teacher but, as the study progressed, the students and their peers took over this themselves. Students were initially introduced to more brief response checks before being guided into questioning that targeted developing deeper understanding and reflection (Boud, 2013). This involved teachers developing their skillset, not just with questioning, but with all of the tools that were introduced. Their knowledge and training in the domain of student-led assessment contributed towards more knowledgeable practitioners who could more valuably contribute to the students' learning across the board.

The focus for the teachers and for me became more centered on the *process* of learning and less so on the final result. Carless (2015) found that students who partook in the assessment process as part of their learning developed an enhanced breadth of learning. This was also explained in Chapter 2 as 'assessment as learning', or the idea that enabling students to critically analyse their work and to develop an understanding of the success criteria and their level respective to them provides a more productive learning experience (MacMath et al., 2009). Findings from this study were also consistent with the idea that learning may be improved when students engage actively by reflecting and reviewing their learning (Earl & Katz, 2006).

However, the most significant finding, in my view, was that although students were eager and able to adopt student-led assessment, teachers' commitment to Assessment for Learning and introducing new skills remained wedded to their involvement and

commitment. This dissertation suggests that student-led assessment is possible when teachers are fully invested, as Jan showed to an exemplary extent, followed by Kelly who met the expectations and standards set in our teach focus groups. Cameron, comparatively, often lacked dedication and drive to commit, which had direct implications on the students. More regarding the future implications for student-led assessment will be discussed in the coming chapter.

Chapter 6:

Implications for the present study and for educational futures

Chapter organisation

In this final chapter, I present a summary of my research, as well as the pedagogical and practical findings that arose from this study. This chapter considers the implications for policy and practice before discussing educational futures and areas for future research. The chapter concludes with the study's limitations and my personal reflections on practice.

Study synthesis and problem revisited

As explained in Chapter 1, my motivations for this dissertation arose from the fact that, often, students are unable to exercise their right of choice and decision-making in matters that affect their learning. In Chapter 2: Part I, I explained the political and social perspectives that have, in the past, driven and influenced assessment regimes. This involves the shift from the years of autonomous classroom practitioners developing their own strategies (Stenhouse, 1980) to a gradual push to standardisation, inspections, reporting and accountability (Whetton, 2009; Wyse & Opfer, 2010). This historical past has powerful ramifications for the contemporary climate and culture of assessment, not only in the UK but also for international schools, such as the one in the present study. After Chapter 2: Part I's emphasis on the UK's political past, shortcomings within the assessment practices were drawn out and discussed in Chapter 2: Part II. This led to a developed understanding of the deficit areas that plague our assessment system – namely

– marking that reinforces underachievement, a lack of formative assessment, a lack of effective learning, deficits in assessment quality, an overemphasis on quantity, a lack of teachers' understanding and greater stress upon marking rather than progression. Chapter 3, Methodology, explained how this qualitative study sought to investigate the impact of introducing student-led assessment into Year 4 classrooms to explore how motivations and student learning changed over the course of a 13-week trial. Chapter 4 reported the findings of the study, which can be succinctly found in Table 4.1. The aim of this study, as was set out in Chapter 5, was to identify ways to improve the deficit areas by establishing an assessment system that nurtures self-regulation and contributes to more able learners. This includes creating transformations in the marking, to ensure it is clear and that the students contribute; that formative assessment comes from and involves the child; that learning is made more effective by integrating assessment into the curriculum; that assessment becomes regular and clear; and that teachers' understanding of assessment embraces practices that involve students in *all* of the work that affects them.

Of great significance to this study was understanding formative assessment and self-regulation within the primary classroom (see Chapter 2: Part II). A fundamental motivation for the study was recognition of the lack of student perspective and the subordination of students to the dominant assessment and accountability practices within education (Klenowski & Wyatt-Smith, 2013). The research in this study is of educational value primarily because of the unique nature of the enquiry and the many components analysed. Shifting control from teacher to student provides valuable learning opportunities that showcase means of assisting *all* students in developing the needed tools to be successful in self-regulation and self-improvement.

Implications and challenges for policy and practice in primary education

Although this study lends itself to many domains of educational research, it makes no claims that the shifts in student and teacher perceptions would be representative of all Year 4 classrooms. However, the above findings do indicate that there is a justification for researching further into student-led assessment, in order to more comprehensively understand student involvement and to enhance current practices.

While this dissertation is aimed at expanding our current knowledge and understanding of student-led assessment, it of course captures only some of the factors involved in using student-led assessment with primary-aged children across diverse culture and national contexts. It has, however, added new findings to a relatively unexplored area of assessment theory and practice (see Chapter 1 for research involving student-led assessment, namely with older students; see Chapter 5 for findings relating to primary).

There are several key findings that can be used to guide primary education in making improvements to institutional policy and educational practice, as outlined in Chapters 4 and 5. These are predicated on a key assumption running through all of the research: that the trends identified in the sampled school, while influence by local conditions, typify patterns of practice now visible all over an increasingly homogenised and performative global culture of outcome-driven primary education.

A prominent finding includes the importance of teacher motivations and experiences, and the effects of these on student motivations. Another is the need for an educational system that recognises the importance of shaping assessment so that *all* students' needs are

accommodated – not simply those who are able to achieve well in 'favourable conditions'. Revisiting the concept of academic buoyancy, introduced in Chapter 2, Martin and Marsh (2008) suggest that prevailing education systems as currently organised mostly benefit students who are able to cope with academic setbacks and struggles. Academic buoyancy enhances one's capacity to take responsibility for one's goals, in a way similar to how student-led assessment requires students to take responsibility for their learning. Findings from this present study suggest that some of the lower ability children struggled initially to self-regulate their own learning since they did not have a fully developed concept of their attainment but, with time, the students were able to grasp the concept. By the end of the 13-week trial, *nearly all* students were able accurately to predict their grades and discuss realistic targets for success. This implies that *some* students need additional guidance from their teacher to be able to reach a desired level of academic buoyancy, that student-led assessment may provide an effective means to ensure more students are able to learn the skills of such academic buoyancy at school. This may help to create a system within which the early years of primary build the foundation, integrating developmentally appropriate and incremental introductions to student-led assessment, so that students have more evenly developed senses of buoyancy as they progress through school by being empowered as self-assessors from the earliest stages (see Chapter 2: Part I for a discussion of the merits of academic buoyancy within education).

Application of Dweck's (2006) notions of agency development, autonomy and self-fashioning encourages the formation of autonomous and self-regulatory learners. Dweck argues that these skills must be learned at school since the skillset that children arrive

with does not necessarily include the ability to engage with self-regulatory learning. Findings from the present study indicate that student motivations towards assessment remained high as students learned to manage their learning – even those who were low achievers, and even though these students tended to require more teacher input. Teacher input involved the three trained teachers providing individualised feedback to children, enabling them to develop the thinking processes to then hone their ability to identify successes and challenges within their work and then devise steps for improvement. Dweck (2006) explains that some students come to school with a growth mindset and the ability to self-motivate, and are therefore more prone to success – but that others require more input. Nagy (2016) explains that herein lies the paradox – those who need their academic successes affirmed most rarely develop the academic motivation to succeed. This is because our educational system focuses on summative results and neglects the process of effort – effort and will do not equate to results, a fact that students can find discouraging. This study calls for educational systems that allow all children to succeed by providing them the skills needed to cope in an environment that recognises potential and effort, as well as success. This involves nurturing all learners into becoming self-regulating, with a consequently enhanced academic buoyancy.

