

**DESIGNING AND IMPLEMENTING A
FORMATIVE ASSESSMENT SYSTEM TO
SUPPORT AND TRACK PUPIL PROGRESS.
A PILOT WITH YEAR 1 BOYS IN
WRITING**

LAURA SPENCER

**A RESEARCH & DEVELOPMENT PROJECT
SUBMITTED FOR THE
MSc LEARNING & TEACHING 2016**

DEPOSIT AND CONSULTATION OF THESIS

One copy of your dissertation will be deposited in the Department of Education Library via the WebLearn site where it is intended to be available for consultation by all Library users. In order to facilitate this, the following form should be completed which will be inserted in the library copy your dissertation.

Note that some graphs/tables may be removed in order to comply with copyright restrictions.

Surname	Spencer
First Name	Laura
Faculty Board	Department of Education
Title of Dissertation	Designing and implementing a formative assessment system to support and track pupil progress. A pilot with Year 1 boys in writing.

Declaration by the candidate as author of the dissertation

1. I understand that I am the owner of this dissertation and that the copyright rests with me unless I specifically transfer it to another person.
2. I understand that the Department requires that I shall deposit a copy of my dissertation in the Department of Education Library via the WebLearn site where it shall be available for consultation, and that reproductions of it may be made for other Libraries so that it can be available to those who to consult it elsewhere. I understand that the Library, before allowing my dissertation to be consulted either in the original or in reproduced form, will require each person wishing to consult it to sign a declaration that he or she recognises that the copyright of this thesis belongs to me. I permit limited copying of my dissertation by individuals (no more than 5% or one chapter) for personal research use. No quotation from it and no information derived from it may be published without my prior written consent and I undertake to supply a current address to the Library so this consent can be sought.
3. I agree that my dissertation shall be available for consultation in accordance with paragraph 2 above.

Designing and implementing a formative assessment system to support and track pupil progress. A pilot with Year 1 boys in writing.

Abstract

This aim of this research project was to design and implement a formative assessment system, to support and track the progress Year 1 pupils at The Boys' School make in their writing. This study began with an examination of the existing literature, exploring the impact formative assessment has on pupil progress, as well as existing initiatives for formative assessment. Two research questions were established and investigated, with close analysis of primary and secondary datasets. Primary data gathered included observations, pupil writing samples and data collected from the formative assessment system itself. Secondary data was gathered from pupil PIE (Progress In English), NGRT (New Group Reading Test) and spelling summative assessments. Data collection occurred in the case study class, where the system was implemented and the control group class, where the system had not been used. Overall, it was found that the formative assessment system was effective in supporting and tracking pupil progress, by creating an intrinsically motivating learning environment and enabling learning to be carefully monitored and navigated. The success of this investigation has resulted in the formative assessment system being implemented into the English curriculum across Key Stages 1 and 2 at The Boys' School.

Contents

Introduction.....	4
1.1 Context.....	4
1.2 Assessment.....	4
1.3 Writing.....	5
2. Literature review.....	8
2.1 Introduction.....	8
2.2 Motivation introduction.....	8
2.3 Habitus.....	9
2.4 Motivation and learning environments.....	14
2.5 Assessment and learning environments.....	18
2.6 Formative assessment and positive learning dispositions.....	19
2.7 Formative assessment and feedback.....	20
2.8 System for formative assessment.....	24
2.9 Existing initiatives.....	25
2.10 Conclusion.....	30
3. Methodology.....	32
3.1 Introduction.....	32
3.2 Quantitative data.....	33
3.3 Qualitative data.....	35
3.4 Limitations.....	37
3.5 Ethical considerations.....	38
4. Discussion and findings.....	41
4.1 Increased motivation.....	41
4.2 Social capital.....	46
4.3 Increased progress on summative assessments.....	48
4.4 Achievement gap.....	51
4.5 Lower ability pupils.....	53
4.6 Teacher pedagogy.....	56
4.7 Intervention.....	59
4.8 Vignette 1: Pupil 9.....	59
4.9 Vignette 2: Pupil 15.....	65
4.10 Vignette 3: Pupil 1.....	71
4.11 Vignette summary.....	76
4.12 Higher ability pupils.....	76
4.13 Time consuming.....	82
4.14 Teaching to the formative assessment system.....	83
5. Conclusion.....	84
5.1 Research question 1.....	85
5.2 Research question 2.....	86
5.3 Overall conclusion.....	88
5.4 Next steps.....	88
5.5 Recommendations for future research.....	89
References.....	90
Appendices.....	98-130

Introduction

1.1 Context

The Boys' School is a leading independent day preparatory school, for boys aged 4-13 situated in a wealthy area of South West London. A key aim of the school is to prepare pupils to undertake common entrance examination and it is expected that upon completing the school in Year 8, the boys will continue their education at a leading secondary independent school. The Head Teacher of The Boys' School has assigned me the task of designing and implementing a formative assessment system that could be used to support and track pupil progress throughout the school.

1.2 Assessment

The purpose of assessment is to inform teachers of pupil learning (Gardner, 2012).

Assessment is an intricate aspect of teaching and learning, playing a vital role in informing teachers of the knowledge, skills and understanding an individual pupil holds (Gardner, 2012). Assessment can be either summative or formative.

Summative assessment takes place at the end of the learning process to inform teachers of the learning acquired over a given period of time. By contrast, formative assessment takes place throughout the learning process to inform teachers of the knowledge and understanding of pupils as learning is constructed (Black & William, 1998).

Assessment at The Boys' School is currently dominated by summative practices and a recent ISI (Independent Schools Inspectorate) inspection report points towards a need for the school to increase the effectiveness of formative assessment. The Head Teacher feels that there has been an ambivalence towards formative practices and although these do occur they are considered tick box exercise and therefore not being used effectively to support teaching and learning. It was believed that the

implementation of a formative assessment system would make formative assessment a more effective practice in the school.

1.3 Writing

The purpose of this investigation is to pilot the formative assessment system with Year 1 pupils at The Boys' School and to evaluate the effectiveness of the system in supporting and tracking pupil progress in writing. Writing was chosen as the focus of this investigation as the school had identified it as an area where achievement across the school was low. For example, in my Year 1 classroom, where the system was piloted, prior to the investigation, progress pupils made in literacy skills and their motivation towards written tasks was low.

It is important that pupils at The Boys' School become competent writers because the degree to which an individual can write determines their life chances (DFE, 2013; Gray et al, 2004). Being proficient in literacy skills is necessary in order to participate as a fully integrated member of society, with illiteracy resulting in individuals becoming isolated to the peripherals of society (DFE, 2013).

The three core literacy skills are comprised of writing, reading and speaking & listening. Progression in writing is dependent on progression in both reading and speaking & listening skills (Wyse & Jones, 2001). Speaking and listening skills are important as children often write how they speak and the inability to verbally construct a coherent sentence becomes apparent in written work (Palmer, 2014).

Writing develops through participation in discourse, as conversing with others expands an individual's vocabulary and intellect (Palmer, 2014; Johnson & Wintgens, 2001).

Additionally, reading is essential as it equips pupils with a range of skills that are transferable to their written work including vocabulary, syntax and graphophonic

strategies (Lehr & Osborn, 1994; Wyse & Jones, 2001). The teaching of phonics is valuable in equipping pupils with an understanding of letter and sound correspondence, which are key skills for spelling (Wray et al, 2002; Wyse & Jones, 2001). In addition to word reading, pupils should develop competencies in comprehension, as this nurtures intellect and can result in pupils producing thoughtful written compositions of their own (DFE, 2013; Wray et al, 2002). All three skills must be taught as progress in one skills does result in progress being made in the other two (Ball, 2008). Given the link between the three literacy skills, this study focused on pupil progress in reading and speaking & listening skills alongside writing.

It is during Key Stages 1 and 2 that pupils develop the foundations for writing, reading and speaking & listening, making primary school pivotal in the development of core literacy skills (Wragg, 1998). Failure to acquire competency in the literacy skills at primary school has been found to have a detrimental effect upon future life chances (Gray et al, 2004). This is exemplified in National GCSE data where a strong correlation has been found between the level a pupil leaves primary school with in English and the level they later achieve in the subject at GCSE. In 2015, the majority of pupils who had previously achieved a National Curriculum Level 5 in English at the end of Key Stage 2 achieved an A* in the subject at GCSE (DFE, 2015). An additional correlation could be observed as those who achieved a Level 3 or below at the end of Key Stage 2 went onto achieve a GCSE grade D or lower (DFE, 2016).

This suggests that a pupil's achievement in literacy at primary school determines their future achievement. Given that a key aim of The Boys' School is to prepare pupils for common entrance examination, it is important that the school gives pupils

the best chance of success by equipping them with proficient literacy skills. I therefore wanted to focus on raising achievement in literacy skills through implementation of the formative assessment system. I turned first to the literature to address how formative assessment can be used to raise achievement in writing.

2. Literature review

2.1 Introduction

The existing literature on formative assessment was reviewed in order to identify how formative assessment could be used to raise pupil motivation and achievement in writing, and to reach a suitable design for the formative assessment system.

The first part of this review seeks to identify the impact formative assessment can have upon pupil progress. The review begins with a discussion on motivation, which has emerged as a central factor in determining the rate of pupil progress (Galloway et al, 2004). This is followed by a discussion of how habitus (Bourdieu, 1990) and learning environments can affect intrinsic motivation. Finally, the valuable role formative feedback plays in motivating pupils is explored.

2.2 Motivation introduction

Motivation has been identified as the greatest contributor to pupil progress (Galloway et al, 2004). Progression in any aspect of the curriculum cannot occur if pupils are demotivated (Maynard & Lowe, 1999). Achievement is dependent upon the degree to which a pupil is motivated, with high motivation resulting in high achievement and low motivation leading to underachievement (Postlethwaite & Haggarty, 2002).

Often attempts to increase motivation in schools are made extrinsically through the use of reward systems, aiming to reinforce appropriate attitudes towards learning (Maclean, 2003). Although some rewards, once accomplished, do contribute to a pupils' sense of achievement, extrinsic motivation on the whole has been criticised for having potentially detrimental effects (Ryan & Deci, 2000). This is because external rewards are felt to result in a superficial approach to teaching and learning,

limiting intrinsic motivational factors (Deci, 1975). A phenomenon known as the over justification effect occurs, whereby an expected external incentive decreases an individual's intrinsic motivation. The result of this is that pupils may begin to believe that their participation in learning is the result of external rewards rather than their own internal appreciation (Maclean, 2003; Lepper et al, 1973).

Additionally, pupils may focus their energies on obtaining as many rewards as possible, at the expense of investing time and effort in their learning (Condry & Chambers, 2016; Galloway et al, 2004).

Instead of concentrating efforts on enhancing motivation extrinsically, schools should strive towards raising intrinsic motivation (Postlethwaite & Haggarty, 2002).

In contrast to extrinsic motivation where pupils are driven by the promise of an external reward, with intrinsic motivation, the drive to engage in a behaviour arises from within the individual because it is felt to be intrinsically rewarding (Malone & Lepper, 1977). Intrinsic motivation peaks when pupil self-efficacy and engagement are high (Ryan & Deci, 2000). Self-efficacy and engagement are paramount because motivation will only occur when pupils are enjoying an activity and are confident they can complete it (Malone & Lepper, 1977). If engagement and self-efficacy are low, then progress will also be low, given that motivation is a precursor for achievement (Postlethwaite & Haggarty, 2002). A range of factors can influence the degree to which pupils are motivated and the existing literature points habitus and the learning environments being the two major influences in education (Malone & Lepper, 1977; Pajares & Valiante, 2006).

2.3 Habitus

The first factor, habitus, refers to the ingrained dispositions that an individual possesses and enacts due to their own life experiences (Bourdieu, 1990). Before the

onset of schooling, children develop ideologies regarding their own identities in relation to practices such as gender, race, and class (Millard, 2000). By observing behaviour both at home and within a societal context, children begin to internalise schematic beliefs regarding their identities, which form habitus of mind (Bourdieu; 1990). Children bring these habitual beliefs to school and re-enact these within the context of the classroom (Millard, 2000).

Gendered beliefs have been found to be particularly influential in regards to writing (Millard, 2000). It is a cliché in education that girls display greater interest in writing and outperform boys in the subject (Skelton et al, 2006). The gender disparity first came to light in the APU (Assessment of Performance Unit) surveys carried out between 1979-1983, when a greater number of boys responded to the 'I hate writing' statement, and more girls agreed with the 'I like writing statement' (Millard, 2000; Francis & Skelton, 2005). GCSE data highlights that in 2015 72.8% of girls achieved A*-C in their English examination compared to just 57.7% of boys (DFE, 2016). This gendered gap in achievement dates back to when the 11+ examinations were first introduced, showing that it is a well-established phenomenon (Millard, 2000).

Differences in the achievement of boys and girls was once believed to be the result of biological factors, and a range of theories were considered amongst which included the following:

- Specialisation of boy's brains to spatial ability meaning they had greater natural advantages in mathematical based subjects.
- Slower skeletal growth of boys than girls impacting upon their to ability to adapt to the auditory and visual demands of reading (Sharpio, 1990; Hyde et al, 1990).

Theories such as this have long been contested, and today it is widely recognised that the gender disparity in literacy skills is purely motivational and a result of habitus (Millard, 2000; Bourdieu, 1990). Boys and girls develop different interests as a result of the ideologies which society inadvertently create regarding gendered roles (Millard, 2000). Society has constructed masculinity and femininity in such a manner that boys are more likely to develop interests, and be engaged, in mathematical based practices while girls are more interested in literacy (Bussey & Bandura, 1999; Willinsky & Hunniford, 1993.). Social expectations are reinforced in numerous ways including through the manufacturing of toys (Millard, 2000). Toys linked to writing and reading have been found to be mostly targeted at girls, whereas toys with a mathematical, scientific or technological base have been found to be largely marketed towards boys (Millard, 2000). By being more likely to play with toys linked to writing, girls are more likely than boys to grow accustomed to written activities (Nolen, 2007). This is because habitual behaviours largely govern an individual's intrinsic motivation to complete an activity (Hull, 1943; Pajares et al, 1999). Habitual dispositions such as those related to gender are powerful and result in individuals forming rigid beliefs about their identities. These beliefs are brought to school and enacted on a daily basis (Bourdieu 1990).

In addition to forming rigid beliefs about their gendered roles, individuals also form habitual beliefs regarding their own abilities (Dumais, 2002). Pupils with specific learning difficulties such as dyslexia or dyspraxia are commonly found to hold beliefs relating to their own inadequacy in learning, as a result of the difficulties they face in completing academic tasks (Cheminias, 2010). This negative self-image intensifies and pupils begin to approach learning with diminished engagement and self-efficacy, resulting in low motivation and consequent low progress (Ernest,

2011). The result is that these pupils continue to fall further behind more motivated, higher achieving peers (Wilson, 2003).

Schools can play a key role in deconstructing habitual beliefs (Rawolle & Lingard, 2015). Gendered ideologies regarding writing can be challenged by schools through their promotion of literacy activities as male and female practises (Millard, 2000).

This could be done through the introduction of resources targeted towards interests of boys (Millard, 2000; Bruning & Horn, 2000). For example books containing action and humour have been found to enhance boys' interest in reading

(Warrington et al, 2003). In addition to this, it has long been argued that writing should be authentic and related to the learners interests (Millard, 2000). Research suggests that boys have a preference for non-fictional texts over fiction and

therefore an increase in non-fictional writing at The Boys' School could raise engagement in writing (Wyse & Jones, 2001). Additionally, as a result of habitus, boys have been found to have a preference for Maths and Science based subjects, and therefore an incorporation of written activities into such lessons could result in writing becoming a more appealing activity for boys (King & Gurian, 2006).

In addition to challenging gendered ideologies, schools can prevent pupils with SEN from developing negative habitus of mind. One way in which this can be done is through implementation of early intervention (Hiebert & Taylor, 1994).

Interventions are beneficial as they can help pupils overcome barriers to learning (Hiebert & Taylor 1994). Pupils observe the progress they make as a result of intervention, leading to increased self-efficacy and consequently motivation

(Nilsen, 2009). Phonics intervention programmes have been particularly effective in helping pupils who experience difficulty in literacy skills (Edwards, 2008). As pupils advance in phonics they notice improvement in their reading and spelling,

resulting in elevated self-efficacy. As a result their motivation to write increases consequently leading to a rise in progress (Edwards, 2008; Nilsen, 2009).

Interventions can also involve the use of tools in the classroom. For example, pupils who experience difficulty in handwriting as a result of poor fine motor skills may benefit from the use of a pencil grip (Cheminias, 2010). Difficulty in fine motor skills can result in high demotivation towards written activities, as a result of handwriting being a laborious activity to such pupils (Wilson, 2003). Pencil grips have been found to help pupils overcome difficulties with handwriting, by making writing a more comfortable and automatic activity (Cheminias, 2010).

Interventions such as those given in the examples are beneficial in enhancing pupil self-efficacy and consequent motivation and achievement (Pajares, 1999). It is important that pupils requiring intervention are identified early in the learning process (Edwards, 2008; Hiebert & Taylor, 1994). Early identification can actually prevent pupils from forming negative habitual beliefs regarding their academic abilities (Cheminias, 2010). Although schools can influence habitual beliefs, the deconstruction of these can take a long time, resulting in a slower increase in self-efficacy and consequent motivation and progress than if early identification and intervention had occurred in the first instance (Zevenbergen, 2005; Rawolle & Lingard, 2015).

The existing literature shows that habitual beliefs are the by-product of a multitude of wide societal factors that accumulate in the minds of individuals (Millard, 2000). The demotivation Year 1 pupils in The Boys' School demonstrate towards writing could be the result of ingrained gendered habitual beliefs regarding writing as a feminine activity and ability perception (Millard, 2000). For this reason, in order to

raise pupil motivation it will be important that I consider ways to challenge these habitual beliefs by raising pupil engagement in writing (King & Gurian, 2006)

2.4 Motivation and learning environments

In school, the degree to which a pupil is motivated to learn is determined by the learning environment (James, 2008; McLean, 2005). All pupils possess a degree of drive to learn, which can be either accentuated or reduced depending upon the extent to which the learning environment is intrinsically motivating (Weiner, 1989). Learning environments are created by the teaching and learning style employed in the classroom (James, 2008). Different approaches to teaching and learning have been found to result in varying degrees of pupil motivation (Hanrahan, 1998). The existing literature acknowledges three main approaches to teaching and learning, arisen out of varied philosophical beliefs regarding how children learn (James, 2008).

The first and most traditional of these approaches is behaviourism, built on the principle of stimulus-response, whereby learning largely occurs through conditioning with a stimulus being provided and a response generated (Pavlov, 1960; James, 2008). Learners are believed to be passive “empty vessels” (Watson, 2009, p.2) whose minds are waiting to be filled with content. Learning in a behaviourist environment is highly teacher directed, with the teacher presenting information to pupils who must demonstrate their understanding of the material provided usually through rote learning tactics (James, 2008). Highly teacher led environments incorporating rote learning practices are disengaged and therefore result in low pupil motivation (Galloway et al, 2004). Motivation in behaviourist environments is also low because a focus is placed on mastery learning. This creates a heavily competitive learning environment, where the overall performance of the

whole group is compromised due to the successful progress of higher ability pupils and apparent regression of others (James, 2008). Pupils who are consistently outperformed by more able peers have low self-efficacy and consequent low motivation (Hanrahan, 1998).

The second approach to teaching and learning is cognitivism, based on the principle that acquisition of knowledge is a foundational skill upon which higher order thinking skills are developed, including comprehension, application, analysis, synthesis and evaluation (Moore & Stanley, 2010). A focus is placed upon the mental processes used and developed by pupils through learning (Piaget, 1959; Brown & DesForges, 2006; Bruner, 1961).

Learning occurs through engaging demonstrations and explanations clearly given by the teacher, following which pupils mostly complete cognitive tasks to demonstrate understanding through application of acquired knowledge (Piaget, 1959; Bruner, 1966). Such tasks are differentiated to suit different levels of cognitive understanding and therefore suitably pitched for pupils enhancing their self efficacy (Piaget 1955, James, 2008). Engagement is also higher than in behaviourist environments as tasks are more mentally stimulating for pupils (Kaplan & Patrick, 2016). However, although pupils do complete tasks, learning is still largely teacher led (Daniels, 2010).

The final approach, constructivism, is built upon the principle that learning is an active process whereby knowledge and understanding are constructed through the learner's interaction with the world around them (James, 2008; Vygotsky, 1978). Although a cognitive approach to teaching and learning leads to greater pupil motivation than behaviourism, the most recently developed approach of constructivism is felt to raise pupil motivation in an unprecedented way (Biggs,

1999). Pupil engagement is high as learning is highly child led and explorative, resulting in it stirring an individual's sensory and cognitive curiosity (Kaplan & Patrick, 2016). As learning is child led, pupils are rewarded with a sense of ownership over their learning, resulting in high autonomy, further contributing to motivation (Cordova & Lepper, 1996).

In addition to this, constructivism involves high levels of collaboration amongst pupils "in which people build knowledge and develop their thinking together" (James, 2008, p. 30), resulting in learning becoming a social activity and therefore engaging for pupils (Vygotsky, 1978). Through collaboration, learners pool ideas in order to collectively achieve a higher level of understanding than could be grasped individually (Vygotsky, 1978). In this way all pupils in a constructivist environment achieve together resulting in high self-efficacy of all learners (Hedegaard, 2008). The focus is on the success of the whole group as opposed to the success of only a select number of pupils as found in a behaviourist environment (Galloway et al, 2004).

Collaboration has been found to nurture trust and reciprocity, resulting in high social capital. In environments where social capital is high, intrinsic motivation is also high (Pedder & McIntyre, 2006). This is because high levels of trust amongst peers result in individuals feeling confident around peers, leading to high self-efficacy (Coleman, 1990). In addition to this, high social capital can result in occurrence of pupil consultation. As trust between teacher and pupils increases in the classroom, pupils begin to feel greater security in consulting with teachers regarding their learning needs. This may lead to teachers empowering pupils to choose the curriculum content or topics they would like delivered (Pedder &

McIntyre, 2006). Choosing topics or content rewards pupils with a sense of ownership over their learning, resulting in increased engagement (Coleman, 1990). Constructivist learning environments are intrinsically motivating by fulfilling the parameters of motivation by being engaging, collaborative, autonomous and nurturing of self-efficacy (Kaplan & Patrick, 2016). When addressed in light of Maslow's (1970) hierarchy of needs paradigm, these characteristics are intrinsically motivating as they fulfil hierarchal needs of the pupils (figure 1).

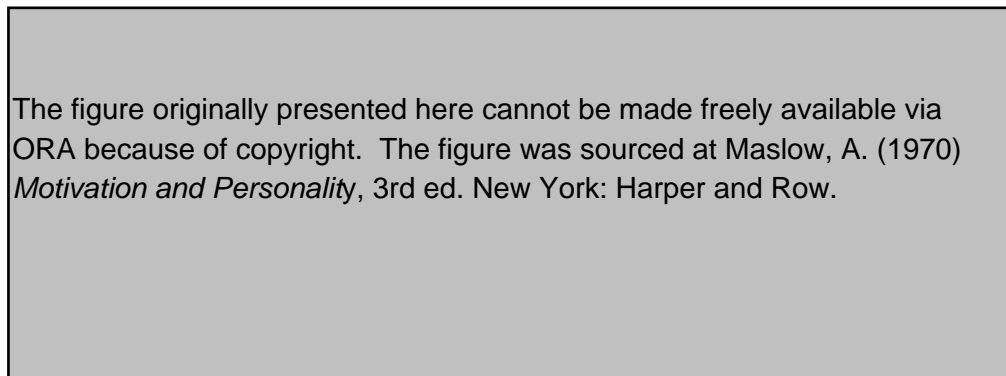


Figure 1: Maslow's (1970) hierarchy of needs triangle.

Collaboration contributes towards a pupil's need for belonging. Engagement, self-efficacy and autonomy contribute to an individual's need for esteem. By fulfilling the various hierarchal needs, a constructivist learning environment means pupils are motivated towards the final need of self-actualisation. When aspiring to self-actualisation pupils are in fact motivated towards fulfilling their full potential (Maslow, 1970).

The existing literature shows that learning environments can significantly impact the degree to which pupils are motivated to learn. In The Boys' School I aim to create a constructivist learning environment in my Year 1 classroom in order to enhance motivation and consequently achievement in writing (Kaplan & Patrick, 2016).

2.5 Assessment and learning environments

When considering the learning environment, schools should look to their assessment practices, as assessment is strongly aligned to learning theories (James; 2008). Summative assessment was originally introduced to cater for a behaviourist approach to teaching and learning (James, 2008). As learning theory evolved and cognitive approaches were introduced, summative assessments advanced to focus on problem solving and thinking skills (Piaget 1955, James, 2008). Finally, formative assessment was introduced to align with a constructivist approach to teaching and learning. Formative assessment is an on-going process facilitating the assessment of learning as it is constructed, therefore making it a relevant practice for a constructivist learning environment (James, 2008; Vygotsky, 1978).

The link between assessment and learning means that the chosen approach to teaching and learning can affect the assessment practices in a school. Additionally, the chosen approach to assessment can also influence the teaching and learning styles employed (James, 2008). For example, by relying heavily on summative assessment focused on mental recall, a school could inadvertently be driving a behaviourist approach to teaching and learning, creating a demotivating environment (Kaplan & Patrick, 2016). By comparison, when a school places emphasis on formative assessment a constructivist learning environment is more likely to emerge motivating pupils (Kaplan & Patrick, 2016).