Although all teachers noticed positive changes in their students learning and autonomy, the study was not without its challenges. As an example from the present study, one teacher in particular, Cameron, was slow to develop student-led assessment using the approaches planned and agreed upon. This led to one class receiving differing amounts of exposure to student-led assessment, highlighting that teacher experiences and beliefs may influence pedagogical approaches. The study involved shifting algorithms of control and

hierarchy, as teachers were asked to surrender the reigns of authority, rethinking the parametres that guide teaching and learning. For Cameron, relinquishing the control of power and management over assessment, as well as the identity as the director of the classroom, proved difficult, which was expressed in both focus groups and Cameron's interviews. Nevertheless, this small-scale study had the advantage of being close-range and tight-knit so these insecurities were discussed and addressed. This meant that teachers were directly exposed to research-informed assessment practices on a regular basis and that they were, to varying degrees, implementing the core concepts and values of student-led assessment even where they did so with varying degrees of trepidation and uncertainty. Piloting the project on a larger scale would likely yield different results and different challenges. It might be difficult to create a 'manifesto' that teachers could follow since the nature of this study involved iterative rounds of teacher input and discussions of the student-led assessment process that would be hard to sustain on a larger scale. It might be very difficult if the teacher training sessions were delivered to a larger group and without so much teacher-to-teacher dialogue. This will also be further discussed in the section on 'Implications for future research'.

However, challenging does not mean impossible. Introducing this model of student-led assessment would involve, firstly, more extensively fieldwork, to determine more precisely the successes and challenges of the movement with larger groups of teachers. It would likely involve a cyclical professional development course, as explained by Van der Hurk et al. (2016), designed to explain to teachers the motives for and implications of using student-led assessment. This would involve teachers working through Zimmerman's *forethought, performance* and *self-reflection phases* (as explained in

Chapter 2 and 3) to integrate their ideas and tailor the model to their own classrooms and their own learners. It might also involve a specific resource pack of tools that practitioners could use. This is why the tools for implementation, such as the student-generated rubrics, targets and traffic lights, were so important in this project and used carefully to scaffold the teachers' and students' understanding of the processes involved – because these then set the standard for good quality and useful student-led assessment tools throughout.

Although there are many factors to consider, the root remains that policies and practices which govern education should focus on enabling students to participate in their learning and ought also to present opportunities for students to be more autonomous in order to develop the necessary skills for leading their own lifelong learning. It is then how we bring these ideas and concepts to teachers that may affect the successes of this particular model of assessment. Based on the findings from the present study, and given the context of a British international school in Malaysia, the practices of assessment *as* and *for* learning, embedded within student-led assessment, proved beneficial for the population of 28 student participants and three teacher participants. Their understanding of and affinity towards student-led assessment improved, as did their learning, and as a result, this method of assessment should now be considered to be embedded into the daily routines and practices of these classes in this school.

Study limitations

There are limitations to this study, as with any research study. As practitioner research, the scope of the research was limited to three classes in one school and, therefore, the

results may not be universalisable to other classes or contexts. It should be stated, however, that research presented in Chapters 1, 2 and 5, as well as in the findings in Chapter 4, indicate more widely that assessment can be used to further student learning when students are actually allowed to participate in the process (see, for example, Absolum et al., 2009; Falchikov, 2004; Nicol & Macfarlane-Dick, 2006; Sadler, 2010). Since this project was applied to Year 4 classes, a larger sample including different year groups or other Year 4 classes at other schools may have added different perspectives and produced different data without undermining the central hypotheses of the present study.

Secondly, the information gathered was relative to the lived experiences and perspectives of the students and teachers in this particular school in Malaysia. Patton (2005) explains how the data lies in the eyes of the beholder. The demographic at our school is not reflective of the country's populations and cannot be applied uncritically to such. However, this research study generated new data and new professional knowledge involving international schools in Malaysia – a scarcely investigated demographic and environment. Furthermore, the data might well serve comparatively to inform judgements regarding international schools in both Asia and beyond, especially those interested in the student-led assessment approach.

Given my prominent involvement as a researcher in this dissertation, I acknowledge that I am critical to the research process documented here. My social ideals, values and beliefs are more or less ingrained, and furthermore my role undoubtedly has had a 'significant bearing on the nature of the data collected and the interpretation of the data' (Denscombe, 2014, p. 245). This is a characteristic of the paradigm I selected – interpretivism

acknowledges that researchers bring their experiences and values into the research, which is a reason why interpretivism suited my style of enquiry and advocacy (Creswell, 2012). However, researcher bias was minimised through my commitment to transparent and descriptive methods undertaken when selecting participants, collecting data and analysing the findings (Lincoln & Guba, 1985). Furthermore, my findings were double-checked by my supervisor to ensure consistency.

Gallagher et al. (2010) explain how children in groups are 'subject to peer group dynamics, relationships with parents and teachers, institutions and hierarchies' (p. 479). To eliminate this, there was a strong emphasis on the importance of honesty and candour. Moreover, the project took an informal, child-friendly and accepting approach so that fears about repercussions for such honesty were dispelled as much as possible (Wilson, 2017).

Using the principles of action research, I acknowledge that each student and teacher will have a different understanding and account of their experiences and perceptions of student-led assessment, rejecting the idea of generalisable statements (Carr & Kemmis, 2003). However, despite the present study being small scale, the findings from it resonate with previous research indicating that students assessing their own work contributes to increased achievement and understanding (McDonald & Boud, 2003; Ross & Starling, 2005). As Carr and Kemmis explain, action research serves to integrate democratic processes into the research whereby participants, in this case the teachers and students, influence the conditions of the study.

The complexity of the study was another limitation. Since there were many factors being introduced and analysed as part of the model of student-led assessment, it is difficult to know what role – and to what degree each of the various interventions served. Many of the tools implemented have been researched previously (see Chapter 2B for a list of each tool and the research grounding their implementation). The study looked at all implements and tools together (the process of student-led assessment paired with student-generated rubrics, questioning, student-written reports, student-generated targets and student-led parent meetings). The study therefore yielded rich data and each tool reinforced the findings. Looking in future at each of the above-listed tools separately would help to give a more comprehensive understanding of the roles that each played in contributing to student-led assessment. This would allow greater, more granulated data on how each tool affected the learning and which tools, if any, were most effective in enhancing motivation and self-regulation within a student-led assessment environment.

A final limitation in this study was timing. Being able to create a large-scale study involving multiple classes and years (for example, consulting students and teachers in Year 2, 3, 4, 5 and 6 throughout a 2-year study) would have received a larger range of more diverse perspectives. Having just a term was limiting, although it still managed to surface extremely interesting and diverse perspectives and factors.

Contributions to disciplinary knowledge

It is a common expectation that doctoral theses should contribute to new knowledge within academic culture and expand the breadth of literature available regarding a specific field (Baptista et al., 2015). This is inflected in a particularly attractive form in a

professional doctorate where situated knowledge and frontline participation lends itself to the creation of new knowledge and procedures.

After years of working with the idea of student-led assessment, I genuinely believe this goal has been achieved. Firstly, the sample, context and approach were different from existing populations, which provide a new outlook towards English assessment in international schools. More importantly, as Robinson (2014) explains, the voices and perceptions of primary-aged children relating to assessment are underrepresented in research. Since there are few studies that analyse student-led assessment and student voice by allowing children to play such a large and influential role within the assessment process, the findings of this study provide a valuable intersection between student ability and voice.

Further, the connection between self-regulation and motivation, while creating transformations in the teaching and assessment, allows us to more clearly understand a truly student-focused process that would allow primary-aged children to be involved within their assessment. This study corroborates findings that children benefit from a clear feedback process (Brown & Harris, 2014; Christodoulou, 2017; Elwood & Klenowski, 2002; Timperley & Parr, 2009), that their motivations increase when they are involved in their learning (Black & Wiliam, 1998; Doddington et al., 2001; Harlen & Deakin Crick, 2003; Miller & Lavin, 2007) and that student understanding is enhanced through student involvement (Carless, 2015; Earl & Katz, 2006; MacMath et al., 2009; McDonald & Boud, 2003). Additionally, through the 13-week trial, the relationship between self-regulation and motivation became clearer. As students in Year 4 were

involved in the process of regulating their learning through assessment, their interest in and dedication to self-assessment became more evident, as described by the teachers. The students' views of assessment were altered, and they showed an improved level of awareness as the trial period progressed, including increased motivation, enhanced understanding and more advanced autonomy within the classroom. Integrating assessment dialogue whereby teachers balanced the interplay between motivation and self-regulation was fundamental to the presentation of learning opportunities that resonated with the students. For example, all three teachers observed that the students developed a more advanced understanding of the assessment process and that as students understood that their role within the classroom, they became more motivated to be involved and further their own learning.

In all, this study has found that altering controllable elements within the classroom, such as the approach from which assessment is taught, can create substantial changes in the learning, understanding and motivation of primary-aged students.

Recommendations for educational futures

Eighteen months since the outset of this dissertation, I understand more clearly student capabilities and am a stronger advocate than ever for the rights of children. Children are highly capable of exercising rational judgement when given the chance and correct guidance. As a result of this dissertation, I have three main recommendations to practitioners in education and everyone interested in, or responsible for, assessment policy. These recommendations are below:

    1. As Hayward and Spencer (2014) explain, 'Good assessment begins from the

curriculum, from having a clear understanding of what matters in it and what progression for learners might look like' (p. 193). Teaching and learning must involve assessment as an embedded practice rather than a discrete subject or topic that has more challenging student-led assessment tools as children progress through schooling. This involves those making centralised decisions – namely those within policy and curriculum development communities – understanding that the skills involved in student-led assessment are not discreet but, rather, a part of a continuum of learning that impinge on all facets of education. This also entails building an education system that eliminates fears stemming from the accountability culture and exaggerated curriculum demands, since these prevent teachers from using alternative approaches to assessment (Heitink et al., 2016). If student-led assessment were a part of the regular curriculum in all areas of study, embedded in productive ways, it could demonstrate the importance of ensuring all children are endowed with the tools to be successful and self-regulatory by moving standards away from an obsession with end-points. Putting greater emphasis on the learning and the role of students as active and self-regulated learners would contribute to students who were, as described above, more academically buoyant.

2. There cannot be curriculum changes without altering teacher practice (Stenhouse, 1975). As part of an integrated curriculum, teachers must also be trained in using the methods of student-led assessment and this study suggests following a cyclical pattern of training to maximise teacher understanding and effectiveness (Van der Hurk et al., 2016).

3. Regularly use classroom assessment routines that require student participation and discuss these often with the students. This may be a gradual introduction, such as traffic light stamps, student-generated targets or insisting that students respond to all

feedback from early primary stages onwards. Enabling students to develop a sense of ownership and control of their learning scaffolds their ability to be critical, efficacious and motivated thinkers. This also involves making curriculum material accessible to students, as most primary students do not have the vocabulary to understand the educational language that teachers and policy-makers use in documentation relating to student learning. Children would benefit from being involved in formulating curriculum objectives *as an expectation embedded in the curriculum itself* and would gain better understanding of their own central position in achieving these objectives.

Recommendations for future research

As explained above, there are several limitations to this study, as it is a single-setting, qualitative practitioner research study. However, it poses great potential for future research. In order to enlarge this field of research, I have three recommendations for future study.

The first recommendation to extend the body of knowledge in this topic area would be to integrate a larger, more statistically significant sample of both students and teachers. This upscaling would provide a greater data presence that would in turn afford a stronger indicator of the participants' perceptions and their influence on student-led assessment. Within this data, I would further suggest that both qualitative and quantitative methods are used in the subsequent analysis, with a view to clarifying the factors that contribute to the changing perceptions of students and teachers in the domain.

A second recommendation is to extend the breadth of the research to analyse how other

heads of schools or principals would react in similar situations. Mentoring is a common practice with heads and teachers. My passion for and knowledge of assessment were factors that influenced this study and the integration of student-led assessment and student voice into the project – it is likely that other professionals would have different perspectives and opinions if placed in a collaborative, group-mentoring environment with their staff while attempting to integrate student-led assessment into their assessment regimes.

A third recommendation to extend this research would be to examine the effects of professional training for teachers when they are provided with greater autonomy in decision-making but are given guidance and parameters. Teachers should feel confident acting as facilitators and guiding students through the journey of knowledge but, as we learned, there are many factors such as curriculum expectations and timing, which may impinge on teacher professional judgement in education. Investing in teachers who are trained in embedding self-regulation and self-monitoring in children may have a rippling effect throughout education. As Tischler (2007) points out, directive approaches to professional development suppress teacher autonomy and creativity, thus decreasing the levels of teacher competence and their drive for lifelong learning. Providing teacher training that encompasses more cognitive involvement and calls for more interactive and constructive dialogue may see the rise of more qualified and more 'invested' teachers. We should strive to open dialogue about learning communities where all parties are committed to ensuring learners have the capacities to tackle challenges confidently with strong motivation and self-regulation.

Reflections on practice

Upon completing the study and my first year as Head of Primary, this research prompted the Primary Coordinators and I to introduce this concept throughout the primary school. Beginning in Year 1, we instated a progression of student-led assessment, beginning with simple traffic light stamps and tick lists, then developing into more elaborate student-generated rubrics and self-monitoring in higher grades. As a school leader, I call upon other leaders to embed this model into the teaching and learning of their school. This developmental model of integrating students into the assessment process has shown to be not only beneficial for the individual students but for their teachers, parents and the larger community of education.

The volume of academic literature pertaining to formative assessment is large and it is refreshing to see the growing research on students' involvement in the assessment process. Although relatively unexplored, the idea of student-led assessment, whether it is formative or summative, has potential for increasing student understanding, autonomy, motivation and self-regulation.

My interest in student voice existed long before this dissertation started. Others like me have been challenging the roles of student involvement and agency throughout the last few decades, calling for students to actively engage in decisions that affect them (Bahou, 2011). Injustices within our society are exacerbated by education systems that do not value the perspectives and opinions of all who are affected by them (United Nations General Assembly, 1989). Ensuring that *all* students have the opportunity to learn the skills needed for academic buoyancy in the face of struggle, and self-regulation in the

early years of their lives, may help to set more paths straight in childhood and beyond. Although a perfect education system likely does not exist, we must still strive to highlight more 'rights' in the eyes of children.