In light of this, the current reliance on summative assessment in The Boys' School is driving a behaviourist approach to teaching and learning, which could account for the demotivation pupils demonstrate towards written tasks. The existing literature suggests that my implementation of the formative assessment system in The Boys' School will drive a constructivist learning environment, raising pupil intrinsic

motivation and resulting in greater achievement in writing (James 2008, Kaplan & Patrick, 2016).

2.6 Formative assessment and positive learning dispositions

A key benefit of formative assessment is that it results in pupils forming positive dispositions about learning (Ecclestone & Pryor, 2003). Research shows that it is important for primary school pupils to develop positive dispositions about learning, as these become embedded as part of their individual habitus, remaining with them throughout their educational career (Dumais, 2002). A pupil's early experience with learning shapes their future expectations of it (Pryor & Torrance, 1997). The constructivist environment created by formative assessment leads pupils to believe that learning is an enjoyable activity, resulting in the cultivation of positive dispositions (Ecclestone & Pryor, 2003). By comparison, the behaviourist environment created by summative assessment results in pupils believing that learning is tedious, consequently leading to the formation of negative dispositions (Ecclestone & Pryor, 2003).

As primary school pupils form dispositions about learning, they also form dispositions related to assessment. Summative assessments are pressurised and intrusive for pupils (Harlen & Crick, 2003). The conditions in which they are undertaken have been found to result in learners feeling anxious (Atjonen, 2014). Implementation of summative practices at Key Stage 1 and 2 can result in pupils developing negative dispositions about assessment (Ecclestone & Pryor, 2003). This experience can be of detriment to pupil performance on assessments in the future. For example, when pupils reach senior school years and are required to undertake national examinations such as GCSEs, they will be fuelled with negative dispositions towards assessment arisen from their primary years of schooling. The

result will be that pupils approach assessments with a negative mind-set and low motivation, leading to under-achievement (Harlen & Crick, 2003).

In order to avoid pupils developing negative dispositions towards assessment, where possible, summative practices should be avoided and formative assessment should be implemented instead in the primary school (Black & William, 2009). Formative assessment is a daily practice, situated in the classroom environment, meaning it is unobtrusive and unpressured to learners (Ecclestone & Pryor, 2003). Through formative practices, pupils develop positive dispositions about assessment (Black & William, 1998). This means that by the time pupils undertake national examinations, they feel confident about assessment, meaning motivation is high, resulting in high achievement (Harlen & Crick, 2003).

By implementing a formative assessment system in my classroom, I will be aiding the formation of positive habitual beliefs related to learning and assessment.

Development of these positive dispositions in Year 1 should support pupils at The Boys' School in achieving highly on common entrance examinations in later school years, as they should then approach them with a positive mind-set and consequent motivated approach.

2.7 Formative assessment and feedback

Summative practices have become known as Assessment of Learning (AOL), as their purpose is to inform teachers of the learning that has accumulated over a period of time (Harlen & James, 1997). By contrast, formative assessment practices are known as Assessment for Learning (AFL), as their essential purpose is to move pupil learning forward while the learning is still in the process of developing (Heritage, 2016).

The essence of assessment is to inform teachers of the knowledge, skills and understanding an individual pupil holds (Gardner, 2012). Formative assessment is more aligned to this than summative, as it takes place in situ and, through a mechanism of continuous feedback, offers insight into the development of these qualities (Frey & Fisher, 2011). On a daily basis feedback mediates between teachers and pupils through a range of written and verbal practices including marking and observation (Andrade & Gregory, 2010). This enables teachers to clearly identify and respond to any misconceptions and gaps in knowledge held by their pupils (Black & William, 1998). Teachers incorporate the information given through formative practices into their planning and teaching of future lessons, as conceptualised in Gardner (2012) (figure 2).

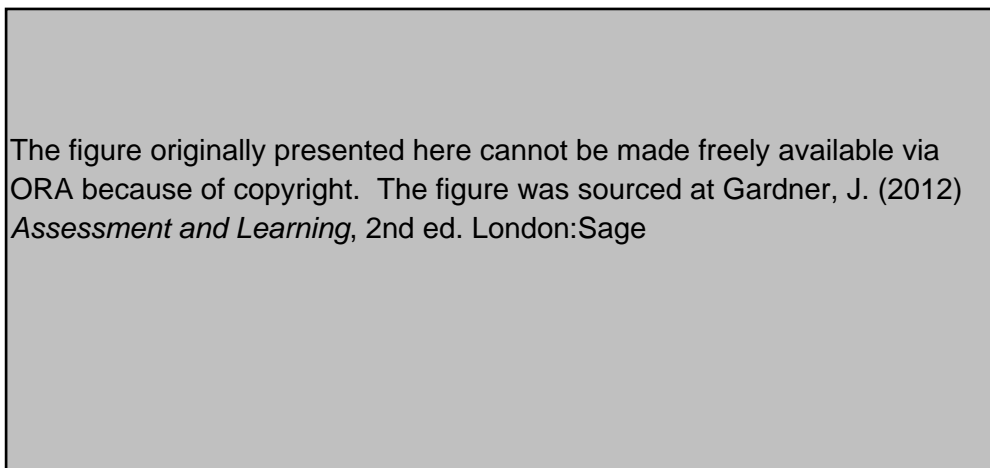


Figure 2: The AFL feedback loop (adapted from Gardner, 2012)

Through formative assessment, feedback becomes a continuous process, enabling teachers to see inside “the black box” (Black & William, 1998, p1.), of the classroom and effectively respond to the learning needs of their pupils. By contrast, summative practices only provide feedback at the end of the learning process,

meaning that misconceptions and gaps in learning are identified too late for them to be rectified through teaching (William, 2011; Irons, 2008).

The continuous feedback supplied through formative practices helps teachers understand their pupils as individual learners (Wynne & James, 1997; Kirkup, 2006). Teachers become familiarised with pupil strengths and areas for development, facilitating effective differentiation (Clarke, 2001). The result is that teachers design tasks which are correctly pitched to the appropriate level of challenge for their pupils (Atkinson, 1964).

Achievement theory shows that adequate challenge is important, as individuals are only motivated to complete tasks when they are suitably pitched to their needs and abilities (Malone, 1981; Galloway et al, 2004). Demotivation occurs when a pupil considers a task too difficult, as they feel failure is imminent reducing their self-efficacy (Atkinson's, 1964). In addition to being too difficult, tasks can be demotivating when they are under-challenging too (Schunk, 1991). When tasks are too easy, pupils become disengaged, resulting in a fall in their motivation (Galloway et al, 2004; Ecclestone & Pryor, 2003). Ofsted (2011) have found that being under challenged results in disengagement of higher ability pupils, leading to poor behaviour.

These findings suggest that the low motivation of Year 1 pupils at The Boys' School could be the result of ineffective differentiation. By raising the presence of formative assessment in The Boys' School, it is believed that differentiation for pupils of all abilities will become more effective, increasing motivation and subsequent progress of pupils in writing (Sadler, 1998).

In addition to facilitating effective task design, the regular feedback provided by formative assessment can be used to set goals for lessons. Goal setting has been

found to raise intrinsic motivation by tapping into a pupil's drive to learn (Biggs, 1996). Through learning goals individuals seek to increase their competence, by stimulating a challenge-seeking and a mastery-oriented response to learning regardless of perceived ability (Elliott & Dweck, 1988).

Goals set precedence for achievement, giving learning a context and making it purposeful (Webb, 2006). They can be shared with pupils through the use of a learning objective and differentiated learning outcomes (Gardner, 2012). Linked to the overarching objective, outcomes state the skills and knowledge a student should demonstrate during the lesson (Biggs, 1996).

Learning goals will only work effectively when formative assessment is an embedded classroom practice (Gardner, 2012; Cauley & McMillan, 2010).

Although goals can be shared in classrooms largely driven by summative assessment, they will not be suitably aligned to the needs of learners and can have the adverse effect of decreasing intrinsic motivation as the lesson will be either too easy or too difficult for pupils (Biggs, 1996). When they are based on the regular feedback provided from formative assessments, goals are suitably challenging, offering opportunities for all to succeed (Biggs, 1996). This means that from the onset of the lesson, when these goals are set intrinsic motivation in the classroom is high, as pupils feel confident they can succeed (Zimmerman, 1992). Learning activities can be carefully aligned to learning outcomes, with the outcomes offering a framework for which feedback can be given (Biggs, 2003; Webb, 2006). In this way feedback becomes specific and contextualised making it clear to pupils how they were successful on the task and where future improvements could be made (Elliott & Dweck, 1988). Feedback can be ineffective in advancing pupil progress if the expectations of a task are not first set through learning goals (Biggs, 1996).

Given the motivational benefits learning goals can bring when used in line with formative assessment, I will implement them in Year 1 during this investigation (Biggs, 1999). In order to share learning objectives and outcomes with the boys, I aim to use lay language so that pupils can relate to them (Webb, 2006). A common method of sharing learning goals in primary schools is 'WALT' (What Are we Learning today) for objectives and 'WILF' (What I am Looking For) for outcomes, the latter of which is differentiated into 'must', 'could' and 'should' achievement components, offering opportunities for all pupils to succeed (Gardner, 2012).

2.8 System for formative assessment

The first part of this literature review has identified the crucial role formative assessment can play in supporting pupil progress. To summarise, formative assessment contributes to pupil progress by shaping an intrinsically motivating learning environment. This is comprised of a constructivist approach to teaching and learning and an ongoing feedback mechanism, allowing for suitably differentiated tasks and learning goals that result in high motivation and achievement of all pupils (Gardner, 2012).

After identifying the learning gains of formative assessment, in the second part of this review I have sought to establish a successful design criterion for the formative assessment system I will implement at The Boys' School. There have been a number of initiatives implemented in attempts to create formative assessment systems in the past including APP (Assessing Pupil Progress), The Depth of Learning approach (Quigley, 2014) and OTrack (Optimum, 2016). A key benefit of such initiatives is that they enable evidence collated through a wide variety of formative practices to be consolidated in one location (Marlow et al, 2014). Too often teachers carry out formative assessment through a range of practices including

observations and marking, but fail to consider the evidence collectively (Burke, 2014). In order to effectively support teaching and learning the evidence collected through formative practises should be unified and considered holistically as facilitated through use of a formative assessment system (Hall & Burke, 2004). A formative assessment system is felt to be a navigational tool, guiding and tracking learning from the beginning of the learning process to the end (De Vos & Belluigi, 2011). In order to be effective, it is important that the formative assessment system is aligned to the curriculum and learning needs of the pupils (Biggs, 1999).

2.9 Existing initiatives

The most well known initiative was APP (Assessing Pupil Progress), introduced in 2008 as part of a government attempt at aiming to raise achievement and attainment in the three core subjects (English, Maths and Science), through use of formative assessment (Marlow et al, 2014; DFE, 2011). Pupils would be assessed against stated outcomes for National Curriculum levels one to eight. English was broken down into three components; ‘Reading’, ‘Writing’ and ‘Speaking and Listening’, each of which had expected outcomes listed beneath numerous assessment focuses (appendix 1). Outcome criteria related to curriculum content pupils of a given level were expected to achieve (Biggs, 1999). Teachers would periodically consider evidence they gathered about their pupils through formative practices against expected written outcomes, highlighting those that had been achieved and identifying any the learner still had outstanding (Marlow et al, 2014).

Written outcomes helped to reduce teacher bias associated with formative assessment (Marlow et al, 2014). Formative assessment has been critiqued for being a biased process, due to the fact it is interpreted through the lens of the teacher (Burke, 2014). The teacher’s close proximity to the pupils has the potential to

influence the interpretation of evidence collected through formative practices (Torrance, 1993). APP assessment against written outcomes reduced teacher bias by operating in a similar manner to a mark scheme, through stating a set of clear criteria that pupils were expected to achieved (DFE, 2011).

A further benefit of written outcomes was that they enriched teacher pedagogy. Being familiar with curriculum content made teachers more effective in delivering Maths, English and Science curriculum content (Marlow et al, 2014). The written outcomes explicitly stated curriculum content that needed covering and the degree of understanding pupils of varying levels were expected to display, helping mediate learning across the curriculum (Marlow et al, 2014).

In addition to enhancing teacher subject knowledge, pedagogy was enriched as teachers were rewarded with a thorough understanding of their pupils as individual learners (Marlow et al, 2014). By referring to APP, teachers could pin point exactly where each learner was at in their learning, identifying outcomes each pupil had achieved. Unachieved outcomes indicated gaps in knowledge, which could then be rectified by teachers through the planning and delivery of future lessons. (Gardner, 2012)

APP facilitated close monitoring of pupil progress by allowing for effective tracking (DFE, 2011). The number of outcomes achieved by individual pupils could be quantified and calculated. Effective tracking allows for close monitoring of pupil progress. Any pupil failing to progress at a similar rate to their peers, could be identified and if required, an intervention could be put in place tailored to their individual learning needs in order to raise their achievement (Marlow et al, 2014). Following a change of government, APP was no longer implemented in schools, although an Ofsted (2011) report evaluating the effectiveness of the initiative

recognised that it had clear learning gains in raising achievement and recommended that “the practices that have been beneficial in improving outcomes for pupils,” should be promoted (p.1). Following this recommendation, other initiatives have been introduced, that have incorporated the benefits of APP and considered the shortfalls.

One such initiative is the Chris Quigley Depth of Learning Approach (2014), involving assessing using milestones. This approach incorporated the success of APP written outcomes, by using prime objectives (Quigley, 2014). Through use of the prime objectives, progress can be tracked effectively across the curriculum. Whereas APP involved assessment using national curriculum levels, under the Quigley (2014) approach, levels have been rejected. Instead, pupils are assessed in terms of their breadth of learning (i.e. how many examples of learning can be observed) and their depth of learning (i.e. the fluency of pupils, how well they apply knowledge and skills and their depth of understanding) (Chris Quigley, 2014), (appendix 2). This approach is felt to be of greater benefit to learning than the use of leveling, as APP leveling was found to be inaccurate and highly inconsistent across schools (Marlow et al, 2014). With APP, pupils had often been rewarded outcomes, appearing to have grasped a concept, although in actual fact they had not committed it to their long-term memory (Looney, 2011). The benefit of the Quigley (2014) approach over APP is that it is built on the principle of mastery learning. Using the Depth of Learning Approach ensures knowledge and understanding is cemented ensured, before pupils progress to learn subsequent information (Quigley, 2014). This is of particular benefit in primary schools, as it is important for foundational knowledge to be consolidated at this stage.

Another example of an existing initiative is the OTrack software introduced by Optimum (2016). Just like the Quigley (2014) approach, this software uses written outcomes, and involves assessment without leveling. An added benefit of OTrack (2016) is that it facilitates tracking of pupil summative assessments alongside formative practices (Optimum, 2016). This results in a balanced approach to assessment, in which equal weight is placed on the importance of formative and summative practices (James, 2008). A combined approach to assessment results in a more holistic understanding of a learner than could be achieved from one sole practice (Taras, 2008). This is because through a combined approach the benefits of both formative and summative assessment can be accessed (Burke, 2014).

Although formative assessment does have significant learning gains over summative practices, summative assessment remains a pertinent practice in some instances and therefore cannot be fully substituted by formative assessment (Taras, 2008). For example, a benefit of summative assessment over formative practices is that it enables assessment of the extent to which knowledge, skills and concepts can be used and applied by pupils at the end of the learning process (Burke, 2014). Additionally, summative assessment helps pupils become accustomed to exam technique, making it important in schools such as The Boys' School given that pupils are being prepared for future common entrance examination (Burke, 2014). It is expected that pupils will become equipped with appropriate exam acumen, making it important for me to continue to implement summative practices alongside formative assessment.

Using a formative assessment system for close tracking and monitoring of pupil progress has the potential to increase pupil achievement on summative assessments. A formative assessment system enables misconceptions to be identified and

rectified as soon as they emerge (Taras, 2008). This means that by the time pupils reach the end of their learning journey and undertake summative assessments, all misconceptions should have been corrected and gaps in knowledge fulfilled, resulting in higher achievement in summative assessments, than if summative practices were used alone (James, 2008; Taras, 2008). Additionally, outcomes on the formative assessment system can include expected knowledge and understanding pupils are expected to display in a given summative assessment. For example, at The Boys' School the Year 1 spelling summative assessment focuses on a range of phonics strategies. Therefore the formative assessment system could include outcomes related to the breadth of phonics knowledge and understanding pupils are expected to hold by the time they undertake their summative assessment. A key benefit of both the Quigley (2014) and Optimum (2016) methods is that both formative assessment systems were computerised. Prior to this, APP had been criticised for being a time-consuming process involving hefty paper work (Andrade & Gregory, 2010). By computerising the assessment system Quigley (2014) and Optimum (2016) limited the quantity of paperwork and made assessing pupil progress more user friendly, resulting in these methods not being as burdensome to teachers as APP once was (Friedman, 2000; Vannest, 2010).

Despite these changes, many teachers still view formative assessment as a time-consuming process (Skaalvik & Skaalvik, 2016). Teaching is a profession already associated with high stress levels due to the increasing pressing demands placed on teachers (Friedman, 2000). However, formative assessment is an activity that can help teachers save time elsewhere (Covey, 1999). For example, through effective marking and observations teachers gain a holistic understanding of their pupils as learners, meaning differentiation becomes easier, reducing lesson planning time.

The Quigley (2014) and Optimum (2016) methods are two examples of a host of initiatives that have been implemented. Many schools have designed and developed their own systems for formative assessment. Designing a formative assessment system at a school-based level is felt to be of greater value than implementing a commercial approach (Black et al, 2011). Schools vary based on a wide multitude of factors including socio-economic status and gender, and by designing their own formative assessment system, schools can tailor it towards the clientele of their pupils (Wyse et al, 2013; Nolen, 2007). This will be of particular benefit at The Boys' School given that it is a single sex independent school operating a bespoke curriculum (Black et al, 2011).

2.10 Conclusion

Based on the success of existing initiatives, the literature shows that the design of the formative assessment system should include the following key features:

- Written outcomes for writing, reading and speaking & listening skills
- Computerised system
- Implementation alongside existing summative practices
- No levelling

These features should make the formative assessment system an effective practice, by allowing for close tracking of pupil progress based on the evidence collected through formative assessment (Black & William, 2009). Close tracking throughout the learning process should reward me with a thorough understanding of my pupils as individual learners (Black et al, 2004). Additionally, close tracking should allow for early identification and correction of misconceptions, rewarding pupils with a secure knowledge base at the end of the learning process. (Marlow et al, 2014).

The existing literature has highlighted that implementation of a formative assessment system should create an intrinsically motivating environment that is highly conducive to learning (Gardner, 2012). The system should do this by driving a constructivist approach to teaching and learning, increasing pupil engagement (James, 2008). In addition to this, the system should enable the feedback collected through formative practices to be utilised, facilitating effective differentiation of tasks and the setting of suitably challenging learning goals, increasing pupil self-efficacy (Clarke, 2001; Galloway et al, 2004). As a result of increased engagement and elevated self-efficacy, the intrinsic motivation of pupils will increase (Lepper et al, 1973). The literature shows that intrinsic motivation is directly related to progress, as when pupils are motivated they are able to achieve their full potential (Galloway et al, 2004).

By raising motivation and facilitating effective tracking of pupil progress, it is believed that the formative assessment system will enhance the progress pupils in my classroom make in writing. In order to investigate the extent to which designing and implementing a formative assessment system will support and track pupil progress, I will seek to answer two research questions, formed as result of key findings from the existing literature:

- 1. To what extent does the formative assessment system intrinsically motivate Year 1 boys in writing?*
- 2. To what extent does the formative assessment system support effective tracking of progress made by Year 1 boys in writing?*

3. Methodology

3.1 Introduction

The assessment system drew upon the successes of APP (2008), Quigley (2014) and OTrack (2016), as detailed in the literature review. I worked collaboratively with Ms X and Ms Y to map out the Year 1 English curriculum and formulate expected learning outcomes for writing, reading and speaking & listening skills, incorporating existing APP outcomes (appendix 1) and aligned to new National Curriculum year group expectations (DFE, 2014). A spreadsheet was created for each pupil in my class with the outcomes listed on it (appendices 3 & 4). Outcomes were marked with a Y (yes) if it had been achieved or N (no) if it not been achieved by the individual pupil. Throughout the four-month period of the investigation (January-May), once a week I would holistically consider the evidence gathered through formative practices for every pupil and use this to mark off achieved outcomes. Outcomes were only rewarded once it was evidenced that a pupil could fulfil the criteria of the desired outcome independently.

In order to observe the impact of the formative assessment system, quantitative and qualitative data was gathered for this investigation. Secondary quantitative data was gathered from summative assessment results and primary quantitative data was gathered directly from the formative assessment system. Additionally, primary qualitative data was gathered through observations and independent writing samples. Using a mixed methods approach offered me a comprehensive perspective of the issue (Ivankova et al, 2006). Equal weight was placed on both the quantitative and qualitative data gathered and analysed in this investigation in order to offer a reliable, holistic depiction of pupil progress (Burke, 2010; Harlen & James, 1997).

In order to observe the impact of my assessment system, I gathered data from both my class (case study class) and the adjacent Year 1 class (control class), to enable associations to be identified in research (Woodside, 2010). Conducting a case-control study enabled me to observe pupil progress as a direct result of the formative assessment system and discount pupil progress being due to any other factors (Cohen et al, 2011). The formative assessment system was only implemented in the case study class. For consistency, both classes had an equal sample size of 20 pupils and both classroom teachers continued to deliver lessons from identical schemes of work (Cohen et al, 2011). However, as per normal practice, each teacher planned individual lessons separately, enabling me to observe the impact the formative assessment system had upon the planning and delivery of my lessons. Additionally, in order to ensure reliability, it was important that within the control class no changes to existing practices were made (Woodside, 2010).

3.2 Quantitative data

In order to see the see the impact the system had on pupil progress in summative assessments, data was gathered from PIE (Progress in English), NGRT (New Group Reading Test) and the school's Year 1 words spelling assessments. The PIE, NGRT and Year 1 words spelling tests were chosen as they were existing practices at The Boys' School, meaning that pupils were familiar with these assessments and they were therefore unobtrusive to their learning (Cohen et al, 2011). The PIE is an assessment of general literacy skills (NFER, 2015), NGRT assesses progress in Reading (GL-assessment, 2015) and the spelling test assesses pupil knowledge and understanding of phonics.

Data was gathered for both classes at regular four-month intervals (September, January and May), enabling reliable comparison of progress (Cohen et al, 2011). On

the PIE and NGRT assessments I analysed Standardised Scores (SAS), as SAS takes into consideration the different ages of the pupils offering reliable comparison of progress (appendices 5, 6, 8 & 9) (NFER, 2015). As standardised scores were not available on the spelling assessment, the raw score was gathered from this assessment instead (appendices 7 & 10).

September, January and May assessment data was collated on a spreadsheet and calculations were made for (i) the range of scores, (ii) the mean score and (iii) the percentage progress in each examination (appendices 5-10). The range of scores enabled me to see how the formative assessment system impacted the attainment gap in the case study class compared to the control group (Hartas, 2010). Through the mean, I could see the impact the formative assessment system had on the case study class as a whole. Additionally, calculating the percentage of progress enabled me to make comparisons between progress made in the case study class and the control group (Hartas, 2010). In addition to this, I could compare the percentage of progress pupils in the case study class made on their summative assessments prior to the implementation of the formative assessment system (September - January) with post-implementation of the system (January – May).

In addition to summative assessment, quantitative data was also gathered from the formative assessment system in the form of the number of outcomes each pupil in the case study class had achieved. A weekly record of the number of outcomes each pupil had achieved, in writing (appendix 11) and reading and speaking & listening skills (appendix 12), was kept and carefully monitored. The percentage increase in the number of outcomes achieved between January and May was also calculated for each pupil to enable comparisons of progress made by different pupils in the class (Hartas, 2010). Quantifying formative assessment data in this way was found to be

beneficial because it enabled me to closely track pupil progress on a weekly basis. Additionally, it allowed for reliable analysis of the system as quantitative data is considered to be less subjective during interpretation than qualitative (Cohen et al, 2011).

3.3 Qualitative data

In addition to quantitative data, I gathered qualitative data, as it offers greater depth and detail to research than quantitative does (Cohen et al, 2011). Qualitative data was taken from daily observations and samples of pupil written work. Observations enable live data to be gathered from naturally occurring situations (Cooper & Schindler, 2001). I made daily observations in the classroom and recorded these into a research diary. The diary was invaluable in offering a fresh perspective on everyday behaviour that may usually be taken for granted or go unnoticed (Cooper & Schindler, 2001). It was particularly beneficial in enabling me to identify the direct impact the assessment system had upon pupil motivation, given that motivation is a largely intangible occurrence (Galloway et al, 2004).

In addition to daily observations, I also conducted a structured observation once a month. Observations were made in both the case study class and the control group class to enable effective comparison (Cohen et al, 2011). For consistency, observations were carried out in both classes by my Teaching Assistant (TA) during a one hour English lesson with an identical learning focus.

The five structured observations aimed to observe any changes in motivation that occurred in the case study classroom as a result of the formative assessment system. Observations were made of the amount of time it took for a pupil to independently pick up a pencil and begin a task, as this is indicative of their level of motivation (Benabou & Tirole, 2003). A stopwatch was used in order to ensure accuracy and

times for each pupil were recorded and an average calculated for each class (Cohen et al, 2011).