As a final remark to students, educators and researchers: kindly be reminded of the root of the word 'assessment' – 'to sit beside' (Ory, 2000). We must strive to use assessment for the purposes for which it was created – to vouchsafe a collaborative process whereby the learner's understanding is enhanced and appreciated and the teacher's role transformed.

Appendix A: Year 4 blank rubric template

Success Criteria	Excellent!	Very good	Below average	Unsatisfactory
	.			

Reply to rubric:

_____

_____

_____

Appendix B: Year 4 analytic rubric example

Year 4 Snake Poetry Rubric

CATEGORY	Exemplary	Accomplished	Developing	Beginning
Required forms	Creatively uses correct poetic forms.	Effectively uses poetic forms.	Attempts to use form but not quite correctly.	Does not use poetic form.
Word usage	Precise, vivid vocabulary paints a strong clear and complete picture in the reader's mind.	Routine and workable vocabulary.	Vocabulary is more telling than showing.	Vocabulary is very basic.
Poetic technique	Effectively uses lines, space and stanza to reinforce rhythm.	Lines, space and stanza reinforce rhythm.	Lines, space and stanza attempt to reinforce rhythm.	Missing lines, space or stanzas.
Conventions	No errors!	Few errors; do not affect reading.	Multiple errors; affect meaning.	Many errors; lacks meaning.
Effort	Goes beyond the requirements!	Shows understanding of the assignment.	Demonstrates some understanding of the assignment OR did not make proper use of in-class work time.	Lacks understanding of assignment AND did not make proper use of in-class work time.
Illustrations/bord	Effective and creative use of illustration enhances poems' meaning.	Illustration enhances poems' meaning.	Illustrations show meaning.	Lack illustrations.
Creativity	Student uses variety of creative techniques to bring recitation to life.	Student uses creative technique to add interest to recitation.	Student attempts to creatively interpret recitation.	Students knows poem but does nothing extra or makes multiple errors.

Appendix C: Photo-collage of student-generated target displays
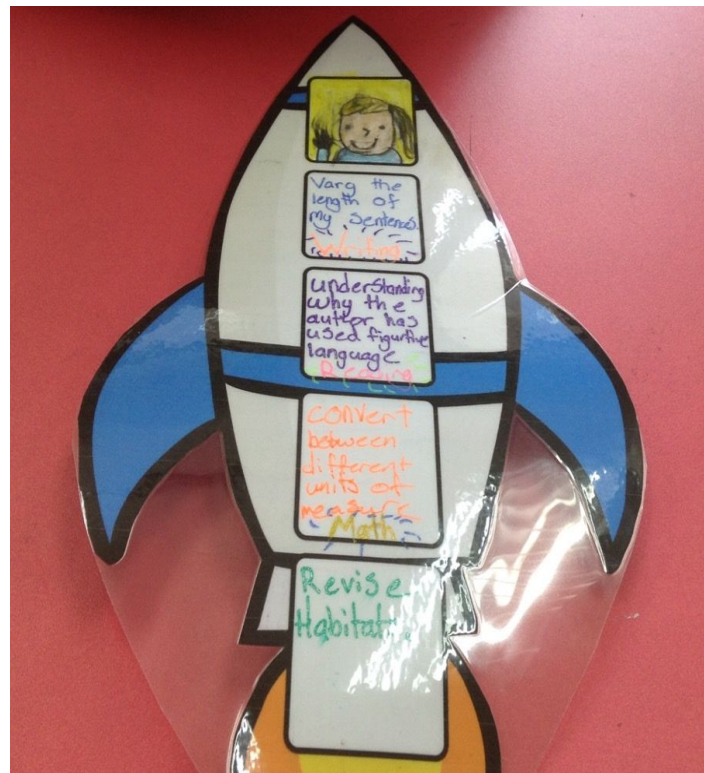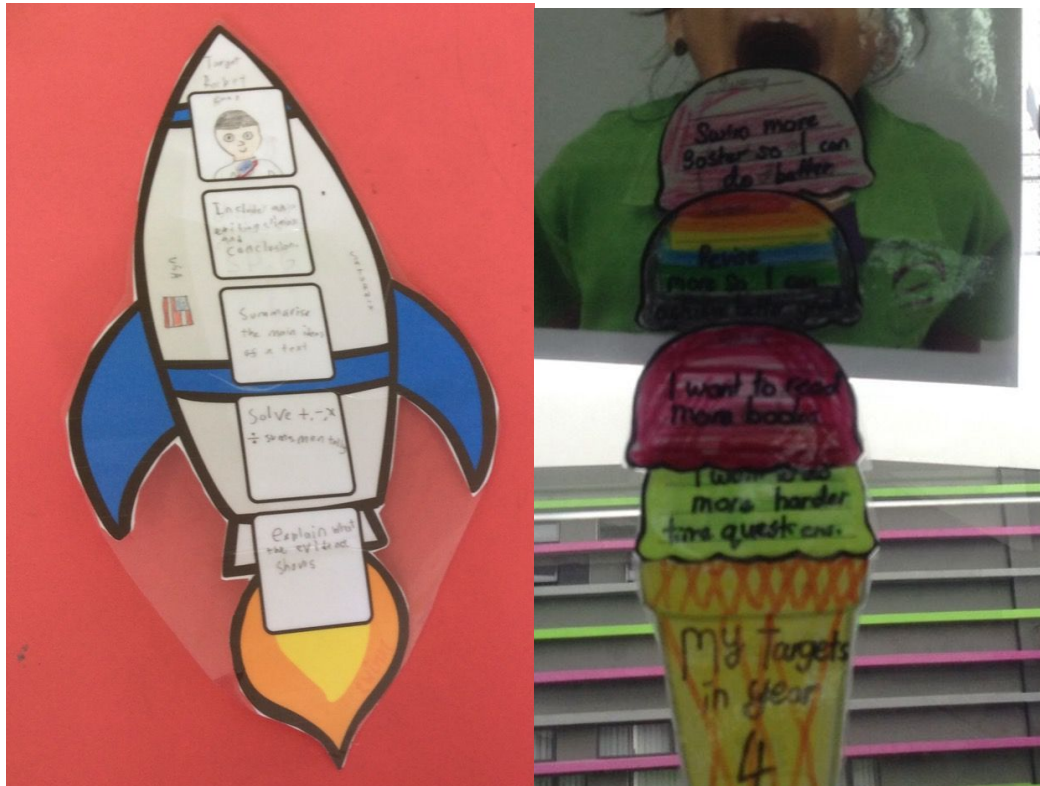
Appendix D: Templates used for student-led conferences

YEAR 4 STUDENT-LED CONFERENCE
REFLECTIONS SHEET FOR WORK HABITS, CLASSROOM BEHAVIOR,
ATTITUDE, & SOCIAL INTERACTION
(2ND TERM – APRIL 2017)

Students: Please make an X in the box that feels best represents where you are in each category. Teachers will mark their impressions with a check mark.

Behaviour , Attitude, Work Habit, Social Interaction	Not developing appropriately for grade level	Making progress & approaching standard	Meets standard expectations	Exceeds standard expectations
Follows directions given in class				
Actively participates in discussions				
Works independently				
Is self-motivated				
Has adequate attention span/ability to focus				
Completes work in a timely manner				
Is self-confident				
Retains information				
Challenges self during work time				
Is neat and orderly				
Demonstrates organisational skills				
Works without distracting others				
Relates well with peers				
Is respectful and courteous				
Assumes responsibility for his/her actions				
Shows pride in his/her work				

YEAR 4
STUDENT-LED CONFERENCE ORGANIZER
(2ND TERM – APRIL 2017)

Introduction

- ○ Knock on the door before entering and introduce your parent/s to your teacher.
- ○ **Collect** your pieces of work/jotters etc. and sit at an available area
- ○ **Explain** the purpose of the conference

Sharing your Work

- ○ Reading
  - • **Read** a paragraph from your 'just right' book
  - • **Explain** Literature Circles
  - • **Share** your celebrations, challenges and goals

- ○ Writing
  - • **Share** your chosen writing pieces, (include a comparison piece from earlier in the year)
  - • **Share** your celebrations, challenges and goals

- ○ Math
  - • **Share** assessment from Geometry
  - • **Show** Key 1-2 pieces of work from math
  - • **Share** your celebrations, challenges and goals

- ○ Science
  - • **Show** 1-2 pieces of work from Science this term and explain what your learned from it
  - • **Share** your celebrations, challenges and goals

Work Habits/Behavior

- ○ **Discuss** your self-evaluation for class behavior
- ○ **Leave** all this with your work on your desk when your leave. We will use this for goal setting in Term 3.

Teacher Input

- ○ **Invite** your teacher to clarify any issues

Relax - You did a great job!

Appendix E: Approval from the school's owner and principal

18 October 2016

To Whom It May Concern,

I am writing in response to the request of Ms. Kate Brennan, Head of Primary at Eaton International School in Kajang, Malaysia. Kate has requested to conduct research within The Year 4 classrooms at Eaton from January 2016 to April 2016. In regards to this, we fully support her and her research involving student-led assessment practices, pending approval from the Ethics Committee.

Kate has informed administration of her intention of working with students and teachers and we both understand and agree to these arrangements. Kate has been granted our approval to contact parents regarding her research, as well to engage with participants within Eaton. We support all voluntary participation of these parties. Consent forms will be signed by all of those involved. Kate will work closely with administration and parents to ensure her research is in the best interests of the children at all times. To date, Kate has shown utmost professionalism when working with parents and students at Eaton thus we have full confidence in her intentions.

If you have any questions, please feel free to contact me, Mrs. Wendy Teo, Principal.

Kind regards,

Wendy Teo
Principal

Eaton International School
Persiaran Puncak Utama,
Jade Hills, 43000 Kajang
Selangor Darul Ehsan, Malaysia
T: 03-8741 4085   F: 03-8741 5085
www.eaton.edu.my

Appendix F: Teacher participant information sheets and consent forms

University of Glasgow

College of Social Sciences

Participant Information Sheet for Teachers

Study title: Investigating student-led assessment practices in Year 4 classes

Researcher: Kate Brennan (k.brennan.2@research.gla.ac.uk)

Principal: Mrs Wendy Teo (wteo@eaton.edu.my)

Supervisor: Professor Robert Davies (Robert.Davis@glasgow.ac.uk)

Trial dates: January 2017 to May 2017

Level of study: Doctoral candidate dissertation research

Introduction

You are being invited to take part in a research study that will be taking place at Eaton International School. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Research Details

You are being asked to take part in a research study involving children's and teachers' perceptions of student-led assessment practices. This involves students helping to decide how assessment will be used within the classroom and what success criteria will be used to assess their work. This will also involve students participating in their own report writing and parent-teacher-student conferences. Then, I will discuss with both you and the children how your perceptions changed and the perceived benefits and challenges of the introduction of student-led assessment in the classroom.

The duration of the study is 4 months. During this time, data will be collected by working focus groups (teachers only), focus groups with both you and the children, as well as through photographs. All data collection will be conducted by me, the researcher, and will take place in your classroom or the surrounding classrooms.

As a group of four (the three Year 4 teachers and myself), we will engage in team mentoring as we work towards developing good professional practice that allows student-led assessment within the classes. This will involve a series of meetings where we discuss tips and techniques for integrating student-led assessment practices. You may be asked to meet during your breaks or after school and I will make every effort to work around your schedule.

The purpose of this study is to better understand how student-led assessment affects children's and teacher's perceptions of learning. All questions will involve feelings regarding student-led

assessment. Neither you nor the children will be asked sensitive questions, nor will anyone be asked to do any strenuous physical activity.

You will be audio-recorded during the focus groups. Audio recording is required for participation in this study. If you do not wish to be audio-recorded, it is not possible to participate in this study.

Potential Benefits

It is my hope that you will gain insight and professional development through this research; however, you may or may not have any direct benefit from being in this research study. This study is designed to learn about teachers' and children's perceptions of student-led assessment, thus the study results may be used to help other children and teachers in the future.

Foreseeable risks

As this study will happen in a school with a small population, anonymity is difficult to assure, as other students and parents of Eaton may know who the participating teachers and students are.

Your participation in this study will likely not involve any physical or emotional risk beyond that of everyday life. However, if you become tired during the tasks, you may take a break at any time. At any time, if you would like to stop the discussions, you may. If you feel uncomfortable, you are free to not answer or skip to the next question. If at any time you would like you withdraw from the study, this is entirely acceptable and no consequences will arise.

Confidentiality

The participants' personal details will be kept confidential. All participants will be identified by pseudonym throughout all documents and in the research paper.

Please note that confidentiality will be maintained as far as it is possible, unless during our conversation a topic arises that indicates someone might be in danger of harm, in which case, I may have to inform relevant agencies.

Results of this study may be used in publications and presentations. In all cases, confidentiality and privacy will be fully maintained. Participant's voices will not be used but direct quotes may be used.

All data will be securely protected by password. Only my supervisor and I will be able to access the data. Data will be kept until December 2018, at which time the data will be destroyed and deleted.

Maintaining Confidentiality

You will be asked, as a part of this study, to agree to confidentiality of all information heard during the course of the focus groups. This means that all information given by the students during the focus groups is entirely private information and should not leave the discussion. You will be asked to agree to this in your Consent Form.

Participant's rights

Participation in this study is voluntary. You may withdraw from this study at any time - you will not be penalised in any way or lose any sort of benefits for deciding to stop participation. If you decide not to be in this study, this will not affect the relationship you have with the school, myself or the other teachers in any way.

If you decide to withdraw from this study, I may ask if the information already collected can be used but you may also choose to withdraw this data.

Financial Information

Participation in this study will involve no cost to you. The researcher will cover any materials needed. You will not be paid for participating in this study.

Approval from Eaton Administration

This project is fully supported by Mrs Wendy Teo. Eaton International School is fully aware of all details regarding the project and is supportive of research being conducted during the school day.

Confirmation of Ethics approval

This project has been considered and approved by the University of Glasgow's College Research Ethics Committee.

Provided are the contact details for further information and where to pursue a complaint, if one should arise:

College of Social Sciences Ethics Officer, **Dr Muir Houston: Muir.Houston@glasgow.ac.uk**

University of Glasgow

College of Social Sciences

Teacher Participant Consent Form

TO BE COMPLETED BY THE INVOLVED TEACHERS

Title of Project: Investigating student-led assessment practices

Name of Researcher: Kate Brennan

Name of Research Supervisor: Professor Robert Davis

Basic consent clauses, statement format

I confirm that I have read and understood the Participant Information Sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

Consent on method clause

I consent to focus groups and working sessions being audio-recorded. I consent that direct quotes may be used in the project.