Motivation was also measured in the number of voluntary contributions given in a lesson. Voluntary contribution is an indicator of high self-efficacy and therefore a useful measure of motivation (Benabou & Tirole, 2003). The number of pupils who voluntarily contributed on at least one occasion during the lesson was calculated and compared in both classes (Cohen et al, 2011).

In addition to this, observations were taken for the number of pupils considered to be off-task during a lesson. Being off-task means pupils are not participating in an activity occurs due to disengagement (Zimmerman, 1992). The number of pupils who were off-task on at least one occasion during the lesson was calculated and compared in both classes (Cohen et al, 2011).

In addition to measuring motivation, observations also sought to identify the impact the formative assessment system had on the teaching and learning style employed in the case study classroom. A stopwatch was used to calculate the minutes of teacher-directed learning in a lesson and any unrecorded time was indicative of child-led learning. The proportion of teacher-directed and child-led learning should indicate whether a behaviourist, cognitivist or constructivist style was being employed in the classroom (James, 2008). Percentages of child-led and teacher-directed learning were calculated and compared for both classes (appendix 15).

In addition to a researcher's diary, activity observation sheets were used to record observations of pupil knowledge and understanding during the completion of tasks aimed at developing writing, reading and speaking & listening skills (appendix 16). I used the observation sheets collaboratively with information collected from other

formative practices to make informed decisions regarding outcomes which pupils had achieved on the formative assessment system.

In this investigation, qualitative data was also gathered from independent writing samples. Pupil writing samples from January, March and May, were taken from a higher and lower ability pupil in the case study class, allowing for comparison of progress made by various abilities as a result of the formative assessment system (Cohen et al, 2011). Additionally, writing samples were taken for the three vignette pupils to allow for close observation of the impact the interventions had upon their writing (Woodside, 2010). For each writing sample, I made factual notes regarding the features of writing displayed by each pupil (Flick et al, 2005). In addition to this, I recorded the length of the composition and the number of words spelt correctly, which I calculated as a percentage to enable accurate comparison of spelling across the three months (Hartas, 2010).

3.4 Limitations

No data is without limitations and in order to ensure the investigation was as fair as possible, it is important to draw attention to these (Cohen et al, 2011). Firstly, all research involves some degree of personal bias and as the researcher I may have inadvertently interpreted findings from my own personal stance (Cohen et al, 2011). An example of this is that confirmation bias may have resulted in me interpreting evidence in a way that supports hypotheses from the literature review (Cohen et al, 2011). Additionally, as well as being the researcher, I was the class teacher, therefore holding a close relationship with the participants and prior knowledge and assumptions regarding them as learners (Gold, 1958). Being aware of my personal paradigms meant I could make attempts to minimise their influence on the research

(Gold, 1958). For example, I adopted the position of neutral observer, recording and interpreting evidence based on factual findings (Cohen et al 2011).

A further limitation of the research is that summative assessment data can be an unreliable measure of progress. Summative assessment is felt to only give a snapshot of pupil progress, and achievement on examinations is highly dependent upon a pupil's mood on a given day (James, 2008). Additionally, the use of summative assessment data in a formative assessment research project could be viewed as counterproductive (Hartas, 2010).

In an attempt to minimise the identified limitations, triangulation was used to ensure validity of sources (Cohen et al, 2011). Through triangulation the benefits of both quantitative and qualitative research methods were accessed and the weaknesses of each counteracted (Cohen et al, 2011). Triangulation enabled me to capture different dimensions of the same phenomenon, facilitating cross verification of sources and therefore offering credibility of data (Flick et al, 2005).

3.5 Ethical considerations

I adhered to the University ethical code of practise and gained CUREC approval from the University ethics board. Additionally, I followed the British Educational Research Association (BERA) ethical guidelines, operating with honesty and integrity to ensure the rights and dignity of all participants were upheld (BERA, 2011; Denscombe, 2004).

Gaining consent of participants is important when conducting research (Kvale, 1996). As participants in this study are only five and six years old, they are too young to give informed consent (Cohen et al, 2011). For this reason, I gained consent from the parents of all participants. All parents received leaflets to fully inform them of the study (appendix 18), in addition to opt-out reply slips (appendix

19) as per University ethical requirements. The child of any parent who returned a signed copy of the opt-out slip was immediately exempt from the study. For the three vignette pupils, parents were consulted with and agreed to intervention before this was put in place for their child.

The Head Teacher gave written informed consent for the school to participate in the investigation (appendix 17), after being given all of the relevant information and being reassured that participation was entirely voluntary (Cohen et al, 2011). I gained permission from The Head Teacher and Ms Y for assessment data to be used anonymously for the purpose of this investigation, ensuring non-traceability of the research (Cohen et al, 2011). Sensitive information about pupils, such as assessment data were stored securely throughout this research project on the school server, which is password protected, and all analysis occurred in school (Cohen et al, 2011). It is important to protect privacy and rights of participants are protected (Cohen et al, 2011). In this investigation, participant anonymity was maintained, with pupils being referred to by numbers (Pupil 1, 2, 3 etc) and staff by letters (e.g. Ms Y, Ms X etc). Additionally, the pseudonym 'The Boys' School' was used to avoid any identification of pupils (Cohen et al, 2011). In writing samples, where pupils have referred to the names of others, these names have been blocked out to maintain confidentiality.

Finally, the young age range of the participants meant they were considered a vulnerable group to carry out research with (Alderson & Morrow, 2011). It was therefore important that I ensured the research project was in no way intrusive to pupils (Cohen et al, 2011). The research methods used were chosen for this investigation as they were felt to be the least invasive. Methods such as interviews

were not chosen as it was felt that these could make pupils feel uncomfortable and cause unnecessary stress (Kvale, 1996).

4. Discussion and findings

4.1 Increased motivation

The formative assessment system was found to increase pupil motivation by enhancing their self-efficacy and engagement. When pupils are motivated they are more likely to achieve, meaning they make greater progress (Galloway et al, 2004). Increased motivation was marked by a reduction in time taken for pupils to independently begin a written task. In January, observations at the start of the investigation revealed that pupils were taking an average time of eight minutes to pick up a pencil independently and begin a written task (figure 3). By May, this time had fallen by 63%, suggesting that pupils experienced greater motivation to begin a written task on their own accord

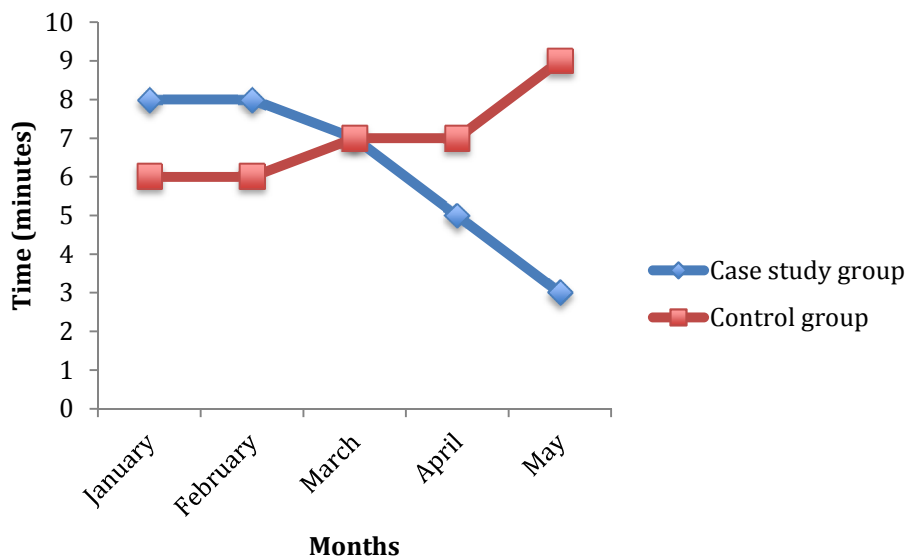


Figure 3: Average time taken for pupils to independently begin a written task.

By comparison, observations taken in the control group classroom showed that the time taken for pupils to independently begin a written task increased during the four months of the investigation. In January, the average time taken for pupils in the

control group to pick up a pencil was two minutes faster than the time taken in the case study group. However, by May the average time taken for pupils in the control group to pick up a pencil had increased by 50%, this being six minutes slower than the time taken by the case study group (figure 3). These findings suggest that whereas intrinsic motivation increased in the case study classroom, it fell in the control group.

An increase in motivation in the case study class and reduction in the control group can also be observed in the number of pupils voluntarily contributing to lessons in both classes. Voluntary contribution is felt to be an indicator of motivation levels, as when pupils are motivated they are more likely to be engaged and participate in lessons (Black & William, 1998). In January when my teaching assistant observed my input session for a lesson focused on spelling words beginning with 'sh', 'ch' and 'th', 50% of pupils in the case study class were voluntarily putting their hand up to answer questions and participate (figure 4). By May, during a lesson that focused on adding the suffixes 'ed' and 'ing' to words, voluntary participation had risen to 90% of the class. By contrast, in the control group, observations were taken for the same lessons and revealed that voluntary contribution had fallen from 55% of the class in January to 45% of the class in May (figure 4). The rise in voluntary participation of pupils in the case study class indicates an increase in their confidence to participate and answer questions during class discussions.

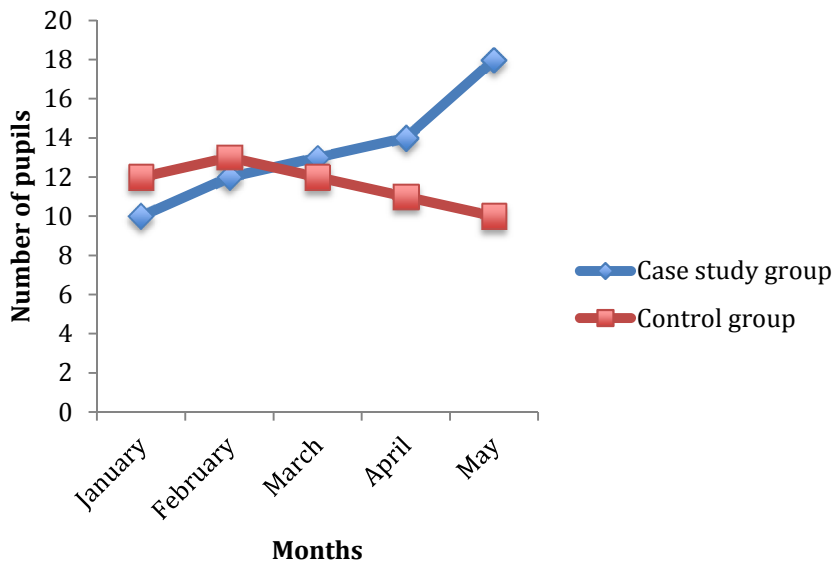


Figure 4: Number of pupils who voluntarily contributed to a one-hour lesson, on at least one occasion.

Enhanced motivation in the case study class was also observed in the change of language I overheard in the classroom. In January, pupils in the case study class had been overheard using largely negative language as they approached literacy based tasks, such as *“I can’t do this. This is too hard,”* (Pupil 16). *“I don’t want to do it. I’m not good at writing,”* (Pupil 5). By May, observed language of the same two pupils was far more positive, such as *“I can do this. I know how to do this.”* (Pupil 16) *“Let’s do it. This is fun,”* (Pupil 5). These comments indicate an increase in pupil motivation. In January Pupils 5 and 16 were largely demotivated, lacking confidence in their own abilities. However by May, these pupils are motivated and felt confident that they could achieve on the given written task.

As pupils became more confident in their own abilities, their self-efficacy increased. The literature shows that pupils must feel confident in their own abilities in order to achieve, making self-efficacy a precursor for motivation (Pajares, 2010). In this investigation, self-efficacy largely increased through effective differentiation. As a result of the formative assessment system, I felt my differentiation became more

effective, as I could identify pupil weaknesses through noting the outcomes individuals had not yet achieved. By May, it appeared that tasks had become more closely aligned to pupil needs and pitched to a more suitable level of challenge than they had been in January.

For example, in January, observations during an undifferentiated independent story writing activity revealed that on average 50% of pupils were off task without teacher support. By comparison in May, when writing a story independently, six pupils were given writing frames for support (appendix 20) as it was identified through the formative assessment system that they had not yet achieved the outcome to 'structure writing chronologically'. Additionally, five pupils who had not yet achieved the outcome 'use of adjectives in writing' were given a word bank in order to support them in descriptive writing. This differentiation resulted in 95% of pupils in the class being independently focused on the task.

Motivation appeared to increase as the pupils felt the task was achievable, resulting in their self-efficacy being high (Atkinson, 1964). The use of writing frames and adjective word banks enabled pupils to overcome their difficulties and feel they could be successful in completing the task at hand (Galloway et al, 2004).

In addition to becoming effectively differentiated, lessons began to follow a more constructivist approach to teaching and learning. As suggested in the existing literature, the formative assessment system drove a constructivist approach to teaching and learning within the case study classroom (James, 2008). The change in learning environment was exemplified in monthly lesson observations in the case study class. In January, the observed lesson was 50% teacher-directed and 50% child-led. However, by May the observed lesson was 75% child-led (figure 5). The increase in child-led learning suggests that a constructivist-learning environment

developed in the case study classroom following the implementation of the formative assessment system. By comparison, observations in the control group revealed that lessons remained largely 50% teacher-directed and 50% child-led, showing that there was no apparent change in the learning environment (figure 5).

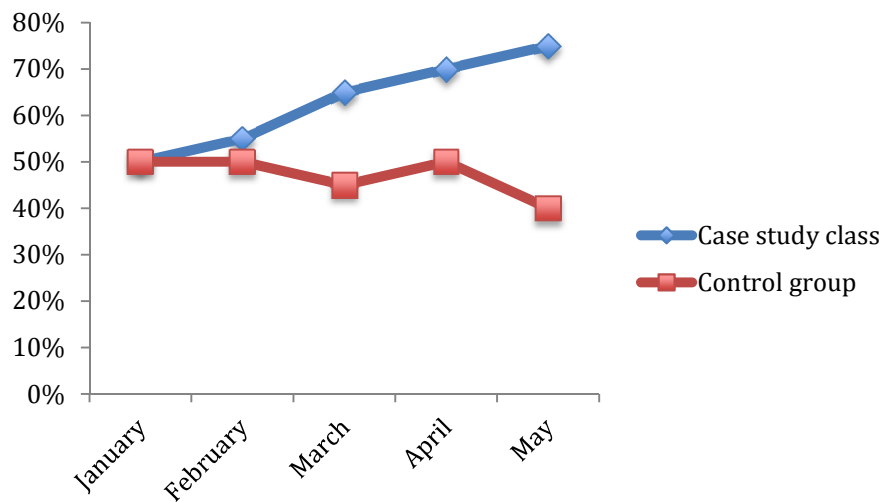


Figure 5: The proportion of child-led learning in a one-hour lesson.

One reason for the increase in child-led learning in the case study class might be that, by May, I was incorporating a greater proportion of child-centred explorative activities into my lessons, in order to enable effective formative assessment of pupil writing, reading and speaking & listening skills for the purpose of the formative assessment system. The increase in the number of child-led activities brought about an active approach to teaching and learning. The existing literature highlights that constructivist learning environments as brought about by formative assessment enhance pupil engagement and consequently increase pupil motivation (Galloway et al, 2004). The level of engagement increased in line with the change in learning environment. During an observed lesson containing a teacher-led input in January, on average 45% of pupils were disengaged at any one time (figure 6). However,

during the observed lesson in May containing a child-led input, on average only 10% of pupils were off task at any time (figure 6). These findings show that the change in learning environment increased pupil engagement resulting in a fall in the number of pupils who were off task during a lesson.

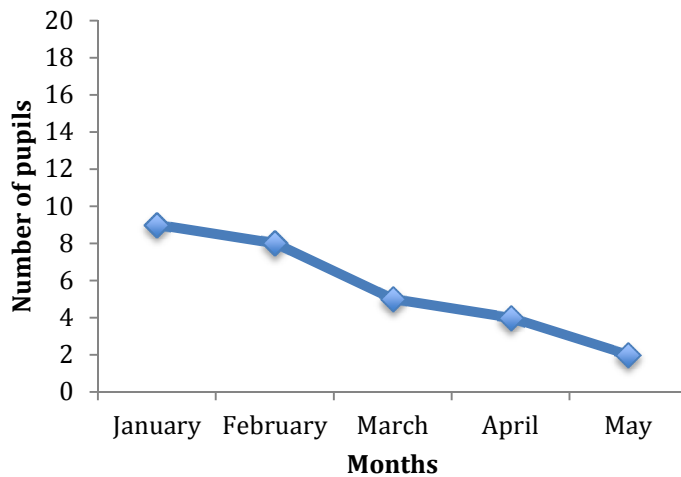


Figure 6: Average number of pupils off task in the case study class during a one-hour lesson.

4.2 Social capital

In addition to an increase in motivation, a rise in social capital appears to have occurred as a result of the constructivist learning environment employed in the classroom following implementation of the formative assessment system. Social capital was brought about through an increase in collaborative activities, which I planned in order to assess the speaking and listening outcomes listed on the formative assessment system. This created a more co-operative learning environment, strengthening trust and reciprocity in the classroom (Pedder & McIntyre, 2006). This could further explain a raise in voluntary participation in the classroom, as when trust and reciprocity is high, pupils feel more confident and secure in sharing contributions and giving answers to questions (Coleman, 1990).

By contrast, in a learning environment where social capital is low, voluntary participation is also low, as pupils may feel concerned about the reaction of others if an incorrect answer is given (Coleman, 1990).

In addition to increased co-operation amongst pupils, I observed an increase in teacher and pupil cooperation too. As lessons became more child-led, I found that my role as a teacher shifted from directing learning to facilitating it. This is supportive of findings in the literature review showing that in behaviourist learning environments, the teacher adopts the role of director of learning, whereas in a constructivist environment, the teacher instead becomes a facilitator of learning (Vygotsky, 1978). Observations revealed that I was increasingly working with children to support them in their construction of knowledge and understanding when completing tasks. This strengthened my rapport with pupils and therefore further increased social capital in the classroom (Hedegaard, 2008).

The apparent rise in social capital coincided with an increase in pupil consultation, consistent with findings in the literature review. Pupils became more forthcoming in asking for help and were also confident in asking for lessons on certain areas where they experienced difficulty, for example; “*Can we learn about split vowel digraphs again tomorrow as I don’t get it yet?*” (Pupil 8), and “*Can we practise capital letters next time?*” (Pupil 20). This further enabled me to observe the learning needs of my pupils and cater for these accordingly. As I followed through with their requests pupils appeared to become more motivated as a result of increased reciprocity and trust within the classroom.

I began consulting with pupils regarding the topics they would like to write about. Three popular themes that emerged were Africa, Space and Castles and I created written activities based on these topics. For example, in one lesson during May the

boys used commas to list the animals that lived in the African Savannah. Pupil engagement appeared to be comparably higher in this lesson than a similar one that had been delivered in January, the theme of which was decided by the teacher. I believe the reason for the increased motivation in this lesson was that pupils had chosen the topic and therefore felt a sense of ownership over their learning. When pupils feel autonomous over their learning they become more engaged, and consequently intrinsically motivated (Coleman, 1990).

Additionally, by planning lessons which caught the interests of the boys, I was inadvertently deconstructing their habitual beliefs about writing. As highlighted in the literature review, writing has been socially constructed as a feminine activity and from a young age boys internalise this belief as part of their habitus (Bourdieu, 1990). Through creating a curriculum containing written activities that captured the interests of boys, I was challenging habitual gendered beliefs surrounding writing and promoting it as an activity targeted towards boys. As a result, the boys began to internalise writing as a masculine as well as a feminine activity, resulting in an increase in their motivation towards written activities.

4.3 Increased progress on summative assessments

The formative assessment system was found to increase the progress pupils in the case study class made in their summative assessments. Between September and January, prior to the introduction of the formative assessment system, the average pupil SAS on the PIE assessment increased by 2% (figure 7). Between January and May, following the implementation of the formative assessment system, the mean standardised score achieved by pupils in the case study class on the PIE assessment increased by 9%. This meant that the average progress made by pupils was 7% greater between January and May than September and January (figure 7)

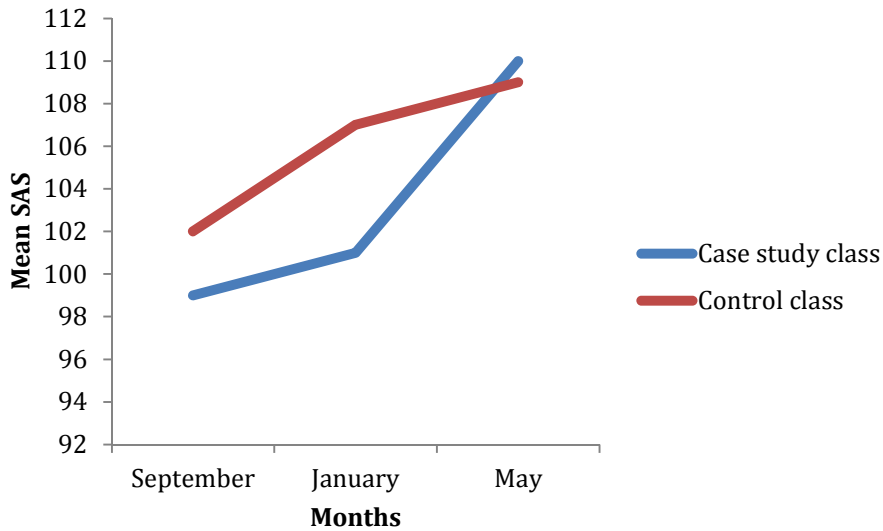


Figure 7: Mean SAS achieved by pupils on the PIE assessment.

Additionally, on the NGRT assessment, the mean SAS achieved by pupils in the case study class increased by 10% between January and May, whereas previously, from September to January, the mean NGRT score had only risen by 2% (figure 8). This shows that pupil progress was 8% greater between January and May, than it had been between September and January (figure 8).

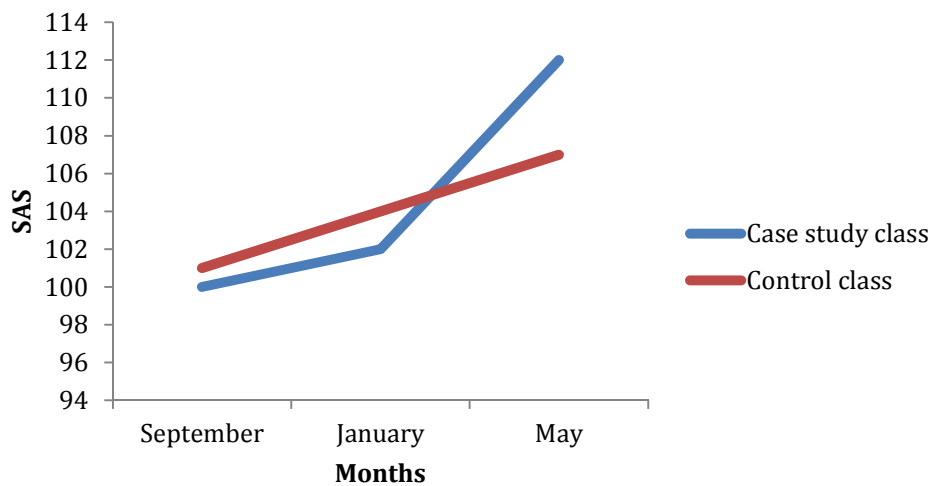


Figure 8: Mean SAS achieved by pupils on the NGRT assessment.

Data taken from the Year 1 spelling assessment further suggests that the formative assessment system increased the progress pupils made in their summative assessments (figure 9). The mean number of words pupils in the case study class could spell correctly increased by 51% between January and May following the implementation of the formative assessment system, compared to the previous increase of just 19% between September and January (pre-implementation). In comparison, the mean number of words pupils in the control group could spell correctly increased by 35% between September and January and just 25% between January and May.

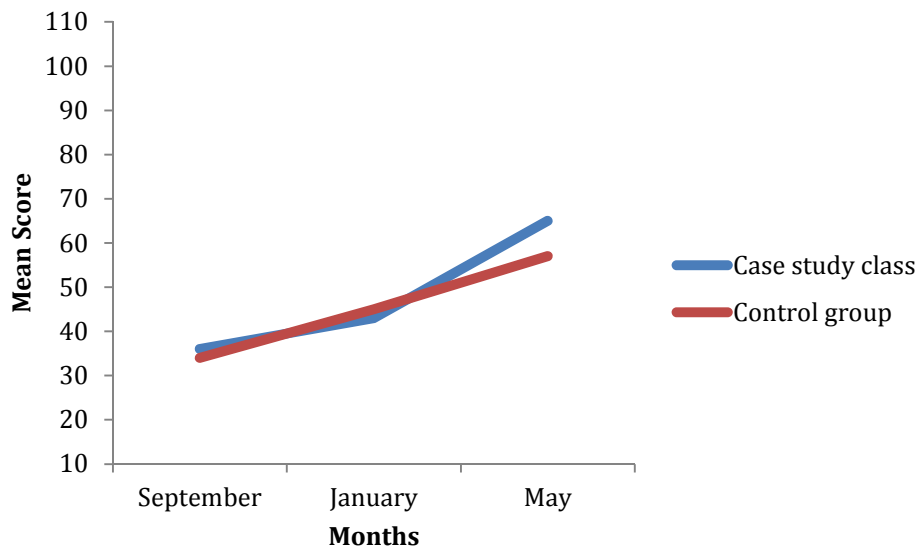


Figure 9: Mean score achieved by pupils on the Year 1 spelling summative assessment.

The NGRT, PIE and Spelling assessment data suggests that between January and May, following the introduction of the formative assessment system, pupils in the case study class made greater progress on their summative assessments than those in the control group class. For example, in May the mean SAS achieved by pupils in the case study class on the NGRT had increased by 10% since January. This increase was 7% greater than that made by the control group, where the mean SAS

achieved had increased by just 3%. In contrast, prior to the introduction of the formative assessment system, between September and January, the mean progress pupils in the control group made in their NGRT assessment had been 1% greater than the progress made by pupils in the case study class (figure 8). In addition to this, in May progression in the mean score achieved on the Year 1 spelling assessment was 25% less in the control group than that of the case study class (figure 9).

These findings suggest that in the control group where the formative assessment system was not used, progression was less. The implementation of the formative assessment system appeared to accelerate the progress pupils in the case study made on their summative assessments. This is supportive of findings in the existing literature that highlight how effective use of formative assessment can enhance pupil progress in summative assessments (James, 2008)

4.4 Achievement gap

In addition to increasing overall scores on summative assessments, the formative assessment system was found to lower the range of scores on the NGRT and PIE assessments, therefore reducing the gap in achievement. The literature review suggested that decreasing the achievement gap is important, as otherwise lower ability pupils will continue to fall further behind their peers (William, 2011).

Between September and January, prior to the introduction of the assessment system, the range of SAS in the case study class had increased by 13% on the PIE assessment within the case study class (figure 10). However, following the introduction of the formative assessment between January and May, the range of scores had reduced by 25% (figure 10). In addition to this, the range of scores achieved by pupils in the case study class on the NGRT fell by 27%, this being a

25% greater decrease than had previously occurred in this assessment between September and January (figure 11). By comparison, in the control group, the range of SAS achieved in May compared to January increased by 13% on the NGRT and 32% on the PIE. This finding suggests that without the use of the formative assessment system gaps in achievement would increase, resulting in lower ability pupils falling further behind peers over time (Dumais, 2002). The formative assessment system was felt to prevent lower ability pupils falling behind, by enabling gaps in knowledge and understanding to be identified and intervention put in place to support these pupils if required (Marlow et al, 2004).

	Case study class			Control class		
	Maximum SAS score	Minimum SAS score	Range of SAS	Maximum SAS score	Minimum SAS score	Range of SAS
September	117	85	32	122	89	33
January	122	86	36	122	91	31
May	122	95	27	133	92	41

Figure 10: Maximum, minimum and range of SAS achieved by pupils on the PIE assessment.

	Case study class			Control class		
	Maximum SAS score	Minimum SAS score	Range of SAS	Maximum SAS score	Minimum SAS score	Range of SAS
September	119	85	34	120	87	33
January	121	88	33	127	89	38
May	123	99	24	133	90	43

Figure 11: Maximum, minimum and range of SAS achieved by pupils on the NGRT assessment.

From the January to May period, as the range of scores reduced in the case study class, the minimum SAS also increased by 10% on the PIE assessment and by 13% on the NGRT. Although the control class also experienced an increase in the

minimum SAS on both assessments (PIE: 1% and NGRT: 1%), this rise was not as pronounced as that experienced in the case study class (figures 10 & 11). This increase in minimum score suggests that the formative assessment system was beneficial in raising the achievement of lower ability pupils.

4.5 Lower ability pupils

The formative assessment system was found to be particularly beneficial in boosting the progress of lower ability pupils. Pupils who had achieved the least number of outcomes on the formative assessment system in January in both writing and reading & speaking and listening (Pupils 9, 15, 10, 1 and 8) were found to experience the greatest increase in the number of outcomes achieved between January and May, suggesting they made the greatest progress (figures 12 & 13).

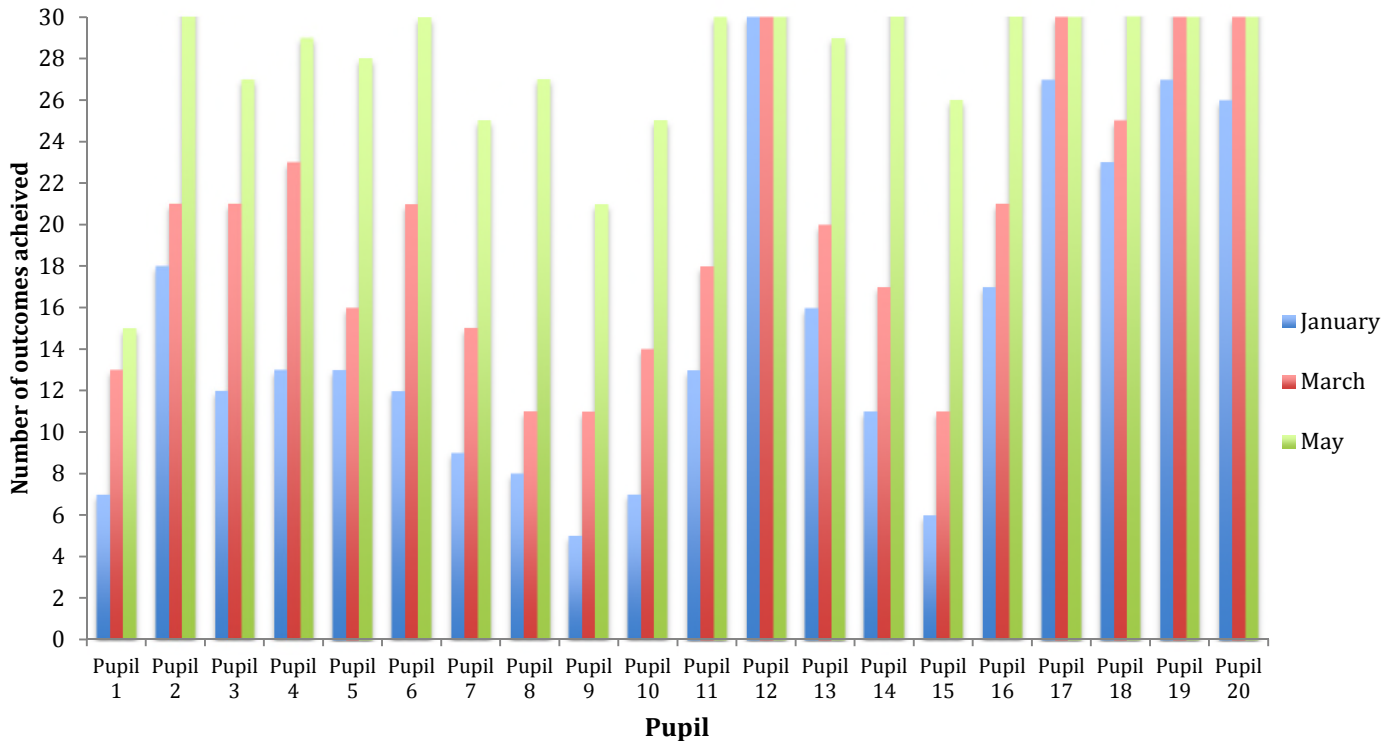


Figure 12: Number of outcomes achieved for writing on the formative assessment system by pupils in the case study class.

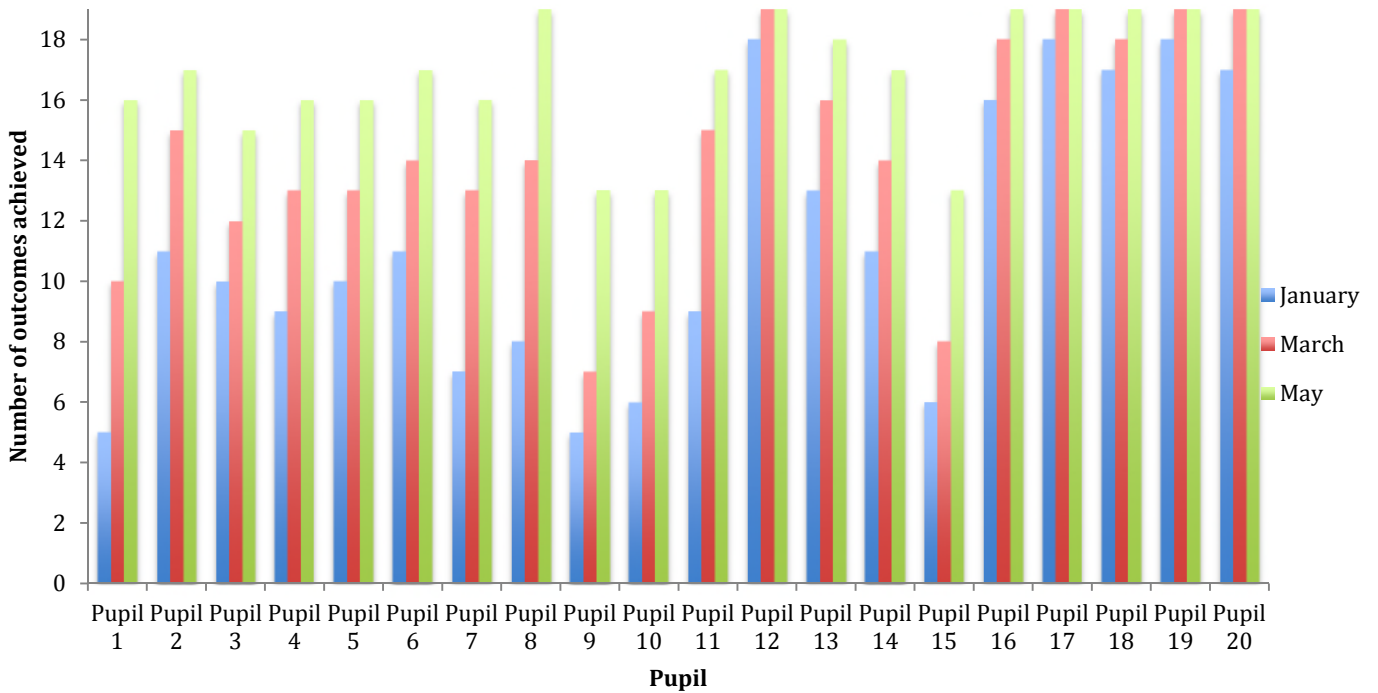


Figure 13: Number of outcomes achieved for Reading and Speaking & Listening skills on the formative assessment system by pupils in the case study class.

Additionally, the progress lower ability pupils made in the summative assessments enhanced between January and May, after the implementation of the formative assessment system. For example, in January, Pupil 16 achieved the fourth lowest score in the class on the PIE assessment, increasing his SAS by only 1% since September. However, following the implementation of the formative assessment system, Pupil 16’s May SAS increased by 21% on the PIE, this being the largest increase in the class (figure 14). The increased progress made by Pupil 16 between January and May suggests that the formative assessment system boosted his progress. Further evidence for this is that Pupil 16 made greater progress in his summative assessments than Pupil 36 in the control group class. Pupil 36 had the same SAS as Pupil 16 on both the PIE and NGRT (figures 14 & 15). Between January and May, Pupil 36’s scores only increased by 3% on the NGRT and 1% on the PIE. Progress made by Pupil 16 on the PIE was 20% greater and on the NGRT

10% greater than that made by Pupil 36 following the introduction of the formative assessment system.

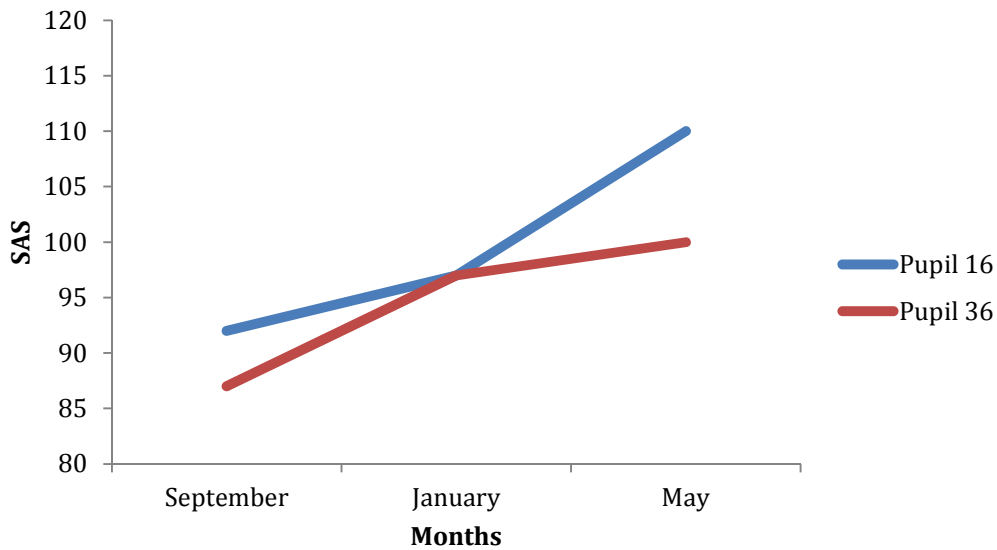


Figure 14: Comparison of increase in progress on PIE assessment.

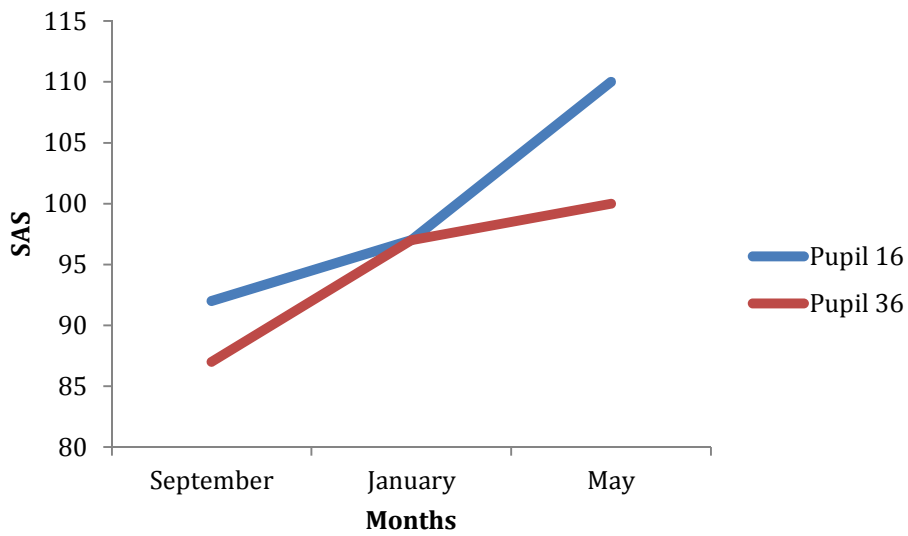


Figure 15: Comparison of increase in progress on NGRT assessment.

One reason the formative assessment system significantly benefited lower ability pupils was that it enabled misconceptions to be identified. When the formative assessment system was implemented in January, I was able to identify the written

outcomes pupils had not achieved and from these identify where particular gaps in knowledge lay.

4.6 Teacher pedagogy

The use of the formative assessment system was found to enhance teacher pedagogy.

The system was felt to improve English instruction, as the expected written outcomes for Year 1 helped me plan lessons and mediate learning across the curriculum. I could see the exact areas of the curriculum that needed to be covered and the breadth of knowledge and understanding required of a Year 1 pupil. By observing this, I was able to set focused learning goals in my lessons. Findings in the literature review show that learning goals helped to make lessons engaging and therefore intrinsically motivating for pupils (Gardner, 2012). In order to make them clear to the pupils, the WALT approach was used to set goals at the beginning of every lesson. By May, observations revealed that pupils were asking the class teacher what their WALT was even before the lesson had begun. Additionally, pupils could be overheard during activities discussing the WALT, with examples of conversation including *“I have achieved the WALT,” (Pupil 12)*. *“Remember the WALT is to use full stops,” (Pupil 3)*. This highlighted how the WALT motivated pupils, as their learning became goal directed and purposeful (Biggs, 1996).

In addition to enhancing subject pedagogy, the formative assessment system enriched my understanding of pupils as individual learners. This was facilitated through effective monitoring and tracking of pupil progress using the formative assessment system (Marlow et al, 2004). Each week I was able to identify new outcomes a pupil had achieved and those he was yet to achieve, meaning I could pinpoint where each pupil was at in their learning. Incorporating this feedback the formative assessment system gave me into my lesson planning facilitated effective

differentiation. An example of this was with Pupil 8, who by the fifth week of the investigation had only achieved one additional outcome for writing from week one. The formative assessment system revealed that Pupil 8 experienced difficulty in both handwriting and grasping the concept of grammar and punctuation, as he had not yet achieved the outcomes for these (appendix 21).

This information enabled me to tailor my teaching towards Pupil 8's needs, by planning lessons focused on grammar and punctuation. Additionally, I directed my teaching assistant to work with Pupil 8 during English lessons in order to support him with his handwriting and use of full stops. As a result, the progress Pupil 8 made in writing increased, and by May (week 16) he had achieved 90% of the written outcomes (figure 16).

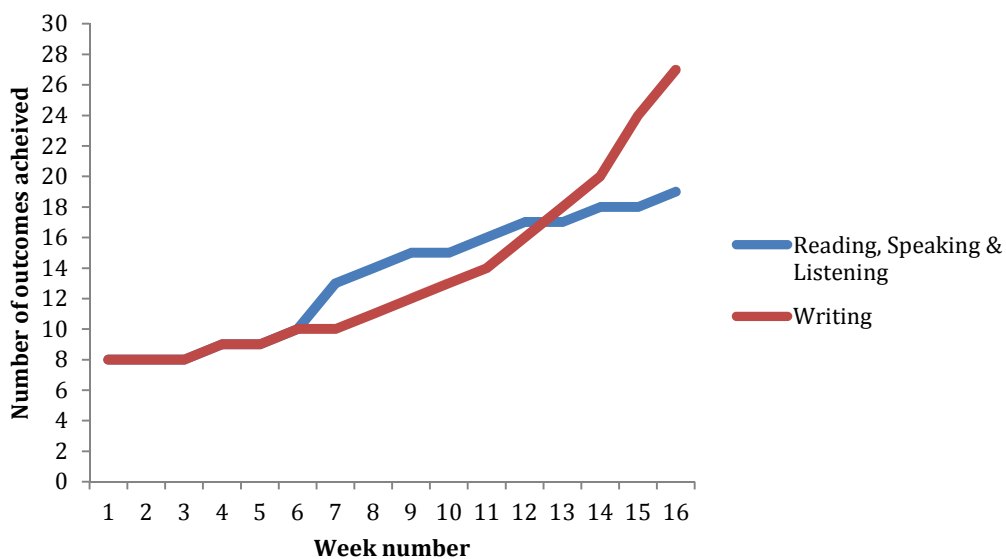


Figure 16: Weekly record of the number of outcomes Pupil 8 achieved on the formative assessment system.

A correlation was observed between an increase in the number of formative assessment outcomes Pupil 8 achieved and an increase in his achievement on

summative assessments. Pupil 8's SAS increased by 8% more on the NGRT and 14% more on the PIE between January and May than between September and January. This is felt to be a result of his gaps in knowledge and understanding being identified and catered for through effective teaching (Gardner, 2012).

The formative assessment system informed me of the unachieved outcomes and consequent learning needs of my pupils, helping me to correct misconceptions early on in the learning process, meaning that by the time pupils undertook their summative assessments they had a secure knowledge base. All SAS on the NGRT and PIE assessments increased between January and May in the case study class (appendices 5 & 6). Comparatively in the control group, between January and May the number of SAS that fell on the PIE increased from just one in January (Pupil 29) to four in May (Pupil's 31, 34, 38 and 40) (appendix 9). This fall in SAS can be attributed to the control group having increasing gaps in their knowledge and understanding.

The fact no scores fell in the case study class suggests that any misconceptions had been identified and corrected early on the learning process, ahead of the summative assessment (James, 2008). As highlighted in the existing literature, close tracking of pupil progress as was facilitated through the formative assessment system, enables gaps in knowledge and understanding to be identified and rectified early on in the learning process (Gardner, 2012). Sole reliance on summative assessment can result in misconceptions being identified only at the end of the learning process, therefore making it too late for them to be rectified (Williams, 2011). Without the formative assessment system, it may have been difficult for the class teacher of the control group to specifically identify gaps in knowledge and understanding.

4.7 Intervention

As a result of effective tracking of pupil progress, the formative assessment system provided for diagnostic analysis and opportunity to put in remedial strategies (Cheminais, 2010 & Clarke, 2001). Three interventions were put in place to support pupil progress following identification from using the formative assessment system that these pupils had specific gaps in their knowledge and understanding. Each intervention is detailed in the vignettes that follow.

4.8 Vignette 1: Pupil 9

When the formative assessment system was introduced in January, it revealed that Pupil 9 had not achieved any of the word reading (appendix 22) and spelling (appendix 23) assessment outcomes on the formative assessment system. This suggested to me as that Pupil 9 had significant gaps in his phonics knowledge and would therefore benefit from intervention. A further need for an intervention strategy was revealed in Pupil 9's summative assessment data taken from January, revealing that on all assessments he had achieved within the bottom quartile of the class. His spelling assessment results were particularly low and in both September and January he achieved the lowest scores in the class of 4 (September) and 7 (January).

After consultation with Ms X and Ms Y, I put in place a daily phonics intervention for Pupil 9, planning this around the outcomes he had not yet achieved on the formative assessment system (appendix 24). Throughout the four months of the study, every day for 10 minutes, Pupil 9 completed small activities aimed at developing his phonics knowledge. Intervention sessions involved an active learning approach to phonics teaching, as the literature shows that constructivist teaching and learning styles enhance motivation and progress (James, 2008).

Activities in the sessions included writing words in the sand, building words using 3D letters and iPad phonics games. At the end of each day, Pupil 9 would take home a list of three words he had practised in the intervention session and would put these into sentences at home with his parents. Every week the formative assessment system was updated to mark any outcomes Pupil A was felt to have achieved and identify other areas he needed to work on.

The data suggests that the intervention programme increased Pupil 9's progress. Progress can be observed in the independent writing samples collected in January (figure 17), March (figure 18), and May (figure 19).



Figure 17: Pupil 9's January independent writing sample.

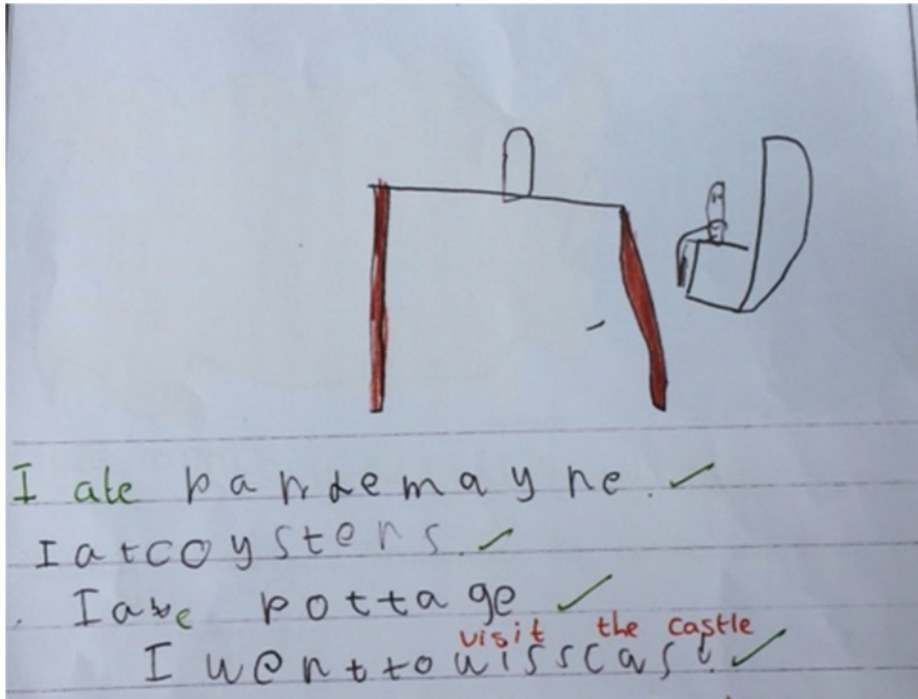


Figure 18: Pupil 9's March independent writing sample.

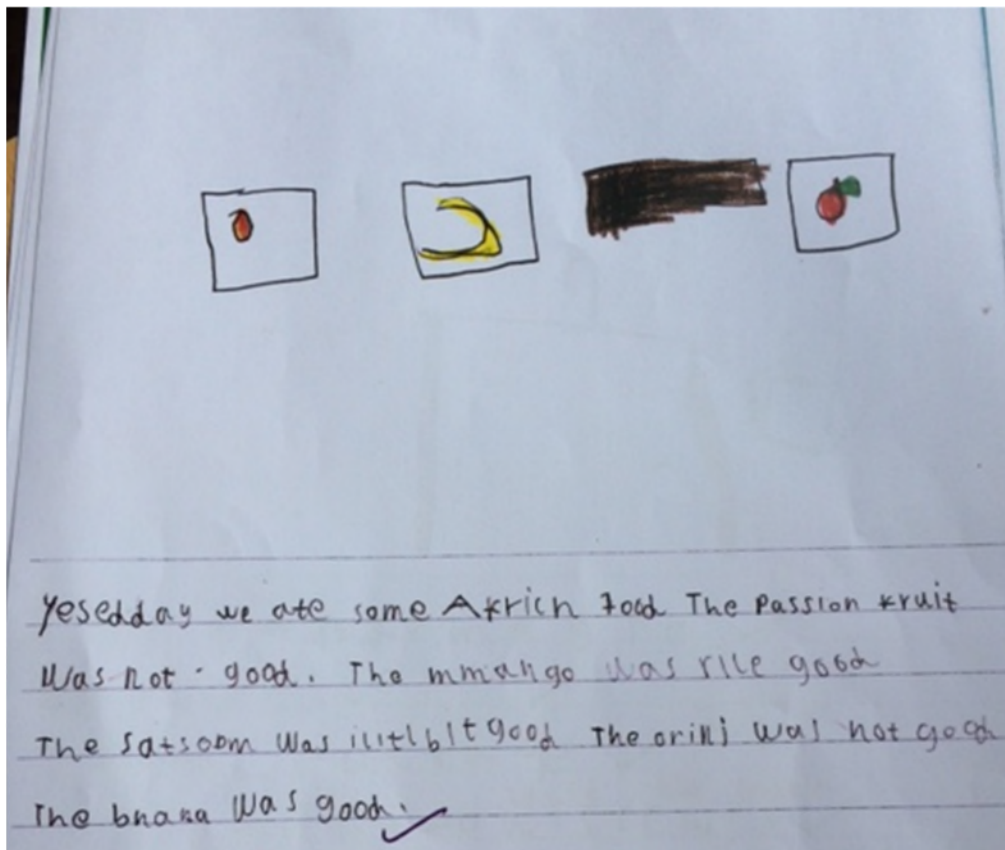


Figure 19: Pupil 9's May independent writing sample.