I acknowledge that copies of transcripts will be returned to participants for verification.

Confidentiality/anonymity clauses

I acknowledge that participants will be referred to by pseudonym; no real names will be used.

I agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group session.

Dependent relationships

I acknowledge that there will be no effect on my working status, relationship with superiors or role within the school from my participation or non-participation in this research.

I acknowledge that I can contact the researcher, Eaton International School or the University of Glasgow regarding any questions I have.

Clauses relating to data storage (you must include one)

I understand that the data collected from this research will be stored securely with my personal details removed and agree for it to be held as set out in the Plain Language Statement.

Basic consent clause, tick box format

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant ....

Signature ....   Date ....

Name of Researcher ....

Signature ....   Date ....

Appendix G: Message sent to all parents regarding the study sent via Dojo

Dear Year 4 Parents,

As you may know, I am currently completing my 4th year of a Doctorate of Education through the University of Glasgow. I am now writing a doctoral thesis about assessment (marking, rubrics, targets, peer and self assessment) and how teachers can improve students' learning by enhancing how much they understand. This includes allowing students to decide how assessment will be used. It also involves students participating in their target setting and report writing which is used during the parent-teacher-student conferences.

The 13-week study will involve several group conversations with students. It will not involve any work outside of school or involve any additional work from parents. I am asking for permission to have these conversations (4 to 6 children together) with your child in a familiar setting without any stress.

Please read the attached "Participant Information" page to better understand this research project. At tomorrow's Curriculum Evening I will discuss this in more detail. All interested parents will be asked to take home a consent form to read and discuss. The consent form is attached for your reference. If you are interested, I would ask that both you and your child sign the consent form and return it to me. We aim to begin by January 11.

I am very open to any questions either at tomorrow's Curriculum Evening or any time after this.

Thank you and I look forward to this opportunity with Year 4 students,

Kate

Appendix H: Participant information sheet for parents and students and consent forms

University of Glasgow

College of Social Sciences

Participant Information Sheet for Parents

Study title: Investigating student-led assessment practices in Year 4 classes

Researcher: Kate Brennan (k.brennan.2@research.gla.ac.uk)

Principal: Mrs Wendy Teo (wteo@eaton.edu.my)

Supervisor: Professor Robert Davies (Robert.Davis@glasgow.ac.uk)

Trial dates: January 2017 to May 2017

Level of study: Doctoral candidate dissertation research

Introduction

Your child is being invited to take part in a research study that will be taking place at Eaton International School. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for carefully reading this.

Research Details

Your child is being asked to take part in a research study involving children's perceptions of student-led assessment. This involves children taking a more active role in their assessment by discussing their own work through self-evaluation. This will also involve students learning to be realistic about their expectations. Then, I will discuss with the children how they feel about the changes and their perceptions of their abilities to make decisions regarding classroom assessment.

The duration of the study is 4 months. During this time, data will be collected by focus group, where classroom teachers will be present, and photographs taken by the students. All data collection will be conducted by me, the researcher, and will take place in their classroom or, in the event that our classroom is occupied, in the library.

The purpose of this study is to better understand how children view assessment, particularly when they play a more active role in deciding what success criteria is used, as well as participating in their report writing and parent-teacher-student conferences. I will discuss with your child how their perceptions changed and the perceived benefits and challenges of the introduction of student-led assessment in the classroom. All questions will involve feelings regarding assessment practices. Children will not be asked any sensitive questions. They will not be asked to do any lifting or strenuous physical activity.

Your child will be audio-recorded answering questions during focus groups. Audio recording is required for participation in this study. If your child does not wish to be audio-recorded, it is not possible for your child to be in this study.

Potential Benefits

Your child may or may not have any direct benefit from being in this research study. This study is designed to learn more about teachers' and children's perceptions of assessment. The study results may be used to help other children in the future.

Foreseeable risks

As the sample size is small, anonymity is difficult to assure, as other students and parents of Eaton may know who the participants are. Your child's participation in this study will likely not involve any physical or emotional risk to your child beyond that of everyday life. However, if your child becomes tired during the tasks, your child may take a break at any time. At any time, your child may tell the interviewer if he/she wants to stop. If your child is uncomfortable, they are free to not answer or skip to the next question. If your child becomes upset, management and/or Dr Sem will be immediately called and pastoral support will be given. Parents will be immediately notified of any such event.

Confidentiality

Although the teachers and I will take every precaution to maintain confidentiality, the nature of focus groups prevents the researchers from guaranteeing confidentiality. Children will be asked to respect fellow participants and not repeat what is said in the focus group to others, however, it is possible that they may.

The participant's personal details will be kept confidential. All children will be identified by pseudonym throughout all documents and in the research paper. Please note that confidentiality will be maintained as far as it is possible, unless during our conversation a topic arises that makes me worried someone might be in danger of harm, in which case, I may have to inform relevant agencies.

Results of this study may be used in publications and presentations. In all cases, confidentiality and privacy will be fully maintained. Children's voices will not be used but direct quotes may be used.

All data will be securely protected by password. Only my supervisor and I will be able to access the data. Data will be kept until December 2018, at which time the data will be destroyed.

Children's rights

Participation in this study is voluntary. Your child may withdraw from this study at any time - you and your child will not be penalised in any way or lose any sort of benefits for deciding to stop participation. If you and your child decide not to be in this study, this will not affect the relationship you and your child have with your child's school, myself, or the teacher, in any way. Your child's grades will not be affected if you choose to leave this study. If your child decides to withdraw from this study, I may ask if the information already collected from your child can be used but you may also choose to withdraw this data.

Financial Information

Participation in this study will involve no cost to you or your child. Your child will not be paid for participating in this study.

Approval from Eaton Administration

This project is fully supported by Mrs Wendy Teo and Eaton International School. All relevant people are fully aware of all details regarding the project and are supportive of research being conducted during the school day.

Confirmation of Ethics approval

This project has been considered and approved by the University of Glasgow's College Research Ethics Committee.

Provided are the contact details for further information and where to pursue a complaint, if one should arise:

College of Social Sciences Ethics Officer, **Dr Muir Houston: Muir.Houston@glasgow.ac.uk**

University of Glasgow

College of Social Sciences

Participant Information Sheet for Students

Study title: Investigating student-led assessment practices in Year 4 classes

Researcher: Kate Brennan (k.brennan.2@research.gla.ac.uk)

Principal: Mrs Wendy Teo (wteo@eaton.edu.my)

Supervisor: Professor Robert Davies (Robert.Davis@glasgow.ac.uk)

Trial dates: January 2017 to May 2017

Level of study: Doctoral candidate dissertation research

Introduction

Hello! You being invited to help in a project that will be taking place at our school, Eaton International School. Before you decide, it is important for you to understand why we are doing this project and what will happen throughout the project. Please take the time to read this information carefully and discuss it with your parents. Ask me (Miss Kate) if there is anything that is not clear so we can discuss further. Take time to decide whether or not you wish to take part.

Thank you for carefully reading this ☺

What is this project about?

This project looks at how you, a student in Year 4, think about your role in assessment. For the next term, you will be asked to do a lot of your own assessment, such as designing your own rubrics and doing more self and peer assessment. You will also be helped with writing your own targets and termly report comments. You will work as a team with the other students in your class. Then, three times during the term, we will discuss how you feel about these changes in your assessment.