The percentage of words Pupil 9 spelt correctly in independent compositions increased by 50% from January to May following the intervention, signifying an increase in progress (figure 20). Additionally, in May Pupil 9 had begun to attempt more complex vocabulary in his writing including the names of fruits he ate and sentence openers such as ‘yesedday’ for ‘yesterday’ (figure 19), suggesting an increase in Pupil 9’s self-confidence. Pupil 9 may have felt his chance of succeeding on the task was high and therefore felt more confident to experiment with complex features of language (Galloway et al, 2004).

In addition to this, Pupil 9’s compositions increased in length by 75% from January to March, and by a further 74% between March and May, suggesting the intervention continuously increased Pupil 9’s motivation (figure 20). As Pupil 9 felt more confident and competent in phonics as a result of the intervention, he began to feel more confident in his own abilities and consequently more motivated to complete written tasks (Galloway et al, 2004).

From the writing samples, other improvements can also be observed, including progression in Pupil 9’s handwriting, his use of finger spaces and improvement in sentence construction. This suggests that the intervention supported Pupil 9 in developing a range of literacy skills in addition to phonics. For example, Pupil 9’s improvement in sentence construction could have been a result of Pupil 9 practising writing sentences every day at home following each intervention session.

	Words spelt correctly	Length of composition	Percentage of words spelt correctly
Writing sample January	2 words	8 words	25%
Writing sample March	6 words	14 words	43%
Writing sample May	24 words	32 words	75%

Figure 20: Analysis of Pupil 9's independent writing samples.

Close tracking and monitoring of Pupil 9's progress using the formative assessment system, revealed that the number of written outcomes he achieved increased from 17% in January to 67% in May. In addition to this, the number of Reading and Speaking & Listening outcomes increased from 26% in January to 68% in May (figure 21). This suggests that the intervention supported Pupil 9's progress in all three literacy skills, supporting findings in the existing literature that progress in one area of literacy coincides with progress being made in another (Wyse & Jones 2001). In addition to this, the gap in achievement Pupil 9 experienced between Writing and Reading and Speaking & Listening skills narrowed. In January, Pupil 9 had achieved a higher number of Reading and Speaking & Listening outcomes than Writing outcomes, suggesting the latter was the weakest of the three skills. However, following the intervention, in May, achievement in all three skills appears to be consistent (figure 21).

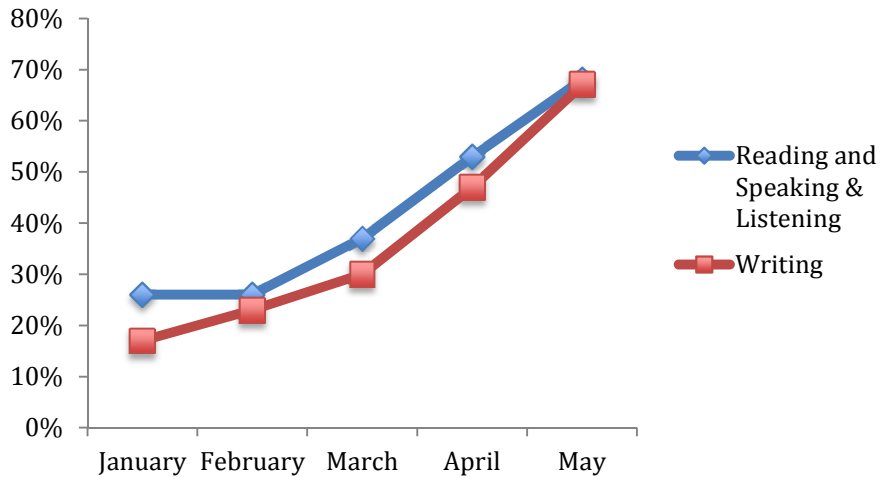


Figure 21: Percentage of outcomes achieved by Pupil 9 on the formative assessment system.

Progress coincided with an increase in Pupil 9's motivation. For example, the average time it took Pupil 9 to independently begin a written task decreased by 80% from 10 minutes in January to 2 minutes in May (figure 22). This suggests that Pupil 9 was approaching written tasks with greater motivation following the phonics intervention, as he began to feel more confident in his abilities, resulting in higher achievement.

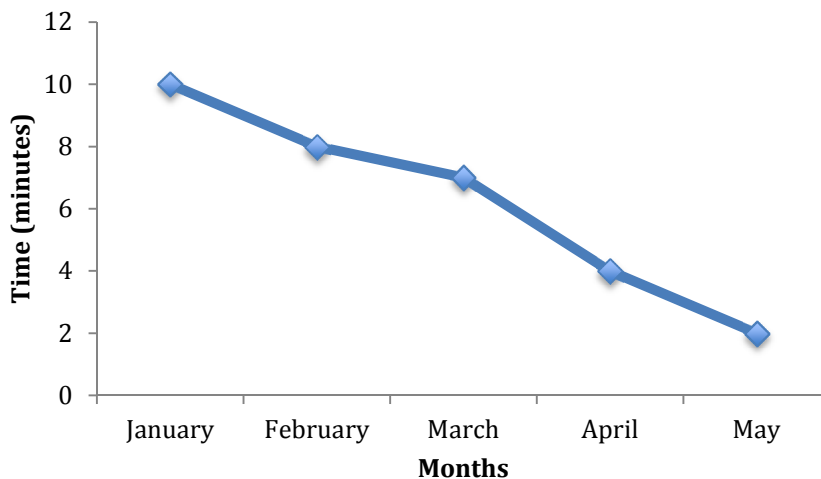


Figure 22: Time taken by Pupil 9 to independently begin a written task.

The intervention also appears to have enhanced the progress Pupil 9 made on his summative assessments. His spelling score increased by 150% between January and May following the introduction of the formative assessment system, compared to an increase of 50% between September and January (appendix 7). In addition to this, Pupil 9's progress was 4% greater on the NGRT and 11% greater on the PIE between January and May than between September and January (figure 23).

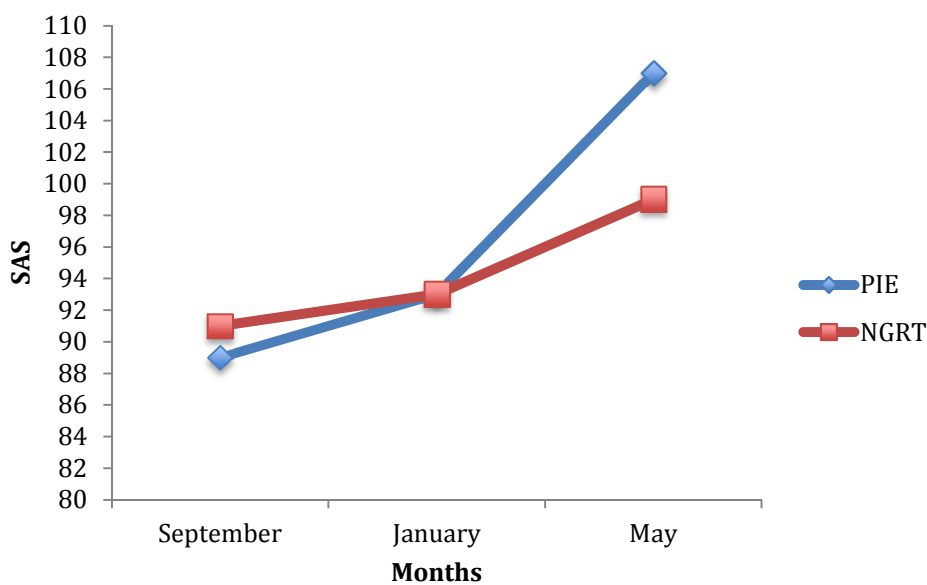


Figure 23: Pupil 9 SAS on PIE and NGRT assessments

4.9 Vignette 2: Pupil 15

An intervention was put in place for Pupil 15 with a view to raising his progress in handwriting. The intervention was put in place following the implementation of the formative assessment system in January, when it was identified that Pupil 15 had not achieved any handwriting outcomes (appendix 25).

I worked collaboratively with Ms X to implement an intervention, drawing upon her expertise in this area. The existing literature highlights how poor handwriting is often the result of poorly developed fine motor skills (Cheminias, 2010). For this

reason, I planned and implemented an intervention aimed at developing Pupil 15's fine motor skills (appendix 27). Activities were aligned to a constructivist approach to teaching and learning as this style has been found to result in high pupil engagement and consequent motivation (James, 2008). Activities included letter formation practice, bead threading and colouring in. In addition to the daily sessions, the intervention involved Pupil 15 using a pencil grip tool in the classroom in order to support him during written activities.

The teaching assistant worked with Pupil 15 for ten minutes each day to complete the intervention. Observations showed that Pupil 15 enjoyed participating in the intervention as he made comments such as "when can I do my games with Ms Z?" "Me and Ms Z did a really fun game today to practise handwriting." These comments show that Pupil 15 viewed the intervention as an enjoyable activity, meaning his motivation was high leading to higher overall achievement.

As a result of the intervention, improvements were made in Pupil 15's spelling and handwriting. The samples of independent written compositions taken from January (figure 24), March (figure 25) and May (figure 26) highlight the progression that was made during the four-month period over which the intervention was carried out.

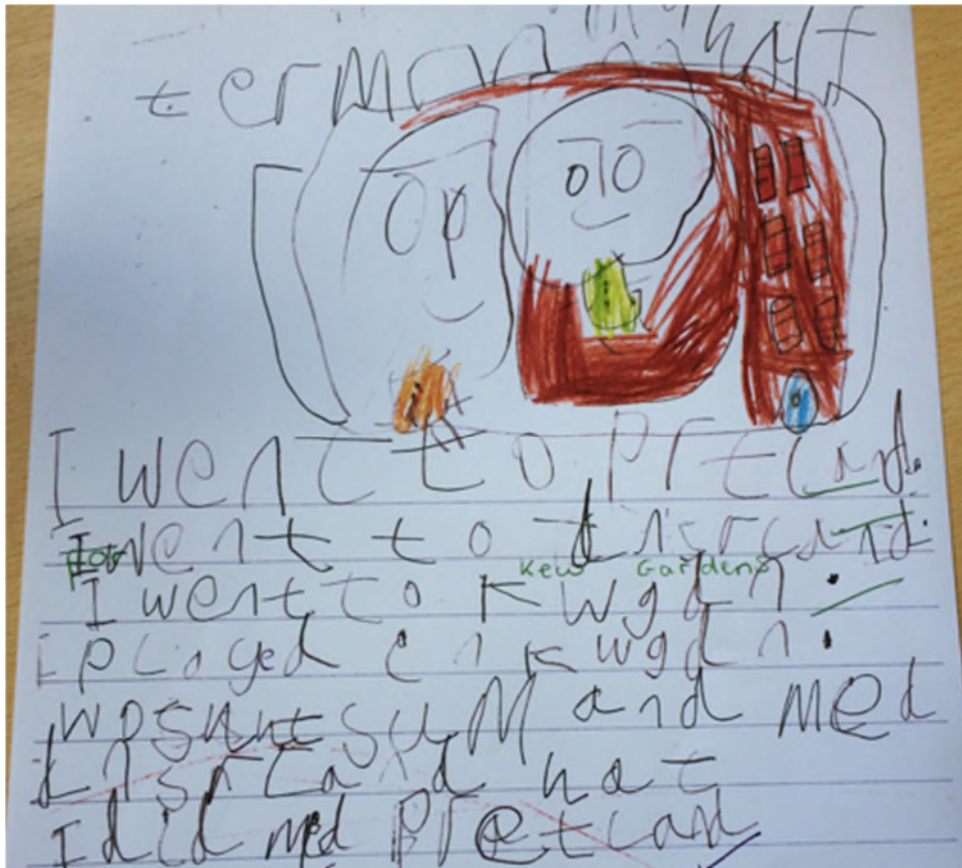


Figure 24: Pupil 15's January independent handwriting sample.



Figure 25: Pupil 15's March independent handwriting sample.

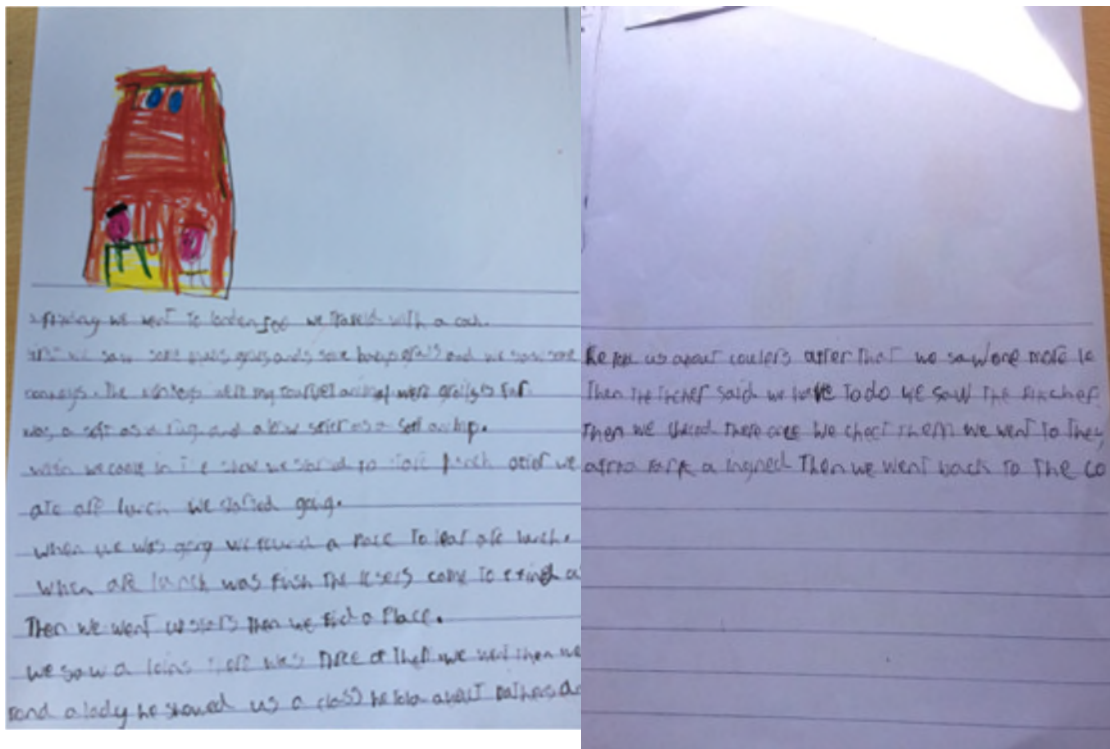


Figure 26: Pupil 15's May independent handwriting sample.

In the January writing sample Pupil 15 had not used finger spaces and his letters were incorrectly formed, as they were too large and did not sit on the line correctly (figure 24). Comparatively, following two months of the intervention. Pupil 15's letter formation had improved, with letters beginning to be of the correct size and sitting correctly on the line, with suitable spacing between words (figure 25).

Further progress in handwriting can be observed in the May writing sample, where Pupil 15 was beginning to distinguish between ascending and descending letters (figure 26). In addition to improvements in handwriting, Pupil 15's illustrations also improved. Drawing requires strong fine motor skills and therefore improvement in Pupil 15's illustrations marks progress in his fine motor skills (Cheminais, 2010).

By May, Pupil 15 was demonstrating greater pencil control, producing drawings of

a more suitable size and showing greater attempt to colour correctly within the lines than in January.

Pupil 15’s compositions increased in length between January and May by 507% overall (figure 27). This suggests that as Pupil 15’s fine motor skills developed, he presented greater motivation to write. The existing literature highlights how well-developed fine motor skills are essential in writing, as they enable writing to be effortless (Wilson, 2003). The significant improvement in Pupil 15’s compositions between January and May suggest that in January Pupil 15 was not reaching his full potential in writing, as he was demotivated due to the difficulties he experienced in handwriting. However, following the intervention, by May Pupil 15 found handwriting a more natural process and was therefore more motivated and consequently able to produce work reflective of his best ability (figure 26)

	Words spelt correctly	Percentage of words spelt correctly	Length of composition
Writing sample January	16	55%	29 words
Writing sample March	29	83%	35 words
Writing sample May	149	85%	176 words

Figure 27: Analysis of Pupil 15’s writing samples.

In addition to handwriting, the writing samples also showed improvement in Pupil 15’s spelling and vocabulary. By May, Pupil 15 was spelling 30% more words correctly than in January (figure 27). Additionally, he was using wider vocabulary, including adjectives and even a simile “groilsis fur was a soft as a rug” (figure 26). This highlights how the formative assessment system benefited Pupil 15 in ways additional to the intervention. The setting of learning goals based on unachieved

outcomes on the formative assessment system may have made learning focused and may have helped Pupil 15 recall learnt techniques to use independently (Biggs, 1999).

The writing samples demonstrate how the interventions enhanced Pupil 15's motivation and progress. Progress in Pupil 15's fine motor skills coincides with progress being made in his writing. By the end of the intervention, Pupil 15 had achieved 26 out of 34 writing outcomes, of which all but one of the handwriting outcomes had been achieved (appendix 26).

Progress was also marked in Pupil 15's summative assessments. On the PIE, Pupil 15's SAS increased by 16% between January and May, compared to 1% between September and January (figure 28). Additionally, Pupil 15's NGRT SAS increased by 18% between January and May, which was once again comparatively higher, than the progress he made during the first part of the year (7%) (figure 28).

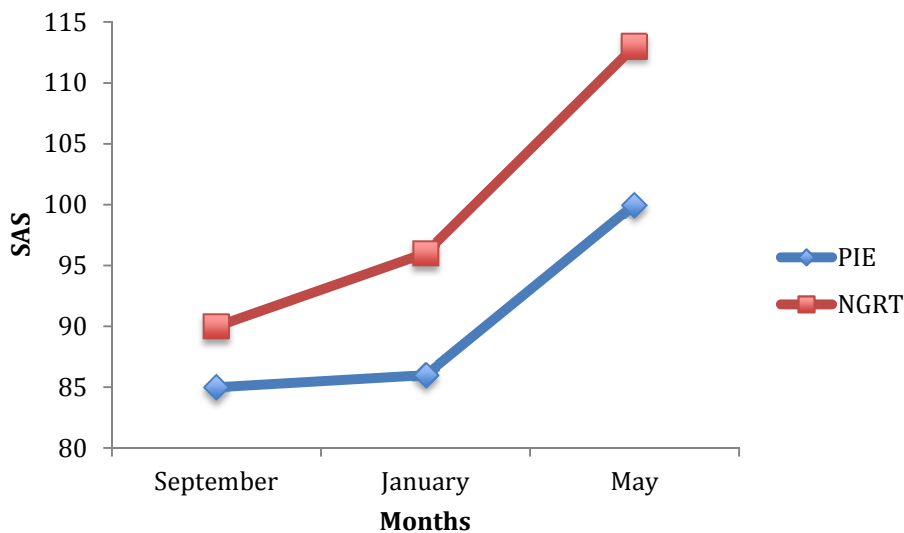


Figure 28: Pupil 15 SAS achieved on PIE and NGRT assessments.

4.10 Vignette 3: Pupil 1

Pupil 1 suffers from selective mutism and, prior to the investigation, had been undertaking Speech and Language Therapy (SLT) with an outside agency. As a result of SLT, by January he had begun to answer questions when directly asked in the classroom using 'yes' or 'no' and would also read aloud to me.

At the start of the investigation, Pupil 1's motivation to complete written tasks was low and he would not pick up a pencil independently. For the first four weeks of the investigation, every time he had to complete a written task I noted in my research diary that he "rested his head on the desk", "wrote one word and stopped" and "did not pick up a pencil until handed one by the teacher". These observations suggest low intrinsic motivation, which according to the literature review, can be a result of low self-efficacy (Galloway et al, 2004). For this reason, in collaboration with Ms X, I planned an intervention aimed at raising Pupil 1's self-confidence (appendix 28). Pupil 1 participated in half an hour sessions twice a week with the teaching assistant. Sometimes these activities included participation of other boys in the class, such as a game that involved the boys identifying each other's strengths. In addition, at the end of each school day the teaching assistant would work with Pupil 1 to record his daily achievements onto a leaf template. Pupil 1 would take this leaf home and hang it onto a confidence tree he had made, as a visual reminder of all his accomplishments.

The intervention appeared successful in enhancing Pupil 1's motivation.

Observations revealed that by May he was independently beginning a written task after an average time of three minutes. Additionally, motivation was marked by an increase in the voluntary contributions Pupil 1 made to lessons (figure 29).

Observations revealed that in January Pupil 1 was contributing monosyllabic answers, and by May he was sharing ideas using sentences. During the observed lesson in May, Pupil 1 volunteered to read his story aloud to the class, and he also gave verbal feedback to a peer saying, “I like your story it was exciting. I like the adjectives.” Pupil 1’s contributions appeared to increase as a result of enhanced self-efficacy as nurtured through the intervention.

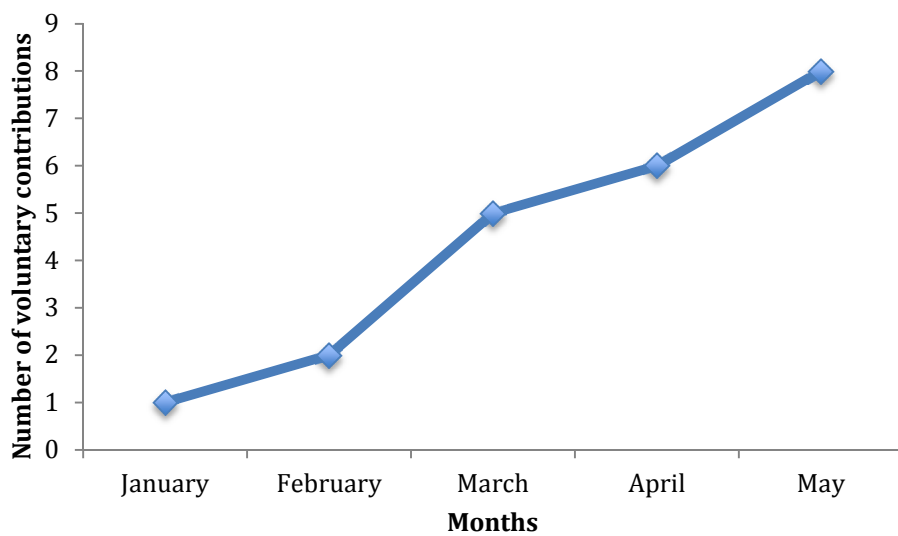


Figure 29: Pupil 1's voluntary contribution to a lesson.

Pupil 1’s increased self-efficacy also resulted in him experiencing greater motivation to complete written tasks, as demonstrated in writing samples taken from January (figure 30), March (figure 31) and May (figure 32).

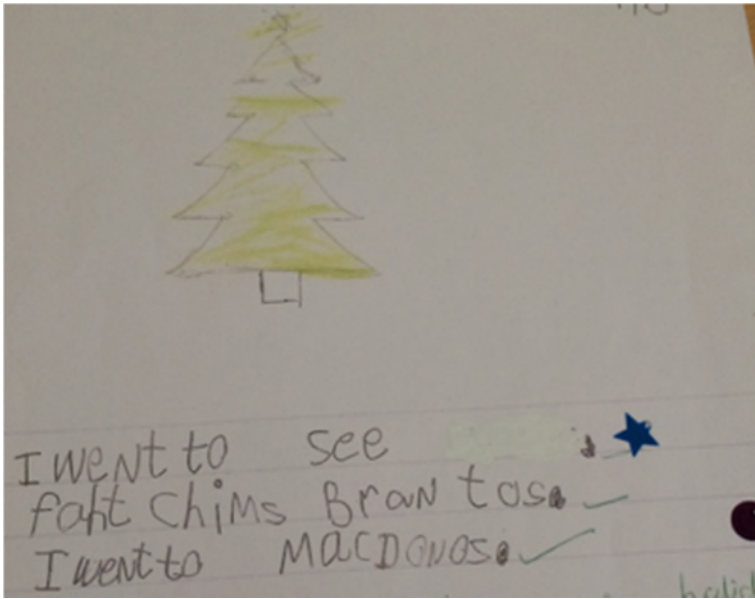


Figure 30 Pupil 1's January writing sample.

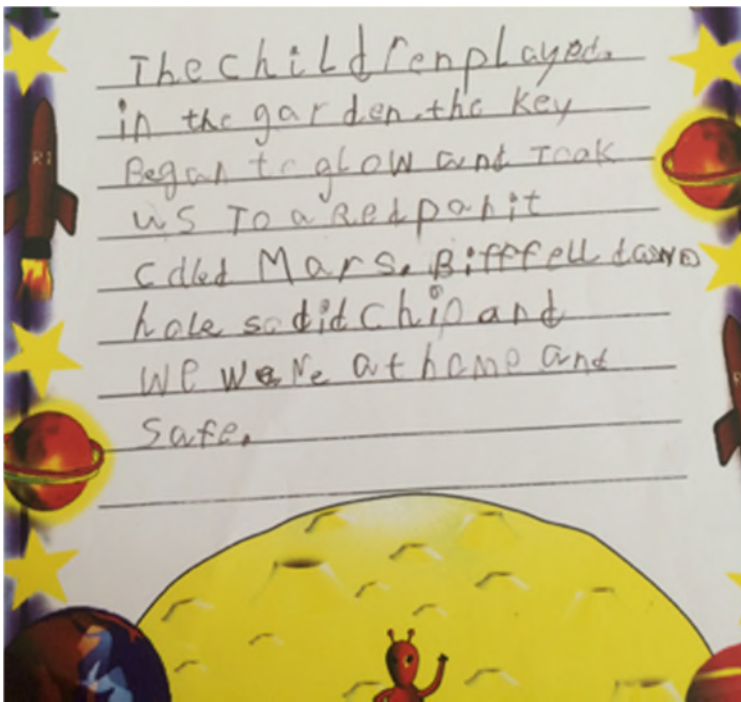


Figure 31: Pupil 1's March writing sample.

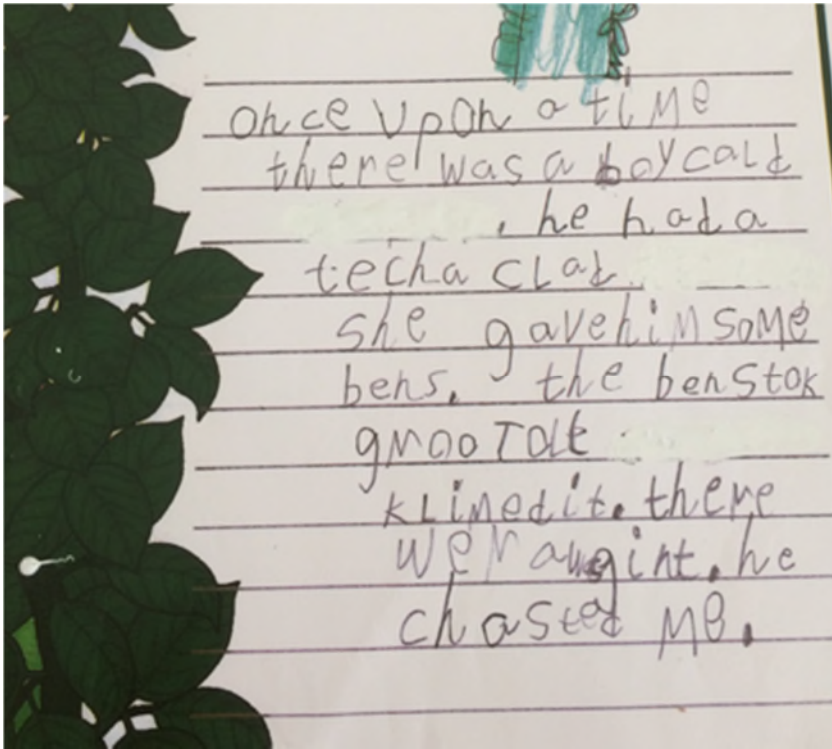


Figure 32: Pupil 1's May writing sample.

Pupil 1's written compositions increased in length by 169% between January and May (figure 33). This increase is further evidence of Pupil 1's growth in self-efficacy. As Pupil 1 became more confident in his abilities, he felt he was able to succeed at written tasks and therefore potentially became more intrinsically motivated, producing a larger quantity of writing (Galloway et al, 2004).

	Words spelt correctly	Percentage of words spelt correctly	Length of composition
Writing sample January	7	54%	13 words
Writing sample March	31	92%	34 words
Writing sample May	25	71%	35 words

Figure 33: Analysis of Pupil 1's writing samples.

The writing samples reveal an increase in Pupil 1's progress as well as motivation. This is supportive of findings in the literature review, that pupils achieve best when they are confident in their own abilities (Atkinson, 1964). Between January and March, the number of words spelt correctly in the writing samples increased by 38% (figure 33). Although composition length fell in May, close analysis of the writing sample shows that Pupil 1 is beginning to use more adventurous word choices than he was in March, suggesting a further growth in confidence. As a result of increased confidence, the number of outcomes Pupil 1 achieved for Writing, Reading and Speaking & Listening increased (figure 34). The steepest increase can be observed in Reading and Speaking & Listening, suggesting that the confidence intervention was successful in helping Pupil 1 overcome his selective mutism in the classroom.

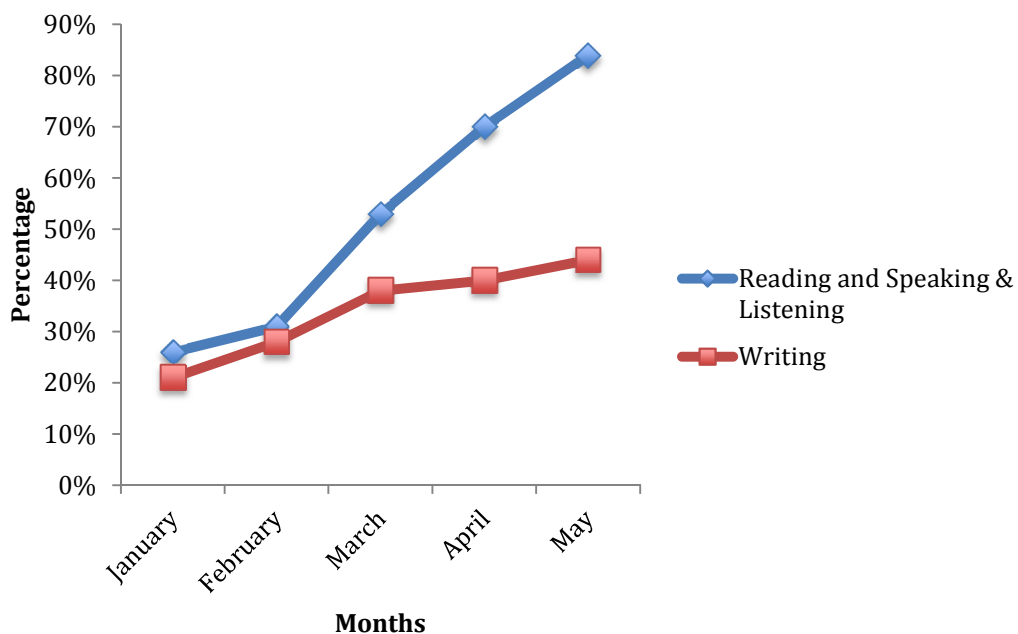


Figure 34: Percentage of outcomes achieved by Pupil 1 on the formative assessment system.

4.11 Vignette summary

The interventions discussed in the three vignettes, highlight how the formative assessment system can be used to identify specific gaps in knowledge, understanding and skills. In all three vignettes, the intervention strategy increased pupil motivation by enabling pupils to overcome barriers to learning. Additionally, I believed that the interventions prevented the boys from developing negative habits regarding the perception of their abilities (Bourdieu, 1990). As the boys progressed through the intervention, they appeared to become more confident in their own abilities and their progress accelerated.

Another benefit of the interventions was that they increased parental involvement. I had regular meetings with parents to discuss their child's progress. The parents were very supportive and I felt that the strong parental support contributed to the increased motivation of the three pupils. An example of this is when Pupil 9 worked conscientiously to write a story using his "*best handwriting*", so that he could take it home to show his parents.

4.12 Higher ability pupils

The formative assessment system was felt to be of least benefit to higher ability pupils. Pupils who achieved within the top quartile of the class on both the NGRT (Pupils 12, 17, 18, 29 and 20) and PIE (Pupils 2, 12, 17, 19 and 20) in the January assessments were found to make the least progress in these assessments between January and May (figure 35).

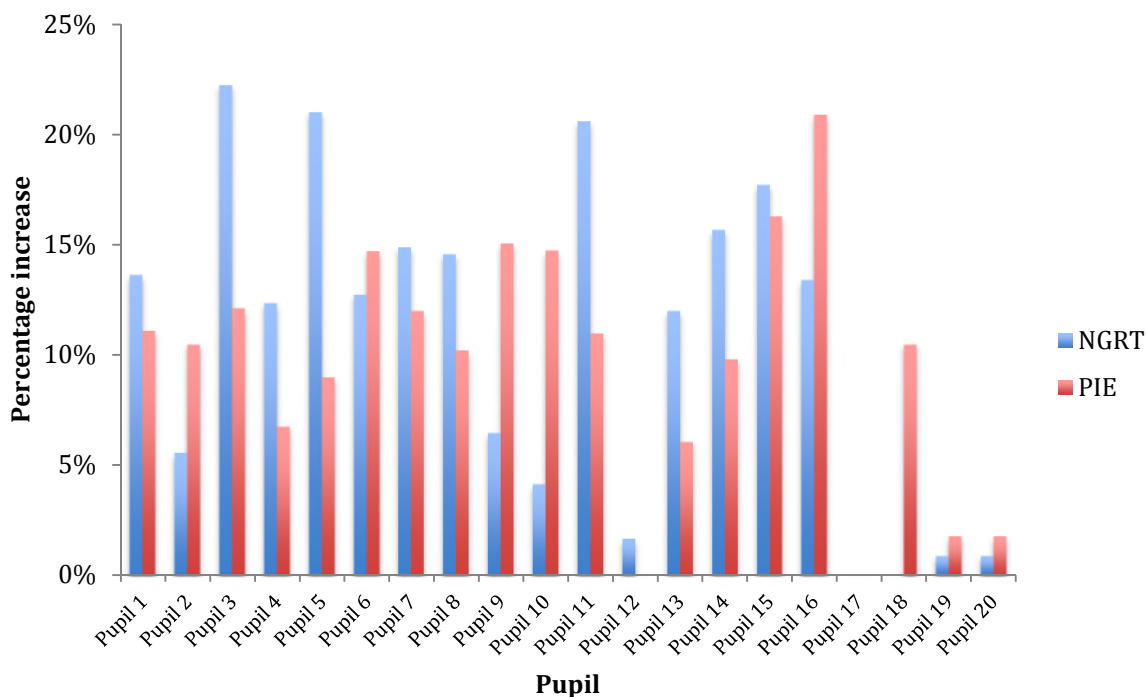


Figure 35: Percentage increase in SAS on NGRT and PIE assessments between January and May of pupils in the case study class.

This finding suggests that the formative assessment system was not as beneficial for higher ability pupils as it had been for middle and lower ability pupils. The reason for this appears to be that the formative assessment system did not adequately challenge higher ability pupils. This is shown by the fact these pupils had already achieved a significant number of outcomes on the formative assessment system early on in the investigation, leaving little room for them to progress and achieve further outcomes. For example, by March Pupils 17, 19 and 20 had already achieved all of their writing outcomes and the formative assessment system did not have any scope for further progress to be tracked.

Whereas the outcomes had benefited lower and middle ability pupils by mediating their learning across the curriculum, the evidence suggests that the outcomes have hindered the progress made by higher ability pupils. In order to make my system beneficial to higher ability pupils, I could have adapted it by creating a

differentiated list of outcomes. Having suitably challenging outcomes would have motivated higher ability pupils and enabled them to achieve their full potential. A sample of independent writing produced by a higher ability pupil (figures 36 & 37) in comparison to that completed by a lower ability pupil (figures 38 & 39) reflects how higher ability pupils made less progress.

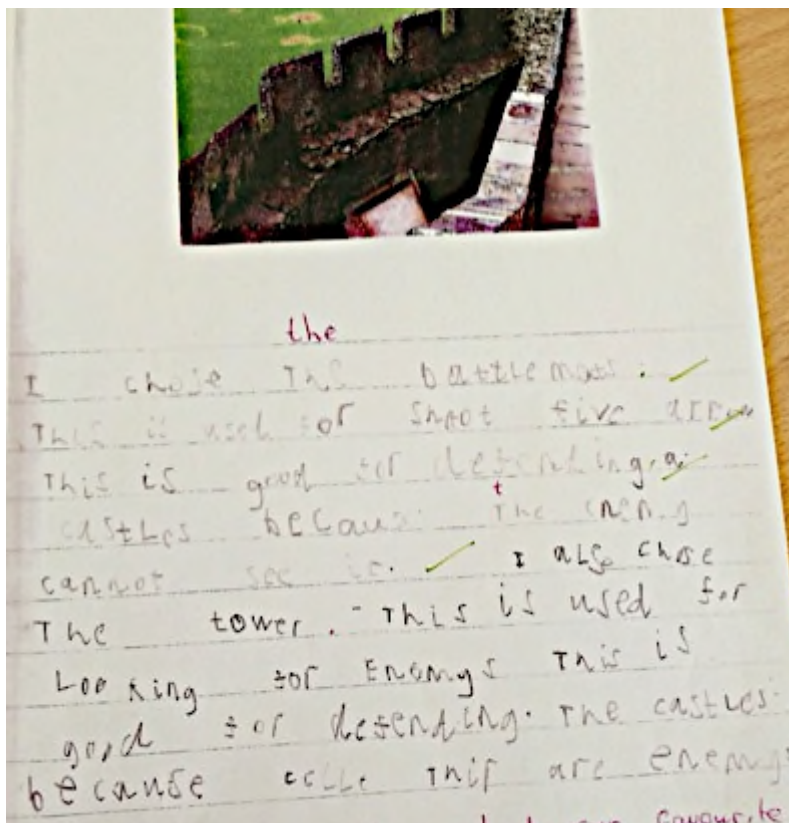



Figure 36: Higher ability pupil's (Pupil 20) January independent writing sample.

I know that Pluto and Xena are
 draw: planets. ✓ I know that
 they found a new planet. ✓ I
 know that Venus has 365 I
 know that Venus is hotter than
 Mercury. ✓ I know that Venus has
 storms. ✓ I know that the sun
 is a star. ✓ I know that
 Jupiter is the biggest & now
 and: the new planet is colder
 than Neptune ✓

Figure 37: Higher ability pupil's (Pupil 20) May independent writing sample.



I WENT
 home and
 COM TO MY HOME ✓
 PAJIS - dip. ✓

Figure 38: Lower ability pupil's (Pupil 16) January independent writing sample.



Figure 39: Lower ability pupil's (Pupil 16) May independent writing sample.

	Words spelt correctly	Length of composition	Percentage of words spelt correctly
Writing sample January	5	12 words	42%
Writing sample May	22	39 words	56%

Figure 40: Analysis of the lower ability pupil's (Pupil 16) writing samples.

	Words spelt correctly	Length of composition	Percentage of words spelt correctly
Writing sample January	46	48 words	96 %
Writing sample May	56	62 words	90 %

Figure 41: Analysis of higher ability pupil's (Pupil 20) writing samples.

The progress made by Pupil 16 was significantly greater than that made by Pupil 20. By May Pupil 16 had increased the length of his composition by 225% and was able to spell 14% more words correctly (figure 40). In addition to the increased length, Pupil 16's May composition included attempts to use more complex features of language and vocabulary than in January, including adjectives "poor and cold" and a more adventurous choice of connective "because" as opposed to "and" in January. Additionally, Pupil 16 had also made progress in his use of punctuation, using full stops and an attempt to use a comma (figure 39).

By comparison, the progress shown in Pupil 20's writing was not as pronounced as in Pupil 16's. Pupil 20's composition showed a slight increase in length by 29%, although in May he spelt fewer words correctly than in January (figure 41). Pupil 20's May composition was very similar in style to the one he produced in January. He continued to write simple sentences that began in the same way. His handwriting remained mostly the same and, there was no attempt to use more complex features of punctuation and language including connectives, adjectives and commas, as Pupil 16 did attempt. This highlights how the formative assessment system appears to be more effective for lower ability pupils than higher ability pupils.

Observations indicated that lower progress was the result of reduced motivation of higher ability pupils. Whereas the behaviour of lower ability pupils improved during the course of the investigation, the behaviour of higher ability pupils deteriorated. For example, during a lesson focused on using capital letters and full stops, Pupils 17, 19 and 20 were displaying silly behaviour while completing a child-led activity. When I approached the group it became clear that they had quickly completed the activity and now did not have anything further to do. In this instance, as well as others which I observed, it became evident that the poor

behaviour of the higher pupils was a direct result of low motivation resulting from them being under challenged. The existing literature points towards the importance of stretching higher ability pupils so that they are suitably challenged and therefore remain motivated (Ecclestone & Pryor, 2003; Ofsted, 2011). In the same way that lower ability pupils become demotivated when completing a task of a difficulty level that is too great, higher ability pupils become demotivated when a task is too easy (Galloway et al, 2004). As highlighted in the literature review, in for motivation to be high, it is important that all pupils are appropriately challenged (Ecclestone & Pryor, 200).

4.13 Time consuming

In order to complete the formative assessment system, I set aside time on a Friday afternoon following the end of the school day. It became weekly practice that I would draw upon the formative evidence I collected through the activity observation sheets and written work produced in books throughout the week to see what outcomes individual pupils had achieved. Evidence collected from my researcher's diary revealed that on average I spent 1.5 hours a week completing the assessment system. The literature suggests that due to time commitments, the previous APP initiative was felt to be a burden for teachers (Friedman, 2000). Despite my attempts to minimise time commitments by computerising the system, it still consumed a large proportion of my time.

However, despite the weekly time commitment, by updating the formative assessment system, I found that I saved time elsewhere. Daily lesson planning time reduced as the time spent completing the system each week meant that I already knew what I needed to plan for each day. Additionally, each time I completed the

system, I became more aware of the needs of my pupils, meaning differentiation became easier. Observations revealed that the average time it took me to plan an English lesson reduced by 50% between January and May (figure 42).

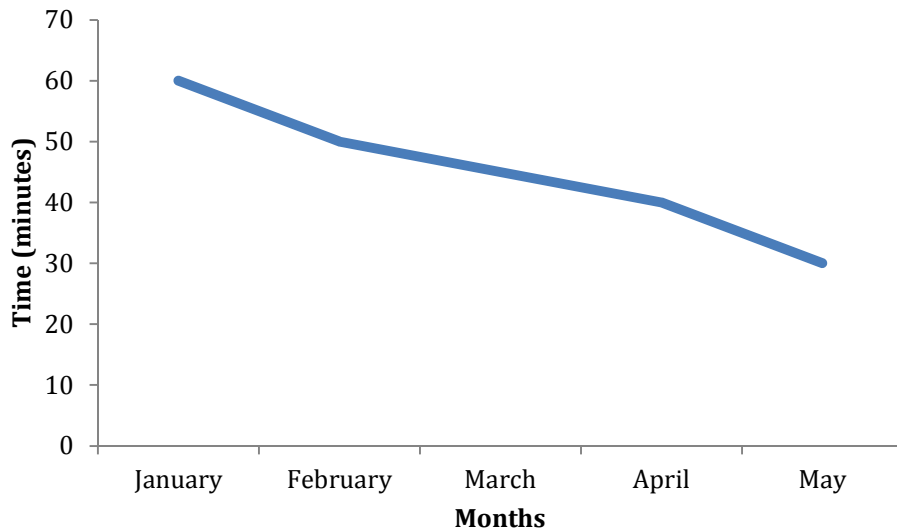


Figure 42: Average time I took each month to plan an English lesson.

4.14 Teaching to the formative assessment system

Just as summative assessment has been criticised for encouraging teachers to teach to the test (Harlen & James, 1997), in this investigation I often found myself teaching to the formative assessment system. I was largely planning lessons based on the outstanding outcomes of the formative assessment system. On occasions, this may have resulted in me inadvertently neglecting to teach other important skills not listed on the formative assessment system. For example, as discussed, the data highlights that I was not stretching higher ability pupils enough in my teaching as a result of planning my lessons around the outcomes.

5. Conclusion

For this study, I have designed and implemented a formative assessment system to support and track the progress of Year 1 boys in writing. This study has sought to investigate how effective this formative assessment system was in supporting and tracking progress, with the potential for the system to become an embedded practice within The Boys' School across Key Stages 1 and 2.

The literature review examined how formative assessment contributes to pupil progress, with particular consideration of its' impact on intrinsic motivation. The effectiveness of existing formative assessment initiatives were also explored in the literature review, so that a suitable design for the formative assessment system could be considered. Following the design and implementation of the formative assessment system, I gathered primary and secondary data to see the impact the system had on supporting and tracking pupil progress in writing. Data was gathered for both the case study and control group class, in order to allow comparisons to be made between the classroom where the system was implemented (case study class) and the classroom where it was exempt (control group class). Primary data were gathered through observations taken in both classes, in addition to writing samples and the formative assessment system itself from the case study class. Secondary data involved quantitative summative assessment results taken from PIE, NGRT and Year 1 spelling assessments in September, January and May of both classes. Three research questions were investigated through this study and answers to each can be made based on the evidence presented.

5.1 Research question 1: To what extent does the formative assessment system intrinsically motivate Year 1 pupils?

The research shows that the formative assessment system appeared to increase the motivation of pupils in my classroom through the learning environment it created. My lessons inadvertently became increasingly constructivist in approach, involving a high proportion of child-led learning, so that I could observe and assess pupil learning as it was being constructed. It appears that child-led learning enhanced pupil engagement during lessons, resulting in increased intrinsic motivation.

In addition to this, the constructivist approach appeared to increase collaboration in lessons. Collaboration appeared to strengthen trust and reciprocity in the classroom, and resulted in enhanced pupil self-efficacy (Pedder & McIntyre, 2006). As social capital increased, pupil consultation occurred and I found that I was increasingly asking pupils what topics they would like to write about. By choosing their topics, pupils were rewarded with a sense of ownership over their learning. Additionally, as written tasks became aligned to pupil interests, engagement increased.

Alongside the constructivist approach, I implemented learning goals, which were found to make learning purposeful for pupils (Biggs, 1999). Additionally, through using the formative assessment system my differentiation in lessons became more effective. I was able to pitch tasks to the individual needs of pupils by identifying their unachieved outcomes and catering for these through differentiation. This meant that tasks appeared to become the appropriate level of challenge for lower and middle ability pupils, increasing their self-efficacy and consequent intrinsic motivation. Although the learning goals and differentiation were beneficial for lower and middle and ability pupils, they appeared to less effective for higher

ability pupils. Tasks and goals often appeared to be under challenging for higher ability pupils and seemed to decrease engagement and self-efficacy.

I think it is implicit that, the formative assessment system increased the intrinsic motivation of lower and middle ability pupils by creating a learning environment where levels of engagement, autonomy and self-efficacy are high. However, I believe the evidence shows that the formative assessment system did not intrinsically motivate higher ability pupils as a result of them being under challenged.

5.2 Research question 2: To what extent does the formative assessment system support effective tracking of progress made by Year 1 boys in writing?

The evidence shows that the formative assessment system was an effective tool for tracking the progress Year 1 boys made in their writing. By using the system I could keep close track of the outcomes pupils had achieved and those that remained unattained. I incorporated this information into my planning and teaching of lessons, meaning they became tailored towards the needs of my pupils. Tracking of progress meant that knowledge and misconceptions were identified and rectified early on in the learning process.

Use of the formative assessment system enabled me to identify three pupils who were under-achieving. I was able to identify the outcomes these pupils had not yet achieved, suggesting possible reasons for under-achievement, and implement an intervention programme tailored towards these outcomes. The remedial strategies that these three pupils received appeared to enable them to overcome barriers they faced towards writing, and following the intervention, produce written work reflective of their full potential. In addition to this, I believe that as these pupils

overcame their difficulties, they became more confident, resulting in the formation of positive habitual beliefs regarding their own abilities (Bourdieu, 1990).

Close tracking and monitoring raised the achievement of lower and middle ability pupils, all of whom made greater progress in their writing during the second half of the year (January-May) following the implementation of the formative assessment system, than they had previously made in the first part of the year, pre-implementation (September-January). Progress was particularly noted in summative assessment results, as lower and middle ability pupils in the case study class appeared to make greater progress in their summative assessments between January and May than those in the control group class. This evidence suggests that the system helped navigate pupil learning across the Year 1 English curriculum (Black et al, 2011), ensuring all content had been covered and mostly achieved by pupils, so that by the time they undertook their summative assessments they had a secure knowledge base and consequently achieved highly. However, although beneficial for tracking the progress of lower and middle ability pupils, the formative assessment system was found to be less effective in tracking the progress of higher ability pupils. Many higher ability pupils had already achieved most of the outcomes on the system at the onset of the investigation in January, leaving little scope for further progression and tracking.

I believe that by being computerised, the formative assessment system was a user-friendly method for effective tracking of pupil progress. The system calculated the number of outcomes pupils achieved each week, producing quantitative data meaning that pupil progress could be closely monitored and compared across the class. Although completion of the formative assessment system required a weekly time commitment, I believe the system helped reduce my lesson planning time.

I think it is implicit that the formative assessment system was an effective, user-friendly tool for tracking the progress of lower and higher ability pupils across the curriculum. However, the system does not appear to have been effective in tracking the progress of higher ability pupils as the outcomes appeared to be under-challenging.