The project will last 4 months. During this time, we will have a few group discussions and you will be encouraged to take photographs of our work. We will do the research in our classroom or, if our classroom is being used, in the library. Your classroom teacher and I will work with you so you will not be alone. There is no 'wrong answer' so there is no worry about pressure. It is a learning experience for us all.

"Why?", you might ask. As you know, I am also a student and I am doing a project to see how students in Year 4 see assessment and marking when you, the student, have more say in how it is done. Then, you will be asked some questions about how the term went. You will not be asked any private questions nor will you be forced to do anything you do not want to do.

Your voice will be audio-recorded during focus groups. Please let me know if you do not feel comfortable with audio-recording.

Possible benefits

You may not have any direct benefit from being in this study. This study is to learn more about how you feel about the changes in our assessment routines. Your opinions may be used to help other children in the future and together, we might be able to find new and interesting information that helps teachers to make classrooms better learning spaces for other students.

Possible risks

It is unlikely that anything bad will arise from the project but it is important that I explain some possible things that might be unpleasant.

Others knowing you are participating: As there are only Year 4 students who are participating, it is possible that other students and parents of Eaton will know you are helping with this project. They might ask you questions and want to know more, which is okay. This isn't a secret project so you can decide if you're comfortable having people know about your involvement.

Becoming tired: If you get tired during the tasks, you can take a break at any time. If you decide that you aren't interested anymore, you can leave the project at any time.

Wanting to stop: You can tell me at any time if you want to stop the discussion or the project. If you feel uncomfortable, we can take a break or you can choose to not answer or skip to the next question. If you become upset for any reason, we will call Dr Sem and your parents to make sure that the problem is resolved.

Keeping details a secret

Your personal details, like your real name, will be kept a secret. To make sure that no one knows anything about you, I will not use your real name in my paper. All other details about you will be locked away in a file that others cannot see.

During our discussions, other students will also be sharing information. It is very important that you do not tell others what has been said in our focus groups, and they will also agree to not repeat what you have shared. This way, the sharing stays between us.

Everything we discuss will be kept anonymous, which means no one will know you said it, unless during our conversation a topic arises that makes me worried someone might be in danger of harm. Then, I may have to tell someone to protect you or others.

The information we find from this project may be used in articles and presentations. In all cases, your real name will not be used. Your voice won't be used either but direct quotes may be used. I will be sure to give you a copy of any information that we create.

Children's rights

This project is 100% optional – you can decide not to do it. You may decide to leave this project at any time – there will not be any punishment or consequence in any way. If you decide not to be in this project, this will not affect our relationship or the relationship between your friends or the school in any way. Your grades will not be affected if you choose to leave this project.

Approval from Eaton Administration

This project is fully supported by Mrs Wendy Teo. Eaton International School knows of all details regarding the project and support us trying something a little bit different.

Confirmation of Ethics approval

This project has been considered and approved by the University of Glasgow's College Research Ethics Committee.

Provided are the contact details for further information and where to pursue a complaint, if one should arise:

College of Social Sciences Ethics Officer, **Dr Muir Houston:** Muir.Houston@glasgow.ac.uk

Participant and Parent Consent Form

TO BE COMPLETED BY YOUNG PERSON AND PARENT/GUARDIAN

Title of Project: Investigating student-led assessment practices in Year 4 classes

Name of Researcher: Kate Brennan

Name of Research Supervisor: Professor Robert Davies

Basic consent clauses, statement format

> I confirm that I have read and understood the Plain Language Statement/Participant Information Sheet for the above study and have had the chance to ask questions.

> I understand that my child's participation is voluntary and that we are free to withdraw at any time, without giving any reason.

Consent on method clause

> I consent to my child's focus groups being audio-recorded. I consent that direct quotes may be used in the project.

> I acknowledge that copies of transcripts will be returned to participants for verification.

Confidentiality/anonymity clauses

> I acknowledge that participants will be referred to by pseudonym (fake name); no real names will be used.

> I agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group session.

Dependent relationships

> I acknowledge that there will be no effect on my grades from my participation or non-participation in this research.

> I acknowledge that I can contact the researcher/teacher/Head, Eaton International School or the University of Glasgow regarding any questions I have.

Clauses relating to data storage (you must include one)

I understand that the data collected from this research will be stored securely with my personal details removed and agree for it to be held as set out in the Plain Language Statement.

Basic consent clause, tick box format

I agree to take part in this research study   ☐

I do not agree to take part in this research study   ☐

Name of Participant ……………………………………………

Signature ……………………………………………………………   Date …………………………………………

Name of Parent/carer (as participant is under 16) ……………………………………………………………

Signature …………………………………………………… Date ………………………………………

Name of Researcher ……………………………………………………

Signature ……………………………………………………………   Date …………………………………………

Appendix I: Sample participant information sheet for parents and consent form (in Mandarin)

University of Glasgow

College of Social Sciences

学校相关负责人联系方式及有关信息

Study title: Investigating student-led assessment practices in Year 4 classes
Researcher: Kate Brennan (k.brennan.2@research.gla.ac.uk)
Principal: Mrs Wendy Teo (wteo@eaton.edu.my)
Supervisor: Dr Robert Davies (Robert.Davis@glasgow.ac.uk)
Trial dates: January 2017 to May 2017
Level of study: Doctoral candidate dissertation research

引言

您的孩子被邀请参加 EATON 国际学校举办的一项调查活动。在您决定之前，最重要的是让您了解进行这项调查的原因和目的以及其中所包含的内容。请花一些时间仔细阅读以下信息并且与您的家人商讨。如果您有任何不清楚的地方或者想要了解更多相关信息，欢迎向我咨询。用一些时间考虑决定您是否愿意参加。感谢您能够仔细阅读此文。

具体流程细节

您的孩子将被邀请参加一项涉及对儿童感知和认知情况的研究活动。

活动中，孩子们通过这次研究活动使他们会更加积极正确的面对今后的学习和困难，并且学会如何现实的制定及实现他们的期望。然后，我会和孩子们一起讨论关于他们是如何看待改变以及他们是如何做出课堂评估。研究将会持续 4 个月，在这期间，相关数据将由各小组集中收集，老师将会在现场并且学生会拍下照片作为记录。所有的数据都是由我和研究员亲自在教室或者图书馆收集的。这次研究的目的是为了更好地了解儿童是如何看待调查评估并且建立独立思考的能力，特别是当他们在决策中更为积极更为积极的参与今后的团队协作当中，同时也为家长-学生-老师三者以后有更好的配合，使学生的能力得到提高。我将会和孩子们讨论他们的感知是如何改变的、感知的好处以及之前提到的在课室里进行的评估活动的相关介绍。所有的问题都是涉及到评估实践的情感反馈，学生们不会被要求做任何困难的工作。您的孩子回答的问题将用音频记录，音频记录在这项调查中是必须的，如果你的孩子不配合使用音频记录，他/她将无法参与这项活动。

Appendix J: Teacher interview scripts (#1, #2 and #3)

Semi-structured interview questions for teachers
Interview #1

Teacher pseudonym:	Year:
Date:	Focus groups:

Introduction
Thank you for letting me interview you about assessment and your experiences as a teacher working with both teacher-led and student-led assessment practices. As you know, this project serves to establish your experiences and opinions about these methods and the transition between them.