5.3 Overall conclusion

I think it is implicit that the formative assessment system was effective in supporting and tracking the progress of Year 1 boys in writing for two key reasons. The first reason was that implementation of the formative assessment system created an intrinsically motivating classroom environment highly conducive to learning and therefore supportive of progress. The second key reason was that the system made formative assessment an effective Assessment For Learning (AFL) practice by enabling pupil progress to be tracked and navigated from the beginning of the learning process until the end.

5.4 Next steps

Having seen the benefits the system has brought to Year 1 pupils in writing, The Boys' School has decided to implement the system in September 2016 across Key Stages 1 and 2 English curriculum. In addition to this, plans are being made for implementation of the system into the Maths curriculum in September 2017. Prior to whole-school implementation, it will be important that I ensure the formative assessment system is supportive of the progress of higher ability pupils. I will do this by adapting it so that it incorporates the principle of Quigley's (2014) Depth of Learning approach. This approach will involve assessing both the breadth of learning (i.e. how many examples of learning can be seen) and the depth of learning (i.e. the fluency of pupils, how well they apply knowledge and skills and their depth

of understanding). Assessing the depth of learning will be of particular benefit to higher ability pupils, as assessment criteria will incorporate complex and abstract cognitive demands, resulting in them being adequately challenged. A further benefit of incorporating the Depth of Learning approach (Quigley, 2014) into the system is that it ensures knowledge and understanding is cemented before pupils progress to learn new information. This will be of particular benefit at Key Stage 1 and 2, in ensuring the foundational skills are embedded.

In addition to this, before whole-school implementation, I will be delivering an INSET training session to staff about the formative assessment system. I will share my research with staff so that they can see the benefits the system can bring to pupil learning and the time they can save in lesson planning as a result of the formative assessment system.

5.5 Recommendations for future research

This investigation has pointed towards future avenues for research. Firstly, an investigation into the impact of whole-school implementation of the assessment system at The Boys' School would offer insight into its impact at a macro-level (whole school), compared to a micro-level scale (my classroom). In addition to this, future research could entail an investigation into the use of the formative assessment system in a contrasting school to The Boys' School, for example, a mixed-sex state school in an area of high social and economic deprivation, in order to observe the systems effectiveness in schools comprised of a varying demographic. Finally, another avenue for future research could be an investigation comparing the use of different formative assessment systems in order to account for best practice.

References

- Atjonen, P. (2014) Teachers' Views of Their Assessment Practice. *The Curriculum Journal*, 25 (2), 238-259
- Alderson, P. and Morrow, V. (2011) *The Ethics of Research with Children and Young People: A Practical Handbook*, 2nd ed. London: Sage
- Andrade, H. and Gregory, C. (2010) *Handbook of Formative Assessment*, Abingdon: Routledge
- Atkinson, J. (1966). *A Theory of Achievement Motivation*, Michigan: Wiley
- Ball, S. (2008) *The Education Debate*, Bristol: The Policy Press
- Benabou, R. and Tirole, J. (2003) Intrinsic and Extrinsic Motivation. *Review of Economic Studies*, 70 (3), 489–520
- British Educational Research Association. (2011) *Ethical Guidelines for Educational Research* [Online] London. Available from: <<https://www.bera.ac.uk/researchers-resources/resources-for-researchers>> [Accessed 28 July 2016]
- Biggs, J. (1999) What the Student Does: Teaching for Enhanced Learning. *Higher Education Research & Development*, 18 (1), 57–75
- Biggs, J. (1996) Enhancing Teaching Through Constructivist Alignment. *Higher Education*, 32 (3), 347–364
- Black, P., Wilson, M. and Yao, S. (2011). Road Maps for Learning: A Guide to the Navigation of Learning Progressions. *Measurement: Interdisciplinary Research and Perspectives*, 9 (2), 71–123
- Black, P. & William, D. (2009) Developing the Theory of Formative Assessment. *Journal of Personnel Evaluation in Education*, 21(1), 5–31
- Black, P., Harrison, C. and Lee, C. (2004) *Working Inside the Black Box*. London: GL assessment
- Black, P. and William, D. (1998) *Inside the Black Box: Raising Standards Through Classroom Assessment*. London: School of Education, King's College
- Bloom, B. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*, New York: McKay
- Bourdieu, P. (1990) *The Logic of Practice*, 2 ed. Cambridge: Policy Press
- Brown, G. & DesForges, C. (2006) *Piaget's Theory: A Psychological Critique*, Abingdon: Routledge

- Bruner, J. (1961) The Act of Discovery. *Harvard Educational Review*, 31, 21–32
- Bruner, J. (1966). *Toward a Theory of Instruction*, Cambridge: Belknap Press
- Bruning, R. & Horn, C. (2000) Developing Motivation to Write. *Educational Psychologist*, 35 (1), 25–37
- Burke, K. (2014) *Balanced Assessment from Formative to Summative*, Bloomington: Solution Tree Press
- Bussey, K. and Bandura, A. (1999) Social Cognitive Theory of Gender Development and Differentiation. *Psychological Review*, 106 (4), 676–713
- Cauley, K. and McMillan, J. (2010) Formative Assessment Techniques to Support Student Motivation and Achievement. *The Clearing House: A Journal of Educational Strategies, Issues and ideas*, 83 (1), 1–6
- Cheminais, R. (2010) *Handbook for New SENCOs*, London: Sage
- Clarke, S. (2001) *Unlocking Formative Assessment: Practical Strategies for Unlocking Pupils' Learning in the Primary School*. London: Hodder Education
- Cohen, L., Manion, L. and Morrison, K. (2011) *Research Methods in Education*, 7th ed. Abingdon: Routledge
- Condry, J. and Chambers, J. (2016) Intrinsic Motivation and the Process of Learning, in M. Lepper, and D. Greene, (eds.) *The Hidden Costs of Reward: New Perspective on the Psychology of Human Motivation*. Hove: Psychology Press, 61–85
- Cordova, D. and Lepper, M. (1996) Intrinsic Motivation and the Process of Learning: Beneficial Effects of Contextualization, Personalization, and Choice. *Journal of Educational Psychology*, 88 (4), 715-730
- Covey, S. (1999) *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*, New York: Simon & Schuster Ltd
- Daniels, E. (2010) Creating Motivating Learning Environments: What We Can Learn from Researchers and Students. *The English Journal*, 100 (1), 25–29
- Denscombe, M. (2004) *The Good Research Guide for Small-Scale Social Research Projects*, 2 ed. Glasgow: Bell and Bain Ltd
- De Vos, M. and Belluigi, D. (2011) Formative Assessment as Mediation. *Perspectives in Education*, 29 (2), 39–47
- DFE, (2015) National Statistics Revised GCSE and Equivalent Results in England: 2014 to 2015. [Online]. Available from: <<https://www.gov.uk/government/statistics/revised-gcse-and-equivalent-results-in-england-2014-to-2015>> [Accessed 15 February 2016]

- DFE. (2014). *National Curriculum in England: Framework for Key Stages 1 to 4*. [Online]. Available from: <<https://www.gov.uk/government/publications/national-curriculum-in-england-framework-for-key-stages-1-to-4>> [Accessed 28 July 2016]
- DFE. (2011) *Assessing Pupils' Progress (APP): Assessment Guidelines*. [Online]. Available from: <<http://webarchive.nationalarchives.gov.uk/20110809101133/nsonline.org.uk/node/20683>> [Accessed 21 January 2016]
- Dumais, S. (2002) Cultural Capital, Gender, and School Success: the Role of Habitus. *Sociology of Education*, 75 (1), 44–68
- Eccleston, K. and Pryor, J. (2003) Learning Careers' or 'Assessment Careers'? The Impact of Assessment Systems on Learning. *British Educational Research Journal*, 29 (4), 471–488
- Edwards, K. (2008) Examining the Impact of Phonics Intervention on Secondary Students' Reading Improvement. *Educational Action Research*, 16 (4), 545–555
- Elliott, E. and Dweck, C. (1988) Goals: an Approach to Motivation and Achievement. *Journal of Personality and Social Psychology*, 54 (1), 51–12
- Flick, U., Von Kardoff, E. and Steinke, I. (2005) *A Companion to Qualitative Research*, 2nd ed. London: SAGE
- Francis, B. and Skelton, C. (2005) *Reassessing Gender and Achievement: Questioning Contemporary Key Debates*, Abingdon: Routledge
- Frey, N. and Fisher, D. (2011) *The Formative Assessment Action Plan*, Danvers: ASCD
- Friedman, I. (2000) Burnout: Shattered Dreams of Impeccable Professional Performance. *Journal of Clinical Psychology*, 56 (5), 595-606
- Galloway, D., Rogers, C., Armstrong, D., Leo, E. and Jackson C. (2004) Ways of Understanding Motivation, in H. Daniels and A. Edwards (eds.) *The RoutledgeFalmer Reader in Psychology of Education*. London: RoutledgeFalmer, 89–105
- Gardner, J. (2012) *Assessment and Learning*, 2nd ed. London: Sage
- Gold, R. (1958) Roles in Sociological Field Observation. *Social Forces*, 36 (3), 217-223
- Gray, J., Schagen, I and Charles, M. (2004) Tracking Pupil Progress from Key Stage 1 to Key Stage 2: How Much do the 'Route' Taken and the Primary School Attended Matter? *Research Papers in Education*, 19 (4), 389-413

- Hall, K. and Burke, W. (2004) *Making Formative Assessment Work: Effective Practice in the Primary Classroom*, Berkshire: Open University Press
- Hanrahan, M. (1998) The Effect of Learning Environment Factors on Students' Motivation and Learning. *International Journal of Science Education*, 20 (6), 737–753
- Harlen, W. and Crick, R. (2003) Testing and Motivation for Learning. *Assessment in Education: Principles, Policy & Practice*, 10 (2), 169–207
- Harlen, W. and James, M. (1997) Assessment and Learning: Differences and Relationships Between Formative and Summative Assessment. *Assessment in Education: Principles, Policy & Practice*, 4 (3), 365-379
- Hartas, D. (2010) *Educational Research and Inquiry: Qualitative and Quantitative Approaches*, London: Continuum International Publishing Group
- Hedegaard, M. (2009) Children's Development from a Cultural-Historical Approach: Children's Activity in Everyday Local Settings as Foundation for their Development. *Mind, culture and activity*, 16 (1), 64-82
- Heritage, M. (2016) *Formative Assessment: An Enabler of Learning*. [Online] Johns Hopkins School of Education. Available from: <<http://education.jhu.edu/PD/newhorizons/Better/articles/Spring2011.html>> (Accessed 24 July 2016)
- Hiebert, E. and Taylor, B. (1994) *Getting Ready Right from the Start. Effective Early Literacy Interventions*, Boston: Allyn and Bacon
- Hull, C. (1943) *Principles of Behaviour: an Introduction to Behaviour Theory*, Oxford: Appleton-Century
- Hyde, J., Fennema, E. and Lamon, S. (1990) Gender Differences in Mathematics Performance: A Meta-Analysis. *Psychological Bulletin*, 107 (2), 139–155
- Irons, A. (2008) Enhancing Learning Through Formative Assessment. *Metacognition and Learning*, 4 (1), 63–85
- Ivankova, N., Creswell, J. and Stick, S. (2006) Using Mixed-Methods Sequential Explanatory Design: from Theory to Practice. *Field Methods*, 18 (3), 3-20
- James, M. (2008) Assessment and Learning, in S. Swaffield (ed.) *Unlocking Assessment*, Abingdon: Routledge, pp. 20–36
- Johnson, M. and Wintgens, A. (2001) *The Selective Mutism Resource Manual*, London: Speechmark
- Kaplan, A. and Patrick, H. (2016) Learning Environments and Motivation, in K. Wentzel and D. Miele (eds.) *Handbook of Motivation at School*. Abingdon: Routledge, pp. 251–257

- King, K. and Gurian, M. (2006) Teaching to the Minds of Boys. *Educational Leadership*, 64 (1), 60–61
- Kirkup, C. (2006) Using Assessment Information to Inform Teaching and Learning. *International Journal of Primary, Elementary and Early Years Education*, 34 (2), 153–162
- Kvale, S. (1996) *InterViews: An Introduction to Qualitative Research Interviewing*. London: Sage
- Lehr, F. and Osborn, J. (1994) *Reading, Language and Literacy*, Mahwah: Lawrence Erlbaum Associates
- Lepper, M., Greene, D., and Nisbett, R. (1973) Undermining Children's Intrinsic Interest with Extrinsic Rewards: A Test of the "Overjustification" Hypothesis. *Journal of Personality and Social Psychology*, 28 (1), 129–137
- Looney, J. (2011) Integrating Formative and Summative Assessment. Progress toward a Seamless System? *Education Working Papers*, 58 (1), 1–65
- Malone, W. and Lepper, R. (1987) Making Learning Fun: a Taxonomy of Intrinsic Motivations for Learning, in R. Snow and M. Farr (eds.) *Aptitude, Learning and Instruction*, Mahwah: Lawrence Erlbaum Associates, pp. 223-253
- Marlow, R., Norwich, B., Ukoumunne, O., Sharkey, S., Ford, T. (2014) A Comparison of Teacher Assessment (APP) with Standardised Tests in Primary Literacy and Numeracy. *Assessment in Education: Principles, Policy & Practice*, 21(4), 412–426
- Maslow, A. (1970) *Motivation and Personality*, 3rd ed. New York: Harper & Row
- Maynard, T. and Lowe, K. (1999) Boys and Writing in the Primary School. *International Journal of Primary, Elementary and Early Years Education*, 27 (2), 4–9
- McLean, A. (2005) *The Motivated School*, London: SAGE Publications
- Millard, E. (2000) *Differently Literate: Boys, Girls and the Schooling of Literacy*, 4th ed. London: RoutledgeFalmer
- Moore, B. and Stanley, T. (2010) *Critical Thinking and Formative Assessments*, New York: Eye On Education
- NFER. (2015) *NFER Tests*. [Online] Available from: <<http://www.nfer.ac.uk/schools/nfer-tests/>> [Accessed 5 April 2016]
- Nilsen, H. (2009) Influence on Student Academic Behaviour through Motivation, Self-efficacy and Value-expectation: An Action Research Project to Improve Learning. *Issues in Informing Science and Information Technology*, 6 (1), 545–556

Nolen, S. (2007) Young Children's Motivation to Read and Write: Development in Social Contexts. *Cognition and Instruction*, 25 (2-3), 219-270

Ofsted. (2011) *The Impact of the 'Assessing Pupils' Progress' Initiative*. [Online] Available from: <<https://www.gov.uk/government/publications/the-impact-of-the-assessing-pupils-progress-initiative>> [Accessed 24 July 2016]

Optimum. (2016) OTrack. [Online] Available from: <<http://optimumotrack.co.uk/>> [Accessed 23 July 2016]

Pajares, F. (2010) Self-efficacy Beliefs, Motivation, and Achievement in Writing: a Review of the Literature. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 19 (2), 139–158

Pajares, F. and Valiante, G. (2006) Self-efficacy Beliefs and Motivation in Writing Development, in C. McArthur, S. Graham and, J. Fitzgerald (eds.) *Handbook of Writing Research*, London: The Guildford Press, pp. 158-170

Pajares, F. and Cheong, F. (2003) Achievement Goal Orientation in Writing: a Developmental Perspective. *International Journal of Educational Research*, 39 (4-5), 437-455

Pajares, F., Miller, D. and Johnson, M. (1999) Gender Differences in Writing Self-beliefs of Elementary School Students. *Journal of Educational Psychology*, 91 (1), 50–61

Palmer, E. (2014) *Teaching the Core Skills of Listening and Speaking*, Alexandria: ASCD

Pavlov, P. (1960) *Conditioned Reflexes*, London: Oxford University Press

Pedder, D. and McIntyre, D. (2006) Pupil Consultation: the Importance of Social Capital. *Educational Review*, 58 (2), 37–41

Piaget, J. (1959) *The Language and Thought of the Child* (3rd ed.), London: Routledge & Kegan Paul

Piaget, J. (1955) *Construction of Reality in the Child*, London: Routledge & Kegan Paul

Postlethwaite, K. and Haggarty, L. (2002) Towards the Improvement of Learning in Secondary Schools: Students' Views, Their Links to Theories of Motivation and to Issues of Under- and Over-achievement. *Research Papers in Education*, 17 (2), 185–209




Pryor, J. and Torrance, H. (1997) Formative Assessment in the Classroom: Where Psychological Theory Meets Social Practice. *Social Psychology of Education*, 2 (2), 151–176

- Quigley, C. (2014). *Assessing without levels*. [Online] Available from: <<http://www.chrisquigley.co.uk/>> [Accessed 23 July 2016]
- Rawolle, S. and Lingard, B., (2015) Bourdieu and Doing Policy Sociology in Education, in K. Gulson, M. Clarke, and E. Petersen, (eds.) *Education Policy and Contemporary Theory: Implications for Research*. Abingdon: Routledge, pp. 15–27
- Robins, G. (2012) *Praise, Motivation and the Child*, Abingdon: Routledge
- Ryan, R. and Deci, E. (2000) Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25 (1), 54–67
- Sadler, D. (1998) Formative Assessment: Revisiting the Territory. *Assessment in Education: Principles, Policy & Practice*, 5 (1), 77–84
- Schunk, D. (1991) Self-efficacy and Academic Motivation. *Educational Psychologist*, 26 (3), 207–231
- Sharpio, J. (1990) Sex-role Appropriateness of Reading and Reading Instruction. *Reading Psychology: An International Quarterly*, 11 (3), 241–269
- Skaalvik, E. and Skaalvik, S. (2016) Teacher Stress and Teacher Self-efficacy as Predictors of Engagement, Emotional Exhaustion, and Motivation to Leave the Teaching Profession. *Creative Education*, 7 (13), 1785–1799
- Skelton, C. Francis, B. and Smulyan, L. (2006) *The SAGE Handbook of Gender and Education*, London: SAGE Publication Ltd
- Taras, M. (2008) Summative and Formative Assessment. Perceptions and Realities. *Active Learning in Higher Education*, 9 (2), pp.172–192
- Torrance, H. (1993) Formative Assessment: Some Theoretical Problems and Empirical Questions. *Cambridge Journal of Education*, 23 (3), 333–343
- Vygotsky, L. (1978) *Mind in Society: The Development of Higher Psychological Processes*, London: Harvard University Press
- Warrington, M., Younger, M. and McLellan, R. (2003) “Under-achieving Boys” in English Primary Schools? *The Curriculum Journal*, 14 (2), 139–156
- Watson, J. (2009) *Behaviourism*, 7th ed. Piscataway: Transaction Publishers
- Webb, R. (2006) *Changing Teaching and Learning in The Primary School*, Maidenhead: Open University Press
- Weiner, B. (1989) *Human Motivation*, Los Angeles: Lawrence Erlbaum Associates
- William, D. (2011) *Embedded Formative Assessment*, Bloomington: Solution Tree Press

- Willinsky, J. and Hunniford, M. (1993) 'Reading the Romance Younger: The Mirrors and Fears of a Preparatory Literacy', in L. Christian-Smith, (ed). *Texts of Desire: Essays on Fiction, Femininity and Schooling*. London: Falmer Press
- Wilson, R. (2003) *Special Educational Needs in the Early Years*, London: RoutledgeFalmer
- Woodside, A. (2010) *Case Study Research: Theory, Methods, Practice*. Bingley: Emerald Group Publishing
- Wragg, E., Wragg, C., Haynes, G. and Chamberlin, R. (1998) *Improving Literacy in the Primary School*, London: Routledge
- Wray, D., Medwell, J., Poulson, L. and Fox, R. (2002) *Teaching Literacy Effectively In The Primary School*, London: RoutledgeFalmer
- Wynne, H. and James, M. (1997) Assessment and Learning: Differences and Relationships Between Formative and Summative Assessment. *Assessment in Education: Principles, Policy & Practice*, 4 (3), 365–379
- Wyse, D., Baumfield, V., Egan, D., Gallagher, C., Hayward, L., Hulme, M., Leitch, R., Livingston, K., Menter, I. and Lingard, B. (2013) *Creating the Curriculum*, London: Routledge
- Wyse, D. and Jones, R. (2001) *Teaching English, Language and Literacy*, London: RoutledgeFalmer
- Zevenbergen, R., (2005) The Construction of a Mathematical Habitus: Implications of Ability Grouping in the Middle Years. *Journal of Curriculum Studies*, 37 (5), 607–619
- Zimmerman, B., (1992) Self-Motivation for Academic Attainment: The Role of Self-Efficacy Beliefs and Personal Goal Setting. *American Educational Research Journal*, 29 (3), 663–676

Appendices

Appendix 1: APP assessment criteria for Reading, Writing and Speaking & Listening skills (DFE, 2011)

Name				Assessing Pupils' Progress Assessment criteria: Reading					
		AF1 - use a range of strategies, including accurate decoding of text, to read for meaning	AF2 - understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text	AF3 - deduce, infer or interpret information, events or ideas from texts	AF4 - identify and comment on the structure and organisation of texts, including grammatical and presentational features at text level	AF5 - explain and comment on writers' use of language, including grammatical and literary features at word and sentence level	AF6 - identify and comment on writers' purposes and viewpoints, and the overall effect of the text on the reader	AF7 - relate texts to their social, cultural and historical traditions	
Level 8		<ul style="list-style-type: none"> Clear critical sense develops a coherent interpretation of text(s), drawing on imaginative insights and well supported by evidence and wider textual knowledge. 	<ul style="list-style-type: none"> Clear critical sense develops a coherent interpretation of text(s), drawing on imaginative insights and well supported by evidence and wider textual knowledge. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning. 	<ul style="list-style-type: none"> Clear appreciation and understanding of how the text structure and language use support the writer's purpose and contribute to meaning.
Level 7		<ul style="list-style-type: none"> Increasing precision in selection and application of textual reference to the point being made, e.g. close reference at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used 	<ul style="list-style-type: none"> Comments begin to develop an interpretation of the text(s), making connections between highlights, leaving out meanings or weighing up relevance at word level to refute an argument in a short stretch of text, or shift selection across a longer textual stretch to evaluate a writer's viewpoint Increasing ability to draw on knowledge of other sources to develop or clinch an argument, e.g. referring to sources beyond the text to compare the effectiveness of imagery used
Level 6		<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument 	<ul style="list-style-type: none"> Relevant points clearly identified, including summary and synthesis of information from different sources or different places in the same text Commentary incorporates apt textual reference and quotation to support main ideas or argument
Level 5		<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate 	<ul style="list-style-type: none"> Most relevant points clearly identified, including those selected from different places in the text Comments generally supported by relevant textual reference or quotation, even when points made are not always accurate
Level 4		<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus 	<ul style="list-style-type: none"> Some relevant points identified Comments supported by some generally relevant textual reference or quotation, e.g. reference is made to appropriate section of text but is unselective and lacks focus
Level 3		<ul style="list-style-type: none"> In most reading Range of strategies used mostly effectively to read with fluency, understanding and expression 	<ul style="list-style-type: none"> In most reading Simple, most obvious points identified though there may also be some misunderstanding, e.g. about information from different places in the text Some comments include quotations from or references to text, but not always relevant, e.g. often relating to paraphrasing sections of the text rather than using it to support comment 	<ul style="list-style-type: none"> In most reading Straightforward inference based on a single point of reference in the text, e.g. 'he was upset because it says "the snow crying"' Responses to text show meaning established at a literal level, e.g. 'walking good' means 'walking carefully' or based on personal speculation, e.g. a response based on what they personally would be feeling rather than feelings of character in the text 	<ul style="list-style-type: none"> In most reading A few basic features of organisation at text level identified, but with little or no linked comment, e.g. 'it talks about all the different things you can do at the zoo' 	<ul style="list-style-type: none"> In most reading A few basic features of writer's use of language identified, but with little or no comment, e.g. 'there are lots of adjectives' 	<ul style="list-style-type: none"> In most reading Main purpose clearly identified, often through general overview, e.g. 'the writer is strongly against war and wants to persuade the reader to agree' Viewpoint in texts clearly identified, with some, often limited, explanation, e.g. 'at the end he knows he's done wrong and makes the attack sound attractive and mysterious' General awareness of effect on the reader, with some, often limited, explanation, e.g. 'you'd be persuaded to sign up because 25p a week doesn't seem that much to help someone see' 	<ul style="list-style-type: none"> In most reading Some simple connections between texts identified, e.g. similarities in plot, topic, or books by same author, about some characters Recognition of some features of the context of texts, e.g. historical setting, social or cultural background 	
Level 2		<ul style="list-style-type: none"> In some reading Range of key words read on sight Unfamiliar words decoded using appropriate strategies, e.g. blending sounds Some fluency and expression, e.g. taking account of punctuation, speech marks 	<ul style="list-style-type: none"> In some reading Some specific, straightforward information recalled, e.g. names of characters, places Generally clear idea of where to look for information, e.g. about characters, topics 	<ul style="list-style-type: none"> In some reading Simple, plausible inference about events and information, using evidence from text, e.g. how a character is feeling, what makes a point clear Comments based on textual cues, sometimes misunderstood 	<ul style="list-style-type: none"> In some reading Some awareness of use of features of organisation, e.g. beginning and ending of story, types of punctuation 	<ul style="list-style-type: none"> In some reading Some effective language choices noted, e.g. '30m' is a good word there Some familiar patterns of language identified, e.g. once upon a time, first, next, last 	<ul style="list-style-type: none"> In some reading Comments identify main purpose, e.g. 'the writer doesn't like violence' Express personal response but with little awareness of writer's effect on reader, e.g. 'she was just horrible like my nan is sometimes' 	<ul style="list-style-type: none"> In some reading General features of a few text types identified, e.g. information books, stories, print media Some awareness that books are set in different times and places 	
Level 1		<ul style="list-style-type: none"> In some reading, usually with support Some high frequency and familiar words read fluently and automatically Decode familiar and some unfamiliar words using blending as the prime approach Some awareness of punctuation marks, e.g. pausing at full stops 	<ul style="list-style-type: none"> In some reading, usually with support Some simple points from familiar texts recalled Some pages/sections of interest located, e.g. favourite characters/events/information/pictures 	<ul style="list-style-type: none"> In some reading, usually with support Reasonable inference at a basic level, e.g. identifying who is speaking in a story Comments/questions about meaning of parts of text, e.g. details of illustrations, diagrams, changes in font style 	<ul style="list-style-type: none"> In some reading, usually with support Some awareness of simple text features, e.g. font style, labels, titles 	<ul style="list-style-type: none"> In some reading, usually with support Comments on obvious features of language, e.g. rhymes/adjectives, significant words and phrases 	<ul style="list-style-type: none"> In some reading, usually with support Some simple comments about preferences, mostly linked to own experience 	<ul style="list-style-type: none"> In some reading, usually with support A few basic features of well-known story and information texts distinguished, e.g. what typically happens in good and bad characters, differences between type of text in which photos or drawings used 	

Name ..