I want to go over a few things today (tired, stopping, uncomfortable). If I ask you a question and you are not sure what I mean, let me know and I can try to explain it better. Also, I wish to stress that this interview is confidential. I will not use your name or any other form of identification in any report or publication.

I will tape record this session. Is this okay with you?

Are you ready to begin?

Part I: Establishing confidence
1. What is your age?
2. How many years have you been teaching?
3. In what other countries have you taught?
4. What is your favourite aspect about teaching? Why?

Part II: Understanding students' perceptions
5. Yesterday, we did the student interviews about assessment. Is there anything that struck you as a bit unusual or surprising?
6. In many cases, the students did not find the rubrics very useful. How do you react this this?
7. Are students motivated by assessment? How can this be bettered?

Part III: Attitudes towards assessment
8. Think of the assessment guidelines you were provided in Term 1. How do these work for you as a teacher? Is more or less specification needed?
9. In your past school, describe the assessment specifications you were given. How did these work for you?

10. In Term 1, you did only teacher-led assessment. How did this work for you? What was successful? What was not successful?

11. How do you know if an assessment task is successful?

12. What factors do you think affect students' assessment results?

13. How can teachers, both here and elsewhere, make assessment more beneficial for students?

Part IV: Feelings towards the research project

11. How do you feel about initiating the student-led assessment approach in your class?

12. What are your predictions with initiating student-led assessment this team?

13. Do you think it will give children a better understanding of their assessment practices?

Conclusion

14. Is there anything else you would like to add?

Semi-structured interview questions for teachers
Interview #2

Teacher pseudonym:	Year:
Date:	Focus groups:

Introduction
Thank you for letting me interview you about assessment and your experiences as a teacher working with both teacher-led and student-led assessment practices. As you know, this project serves to establish your experiences and opinions about these methods and the transition between them.

I want to go over a few things today (tired, stopping, uncomfortable). If I ask you a question and you are not sure what I mean, let me know and I can try to explain it better.

Are you ready to begin?

Part I: Establishing confidence
1. How is Term 2 going in Year 4XX?
2. In terms of student growth, in what ways have you seen them improve?

Part II: Understanding students' perceptions
3. Yesterday, you sat in on the second student focus groups. Was there anything that struck you about their changing views of student-led assessment?
4. How are the students' motivations of learning assessment different this term?

Part III: Attitudes towards assessment
5. Now you have been given quite specific instructions with regards to assessment. How do these work for you as a teacher? Is more or less specification needed?
6. What is the most challenging part of student-led assessment?
7. Are there any aspects of student-led assessment that the students are finding easy or are making impressive progress with?
8. You have been working along with a team of Year 4 teachers. Has this impacted the process of introducing student-led assessment into the classroom in any way?
9. Can you describe to me how each of the tools of assessment are going (prompt for: rubrics, questioning, targets, traffic lights)?

Conclusion
10. Is there anything else you would like to add that we haven't discussed?

Semi-structured interview questions for teachers
Interview #3

Teacher pseudonym:	Year:
Date:	Focus groups:

Introduction

Thank you for letting me interview you about assessment and your experiences as a teacher working with both teacher-led and student-led assessment practices. As you know, this project serves to establish your experiences and opinions about these methods and the transition between them.

I want to go over a few things today (tired, stopping, uncomfortable). If I ask you a question and you are not sure what I mean, let me know and I can try to explain it better.

Are you ready to begin?

Part I: Establishing confidence with Student-led conferences
1. How have the parent meetings been going today? Anything usual?
2. How were the student-led conferences?
3. How did you prepare them for the interview?

Part II: Changing perceptions
4. Thinking back to the beginning of Term 2 when this was introduced, when there were some hesitations with this project, until now, what was good and what wasn't so smooth?
5. What were some of the challenges you had to overcome with the students?
6. In what ways did the students' learning change throughout this project?

Part III: Attitudes towards assessment
7. What were the most effective ways you assessed the students this term?
8. What factors affected the student's assessment results?
9. Can you describe to me how each of the tools of assessment are going (prompt for: rubrics, questioning, targets, traffic lights, tests and reports)?

Part IV: Developing good practice
10. What are some things that you learned as a teacher yourself?
11. What elements of this will you take away with you for next term?
12. In all, what do you now think about student-led assessment as a model of assessment in Primary?

Conclusion

13. Is there anything else you would like to add?

Appendix K: Samples of student-captured photos using photo-voice

2	3	4
I tried to describe how to make my experiment fair, but the method doesn't work.	I have tried to make my experiment fair. But the method used is only a little bit successful	I have made my experiment completely fair by designing an experiment which takes that into account.
I have understood the steps a little, but have put a little bit of the wrong information in each box.	I have understood the steps well, and have mostly put the right information in the right boxes.	I have completed the steps perfectly, and have shown that I understand each step and have put the information in each correctly.
I have understood the scientific process but my experiment has till failed	I have understood the process of scientific enquiry and my experiment has succeeded. My results are not as predicated.	I have understood the process of scientific enquiry, my experiment has succeeded and my results are as I expected.

Appendix L: Samples of teacher-captured photos using photo-voice

Appendix M: Samples of the report-writing reflection template

Term 2 Assessment Reflections

Name _____			Date _____	
		My Score	What do I need to improve on?	How do I plan to do this?
Reading Comprehension	Fiction			
	Poetry			
Writing	Narrative Story			
Handwriting	Shang Dynasty			
Science	Forces and Magnets written			
	Magnet Experiment & Write-up			
Maths	Arithmetic			
History	Shang Dynasty			
Geography	Map Skills			
Spelling	Term 2 words			

Writing

Celebrations	In what writing areas have you been successful? What writing are you most proud? What helped you be successful?
Celebrations	_____ _____ _____ _____
Challenges	What am I doing to challenge/stretch myself? Where is an area in your writing that you would like to have more challenge? What have you found challeneging? Why?
Challenges	_____ _____ _____ _____
Changes	In what ways have you changed as a writer? Why? Have these changes been positive or negative? Why? What makes you say that?
Changes	_____ _____ _____ _____

Goal	What ONE area in writing that you want to continue to focus upon?

_____
_____
_____
_____
_____
_____

Who? How? What?	Who can help? How are you going to try to achieve this? What steps are you going to take? How will you know if you are successful?

_____
_____
_____
_____
_____
_____
_____

Appendix N: A sample of the first joint teacher/student generated rubric and the students' first independent student-generated rubric

Joint student and teacher generated rubric:

Setting	The setting is very blank and boring. Example Plain white scene Without any description.	The setting was great but there is only 1 setting.	The setting was amazing but the detail isn't very interesting.	Does the setting have detail in it interesting?
Character	There is only 1-2 characters in the fantasy story.	There is only 2-4 characters in the fantasy story	There is 3-5 characters in the fantasy story.	There is 6 or more characters in the fantasy story.
Spelling + grammar	The spelling and grammar is incorrect. the story doesn't make sense.	The spelling and grammar was incorrect but some of it was correct.	The spelling and grammar is correct but some are in the work but it is good	The spelling and grammar is all correct. The story was awesome.
Creativity of the Story.	The story has no creativity at all.	The story has less creativity but some are creative.	The story has creativity but not alot. The story is pretty good	The story was very creative the character was amazing and the setting is awesome.

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