Assessing Pupils' Progress Assessment criteria: Writing

The National Strategies



	AF5 - vary sentences for clarity, purpose and effect	AF6 - write with technical accuracy of syntax and punctuation in phrases, clauses and sentences	AF3 - organise and present whole texts effectively, sequencing and structuring information, ideas and events	AF4 - construct paragraphs and use cohesion within and between paragraphs	AF1 - write imaginative, interesting and thoughtful texts	AF2 - produce texts which are appropriate to task, reader and purpose	AF7 - select appropriate and effective vocabulary	AF8 - use correct spelling	Handwriting and presentation
Level 8	<p>Across a range of writing</p> <ul style="list-style-type: none"> • sentence structure is imaginative, precise and accurate, matched to writer's purpose and intended effect on the reader 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • imaginative, well controlled structuring of subject matter and management of paragraphs provide textual coherence and cohesion to position the reader appropriately in relation to the writer's purpose 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • creative selection and adaptation of a wide range of forms and conventions to meet writer writing challenges with distinctive personal voice and style matched to intended effect 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • wide ranging vocabulary used imaginatively and with precision 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • correct spelling throughout 	
Level 7	<p>Across a range of writing</p> <ul style="list-style-type: none"> • variety of sentence types deployed judiciously across the text to achieve purpose and overall effect, with one loss of control • a range of features employed to shape/craft sentences that have individual merit and contribute to overall development of the text, e.g. embedded phrases and clauses that support main text; appositives; secure control of complex verb forms; anaphora; repetition or balance in sentence structure 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • information, ideas and events skilfully managed and related to achieve intended purpose and effect, e.g. introduction and development of character, plot, event, or the terms of an argument, are paced across the text • a variety of devices position the reader, e.g. skilful control of information flow to reader; teasing the reader by drawing attention to how the narrative or argument is being handled 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • paragraphs across the text is integral to meaning and purpose, e.g. paragraph length and complexity varied to match narrative pace or development of argument; varied devices to link or juxtapose paragraphs; paragraph structure repeated for effect • individual paragraphs shaped or crafted for imaginative or rhetorical effect, e.g. last sentence echoing the first; lengthy single sentence paragraph to convey inner monologue 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • imaginative and generally successful adaptation of wide range of forms and conventions to suit variety of purposes and audiences, e.g. deliberate reference to other texts or textual conventions for effect or emphasis • well judged, distinctive individual voice or point of view established and sustained throughout, e.g. consistent handling of narrator's persona in fiction; well controlled use of original turns of phrase in formal discursive writing • generally successful and consistent control of appropriate level of formality and varied range of stylistic devices to achieve intended effect, e.g. varying the level of formality within a piece for effect; direct address to the reader or taking the reader into their confidence 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • vocabulary consistently, often imaginatively, well matched to purpose and audience • range of vocabulary generally varied and ambitious, often judiciously chosen 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • correct spelling throughout 	
Level 6	<p>Across a range of writing</p> <ul style="list-style-type: none"> • controlled use of a variety of simple and complex sentences to achieve purpose and contribute to overall effect • confident use of a range of sentence features to clarify or emphasise meaning, e.g. fronted adverbials ('Reluctantly, he... Five days later...'), complex noun or prepositional phrases 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • syntax and full range of punctuation are consistently accurate in a variety of sentence structures, with occasional errors in ambitious structures, e.g. only occasional comma splices, some use of semi-colons, not always accurate 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • material is clearly controlled and sequenced, taking account of the reader's likely reaction, e.g. paragraphs of differing lengths, use of flashback in narrative, anticipating reader's questions • a range of features clearly signal overall direction of the text for the reader, e.g. opening paragraphs that introduce themes clearly, paragraph markers, links between paragraphs 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • construction of paragraphs clearly supports meaning and purpose, e.g. paragraph topic signalled and then developed, withholding of information for effect; thematic links between paragraphs • within paragraphs, cohesive devices contribute to emphasis and effect, e.g. adverbials as sentence starters 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • imaginative treatment of appropriate materials, familiarity with conventions and consistency maintained, e.g. register for humour, clear emphasis on narration rather than plot • convincing, individual voice or point of view established and mostly sustained throughout, e.g. authoritative expert view, convincing characterisation, adopting a role • level of formality used for purpose and audience generally appropriate and a range of stylistic devices used to achieve effect, not always successfully, e.g. controlled informality, generalisations or shifts between conversational style and more literary language 		<p>Across a range of writing</p> <ul style="list-style-type: none"> • vocabulary chosen generally appropriate to purpose and audience and often ambitious, even though choices not always apt 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • generally correct spelling throughout, including some: <ul style="list-style-type: none"> o ambiguous, uncommon words o words with complex sound/symbol relationships o words with unstressed syllables o multiletter vowel and consonant symbols • likely errors: <ul style="list-style-type: none"> o occasionally in complex words such as outrageous, exaggerated, announcing, parallel 	
Level 5	<p>Across a range of writing</p> <ul style="list-style-type: none"> • a variety of sentence lengths, structures and subjects provides clarity and emphasis • wider range of connectives used to clarify relationship between ideas, e.g. although, on the other hand, meanwhile • some features of sentence structure used to build up detail or convey shades of meaning, e.g. variation in word order, expansions in verb phrases 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • full range of punctuation used accurately to demarcate sentences, including speech punctuation • syntax and punctuation within the sentence generally accurate including commas to mark clauses, though some errors occur where ambitious structures are attempted 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • material is structured clearly, with sentences organised into appropriate paragraphs • development of material is effectively managed across text, e.g. closings refer back to openings • overall direction of the text supported by clear links between paragraphs 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • paragraphs clearly structure main ideas across text to support purpose, e.g. clear chronological or logical links between paragraphs • within paragraphs / sections, a range of devices support cohesion, e.g. secure use of pronouns, connectives, references back to text • links between paragraphs / sections generally maintained across whole text 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • relevant ideas and material developed with some imaginative detail • development of ideas and material appropriately shaped for selected form, e.g. nominalization for succinctness • clear viewpoint established, generally consistent, with some elaboration, e.g. some, uneven development of individual voice or characterisation in role 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • main purpose of writing is clear and consistently maintained • features of selected form clearly established with some adaptation to purpose • appropriate style clearly established to maintain reader's interest throughout 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • vocabulary chosen for effect • reasonably wide vocabulary used, though not always appropriately 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • correct spelling of: <ul style="list-style-type: none"> o grammatical function words o almost all inflected words o most derivational suffixes and prefixes o most content/lexical words • likely errors: <ul style="list-style-type: none"> o occasional phonetically plausible spelling of unstressed syllables in content words o double consonants in prefixes 	
Level 4	<p>Across a range of writing</p> <ul style="list-style-type: none"> • some variation in length, structure or subject of sentences • use of some subordinating connectives, e.g. if, when, because throughout the text • some variation, generally accurate, in tense and verb forms 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • sentences demarcated accurately throughout the text, including question marks • speech marks to denote speech generally accurate, with some other speech punctuation • commas used in lists and occasionally to mark clauses, although not always accurately 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • ideas organised by clustering related points or by time sequence • ideas are organised simply with a fitting opening and closing, sometimes linked • ideas or material generally in logical sequence but overall direction of writing not always clearly signalled 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • paragraphs / sections help to organise content, e.g. main idea usually supported or elaborated by following sentences • within paragraphs / sections, limited range of connections between sentences, e.g. over-use of 'also' or 'pr nouns' • some attempts to establish simple links between paragraphs / sections not always maintained, e.g. firstly, next 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • relevant ideas and content chosen • some ideas and material developed in detail, e.g. descriptions elaborated by adverbial and expanded noun phrases • straightforward viewpoint generally established and maintained, e.g. writing in role or maintaining a consistent stance 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • main purpose of writing is clear but not always consistently maintained • main features of selected form are clear and appropriate to purpose • style generally appropriate to task, though awareness of reader not always sustained 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • some evidence of deliberate vocabulary choices • some expansion of general vocabulary to match topic 	<p>Across a range of writing</p> <ul style="list-style-type: none"> • correct spelling of: <ul style="list-style-type: none"> o most common grammatical function words, including adverbs with -ly formation o regularly formed content/lexical words, including those with multiple morphemes o most past and present tense inflections, plurals • likely errors: <ul style="list-style-type: none"> o homophones of some common grammatical function words o occasional phonetically plausible spelling in content/lexical words 	
Level 3	<p>In most writing</p> <ul style="list-style-type: none"> • reliance mainly on simply structured sentences, variation with support, e.g. some complex sentences • and, but, so are the most common connectives, subordination occasionally • some limited variation in use of tense and verb forms, not always secure 	<p>In most writing</p> <ul style="list-style-type: none"> • straightforward sentences usually demarcated accurately with full stops, capital letters, question and exclamation marks • some, limited, use of speech punctuation • comma splicing evident, particularly in narrative 	<p>In most writing</p> <ul style="list-style-type: none"> • some attempt to organise ideas with related points placed next to each other • openings and closings usually signalled • some attempt to sequence ideas or paragraphs or of adverbials • movement between paragraphs / sections sometimes abrupt or disjointed 	<p>In most writing</p> <ul style="list-style-type: none"> • some internal structure within sections of text e.g. one-sentence paragraphs or ideas loosely organised • within paragraphs / sections, some links between sentences, e.g. use of pronouns or of adverbials • movement between paragraphs / sections sometimes abrupt or disjointed 	<p>In most writing</p> <ul style="list-style-type: none"> • some appropriate ideas and content included • some attempt to elaborate on basic information or events, e.g. nouns expanded by simple adjectives • attempt to adopt viewpoint, though often not maintained or inconsistent, e.g. attitude expressed, but with little elaboration 	<p>In most writing</p> <ul style="list-style-type: none"> • purpose established at a general level • main features of selected form sometimes signalled to the reader • some attempt at appropriate style, with attention to reader 	<p>In most writing</p> <ul style="list-style-type: none"> • simple, generally appropriate vocabulary used, limited in range • some words selected for effect or occasion 	<p>In most writing</p> <ul style="list-style-type: none"> • correct spelling of: <ul style="list-style-type: none"> o some common grammatical function words o common content/lexical words with more than one morpheme, including compound words • likely errors: <ul style="list-style-type: none"> o some inflected endings, e.g. past tense, comparatives, adverbs o some phonetically plausible attempts at content/lexical words 	<p>In most writing:</p> <ul style="list-style-type: none"> • legible style, shows accurate and consistent letter formation, sometimes joined
Level 2	<p>In some forms of writing</p> <ul style="list-style-type: none"> • some variation in sentence openings, e.g. not always starting with name or pronoun • mainly simple sentences with and used to connect clauses • past and present tense generally consistent 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • clause structure mostly grammatically correct • sentence demarcation with capital letters and full stops usually accurate • some accurate use of question and exclamation marks, and commas in lists 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • some basic sequencing of ideas or material, e.g. time-related words or phrases, line breaks, headings, numbers • openings and/or closings sometimes signalled 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • ideas in sections grouped by content, some linking by simple pronouns 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • mostly relevant ideas and content, sometimes repetitive or sparse • some apt word choices create interest • brief comments, questions about events or actions suggest viewpoint 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • some basic purpose established, e.g. main features of story, report • some appropriate features of the given form used • some attempts to adopt appropriate style 	<p>In some forms of writing</p> <ul style="list-style-type: none"> • usually correct spelling of: <ul style="list-style-type: none"> o high frequency grammatical function words o common single morpheme content/lexical words • likely errors: <ul style="list-style-type: none"> o inflected endings, e.g. past tense, plurals, adverbs o phonetic attempts at vowel digraphs 	<p>In some forms of writing:</p> <ul style="list-style-type: none"> • letters generally correctly shaped but inconsistencies in orientation, size and use of upper/lower case letters • clear letter formation, with ascenders and descenders distinguished, generally upper and lower case letters not mixed within words 	
Level 1	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • reliance on simple phrases and clauses • some sentence-like structures formed by chaining clauses together, e.g. series of ideas joined by repeated use of 'and' 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • mostly grammatically accurate clauses • some awareness of use of full stops and capital letters, e.g. beginning/end of sentence 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • some formulaic phrases indicate start/end of text, e.g. once upon a time, one day, the end • events/ideas sometimes in appropriate order, e.g. actions listed in time sequence, items numbered 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • simple connections between ideas, events, e.g. repeated nouns, pronouns relate to main idea 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • basic information and ideas conveyed through appropriate word choice, e.g. relate to topic • some descriptive language, e.g. colour, size, simple emotion 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • some indication of basic purpose, particular form or awareness of reader, e.g. a story, label, message 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • mostly simple vocabulary • communicates meaning through repetition of key words 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • usually correct spelling of simple high-frequency words • phonetically plausible attempts at words with digraphs and double letters • sufficient number of recognisable words for writing to be readable, including e.g. use of letter names to approximate syllables and words 	<p>In some writing, usually with support:</p> <ul style="list-style-type: none"> • most letters correctly formed and orientated • spaces between words • upper and lower case sometimes distinguished • use of ICT, e.g. use keyboard to type own name

Level	AF1 Talking to others Talk in purposeful and imaginative ways to explore ideas and feelings, adapting and varying structure and vocabulary according to purpose, listeners, and content	AF2 Talking with others Listen and respond to others, including in pairs and groups, shaping meanings through suggestions, comments and questions	AF3 Talking within role-play and drama Create and sustain different roles and scenarios, adapting techniques in a range of dramatic activities to explore texts, ideas and issues	AF4 Talking about talk Understand the range and uses of spoken language, commenting on meaning and impact and draw on this when talking to others
8	<p>Across a range of contexts</p> <ul style="list-style-type: none"> make creative, precise selections from a wide repertoire of strategies and conventions to meet varied speaking and listening challenges adapt vocabulary, grammar, and non-verbal features to match context and purpose with distinct personal style 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> show perceptive understanding of varied, complex speech, sustaining concentrated listening and responding with flexibility to develop ideas initiate and lead a variety of group roles, managing and sustaining discussion with sensitivity 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> deepen response to ideas and issues by exploiting dramatic approaches and techniques creatively, and experimenting with complex roles and scenarios 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> reflect on and apply clear understanding and knowledge of the significance of spoken language variation, evaluating own and others' discourse
7	<p>Across a range of contexts</p> <ul style="list-style-type: none"> explore a wide range of subject matter with precision and effect manage and manipulate talk to position the listener make apt and flexible choices of vocabulary, grammar, and non-verbal features across different registers 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> respond to and interrogate what is said and how delivery relates to the speaker's viewpoint, shaping direction and content of talk with well-judged contributions draw on a range of different group roles and responsibilities, sustaining effective collaboration and discussion 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> explore complex ideas and issues through insightful choice of speech, gesture, and movement, establishing roles and applying dramatic approaches with confidence 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> evaluate meaning and impact of a range of significant features of language variation in own and others' discourse
6	<p>Across a range of contexts</p> <ul style="list-style-type: none"> explore complex ideas and feelings in a range of ways, both succinct and extended maintain generally controlled and effective organisation of talk to guide the listener adapt vocabulary, grammar, and non-verbal features to meet an increasing range of demands 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> engage with complex material making perceptive responses, showing awareness of the speaker's aims and extending meanings adopt group roles and responsibilities independently, drawing ideas together and promoting effective discussion 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> demonstrate empathy and understanding through flexible choices of speech, gesture, and movement, adapting roles convincingly to explore ideas and issues 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> analyse meaning and impact of spoken language variation, exploring significant details in own and others' language
5	<p>Across a range of contexts</p> <ul style="list-style-type: none"> express and explain relevant ideas and feelings, with some elaboration to make meaning explicit shape talk in deliberate ways for clarity and effect to engage the listener adapt vocabulary, grammar, and non-verbal features in ways well-matched to audience, purpose and context 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> recognise significant details and implicit meanings, developing the speaker's ideas in different ways sustain roles and responsibilities with independence in pairs or groups, sometimes shaping overall direction of talk with effective contributions 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> show insight into texts and issues through deliberate choices of speech, gesture, and movement, beginning to sustain and adapt different roles and scenarios 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> explain features of own and others' language use, showing understanding of effect of varying language for different purposes and situations
4	<p>Across a range of contexts</p> <ul style="list-style-type: none"> speak in extended turns to express straightforward ideas and feelings, with some relevant detail structure talk in ways which support meaning and show attention to the listener vary vocabulary, grammar, and non-verbal features to suit audience, purpose, and context 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> show generally clear understanding of content and how it is presented, sometimes introducing new material or ideas take on straightforward roles and responsibilities in pairs and groups 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> convey straightforward ideas about characters and situations, making deliberate choices of speech, gesture, and movement in different roles and scenarios 	<p>Across a range of contexts</p> <ul style="list-style-type: none"> show understanding of how and why language choices vary in their own and others' talk in different situations
3	<p>In most contexts</p> <ul style="list-style-type: none"> develop ideas and feelings through sustained speaking turns organise talk to help the listener, with overall structure evident adapt language and non-verbal features to suit content and audience 	<p>In most contexts</p> <ul style="list-style-type: none"> respond to the speaker's main ideas, developing them through generally relevant comments and suggestions attempt different roles and responsibilities in pairs or groups 	<p>In most contexts</p> <ul style="list-style-type: none"> show understanding of characters or situations by adapting speech, gesture, and movement, helping to create roles and scenarios 	<p>In most contexts</p> <ul style="list-style-type: none"> recognise and comment on different ways that meaning can be expressed in own and others' talk
2	<p>In some contexts</p> <ul style="list-style-type: none"> recount experiences and imagine possibilities, often connecting ideas vary talk in simple ways to gain and hold the attention of the listener make specific vocabulary choices and use non-verbal features that show awareness of different purposes and listeners 	<p>In some contexts</p> <ul style="list-style-type: none"> listen and respond to the speaker, making simple comments and suggestions make helpful contributions when speaking in turn, in pairs, and in small groups 	<p>In some contexts</p> <ul style="list-style-type: none"> extend experience and ideas, adapting speech, gesture, or movement to simple roles and different scenarios 	<p>In some contexts</p> <ul style="list-style-type: none"> show awareness of ways in which speakers vary talk, and why, through exploring different ways of speaking
1	<p>In some contexts</p> <ul style="list-style-type: none"> express feelings and ideas when speaking about matters of immediate interest talk in ways that are audible and intelligible to familiar others show some awareness of the listener by making changes to language and non-verbal features 	<p>In some contexts</p> <ul style="list-style-type: none"> understand and engage with the speaker, demonstrating attentive listening engage with others through taking turns in pairs and small groups 	<p>In some contexts</p> <ul style="list-style-type: none"> engage in imaginative play enacting simple characters and situations using everyday speech, gesture, or movement 	<p>In some contexts</p> <ul style="list-style-type: none"> notice simple differences in speakers' use of language and try out new words and ways of expressing meaning

Appendix 2: Overview of Quigley (2014) Depth of Learning initiative.



Assessing using milestones

1) How do I track progression within a milestone?

We believe progression is not simply a matter of ticking off what pupils can do. Instead we are concerned with how well they can do things, their fluency and their depth of understanding. Therefore we think it is important to track two things:

- a) the **breadth** of learning (i.e. how many examples of learning we can see)
- b) the **depth** of learning (i.e. the fluency of pupils, how well they apply knowledge and skills and their depth of understanding)

Depth of learning is central to this assessment system. Progression is not simply a matter of being able to do more things. It involves:

- a) increasing levels of cognitive challenge
- b) changes to teaching methodology
- c) a changing nature of progress
- d) decreasing levels of support
- e) increasing quantity of learning
- f) activities that match the intended cognitive challenge.

We have simplified this into three stages of progress within a milestone: Basic, Advancing and Deep (BAD) learning

The table below gives more detail on BAD learning.

Depth of learning	Cognitive	Predominant teaching	Nature of progress	Support	Quantity*	Typically, pupils will
Basic	Low level cognitive demand. Involves following instructions.	Modeling Explaining	Acquiring. Refining	High	Some	name, describe, follow instructions or methods, complete tasks, recall information, ask basic questions, use, match, report, measure, list, illustrate, label, recognise, tell, repeat, arrange, define, memorise.
Advancing	Higher level of cognitive demand. Involves mental processing beyond recall. Requires some degree of decision making.	Reminding Guiding	Applying. Practising	Medium	Most	apply skills to solve problems, explain methods, classify, infer, categorise, identify patterns, organise, modify, predict, interpret, summarise, make observations, estimate, compare.
Deep	Cognitive demands are complex and abstract. Involves problems with multi-steps or more than one possible answer. Requires justification of answers.	Coaching Probing Deep questioning	Deepening Extending	Low	All	solve non-routine problems, appraise, explain concepts, hypothesise, investigate, cite evidence, design, create, prove.

* Quantity is important where increased cognitive challenge is not possible, for example in phonic knowledge or number facts. In some cases, therefore, progress may be seen in increasing the quantity of knowledge.

Appendix 3: Blank uncompleted copy of the formative assessment system spreadsheet showing outcomes for writing.

The Boys' School Year 1 outcomes for writing

Composition	Achieved	Vocabulary, grammar and punctuation	Achieved	Handwriting	Achieved	Spelling -	Achieved
Compose a sentence orally before writing it.	NO	Use simple connective such as 'and' to join sentences.	NO	Form capital letters.	NO	Spell vowel digraph words ((ai, oi, ay, oy, ar, ee, ea, er, ir, ur, oo, ou, oa, oe, ou, ow, ie, or).	NO
Sequence sentences to form short narratives.	NO	Begin to punctuate sentences using a capital letter and full stop.	NO	Form digits 0-9.	NO	Spell ll, ss, zz and ck words.	NO
Use key features of narratives in writing.	NO	Use commas to create a list	NO	Understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these.	NO	Spell split vowel digraph words (a-e, e-e, i-e, o-e, u-e).	NO
Convey information and ideas in simple non-narrative forms.	NO	Begin to punctuate sentences using a question mark and exclamation mark.	NO	Clear distinguish between ascenders and descenders.	NO	Spell nk words (eg. bank).	NO
Structure chronological texts.	NO	Use a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'.	NO	Letters correctly sitting on the line.	NO	Spell -tch words (e.g catch, fetch, rich).	NO
Proof read work checking that it makes sense.	NO	Use of adjectives in writing.	NO	Letters formed of a suitable size.	NO	Spell words containing /v/ sound at the end of words (eg. live, give).	NO
Discuss what has been written with the teacher or other pupils.	NO	Use of imperative verbs in writing.	NO	Use finger spaces between words.	NO	Recognise and use alternative ways of spelling phonemes, (e.g. the /ae/ sound can be spelt with 'ai', 'ay') and begin to know which words contain which spelling alternatives.	NO
Read writing aloud clearly enough to be heard by their peers and the teacher.	NO					Using the spelling rule for adding -s or -es for plurals.	NO
						Use the prefix un-.	NO
						Use -ing, -ed, -er and -est where no change is needed in the spelling of root words.	NO
						Spell the days of the week.	NO
						Name the letters of the alphabet.	NO

Appendix 4: Blank uncompleted copy of the formative assessment system spreadsheet showing outcomes for Reading and Speaking & Listening skills.

The Boys' School Year 1 outcomes for reading & speaking and listening

Word reading	Achieved	Comprehension	Achieved	Speaking and listening	Achieved
Apply phonic knowledge and skills as the route to decode words.	NO	Discuss a wide range of poems, stories and non-fiction.	NO	Listen and respond appropriately to adults and their peers.	NO
Respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes.	NO	Ability to link what is read to own experiences.	NO	Ask relevant questions to extend their understanding and knowledge.	NO
Read words by blending sounds in unfamiliar words.	NO	Ability to identify simple particular characteristics of key stories, fairy stories and traditional tales.	NO	Use relevant strategies to build their vocabulary.	NO
Read words with –s, –es, –ing, –ed, –er and –est endings.	NO	Make inferences on the basis of what is being said and done.		Articulate and justify answers, arguments and opinions.	NO
Read words with contractions and understand the role of an apostrophe.	NO	Make simple predictions when reading stories.	NO	Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comment.	NO
		Comment on obvious features of language, including rhyming patterns.	NO	Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.	NO
		Participate in discussion about what is read to them, taking turns and listening to what others say.	NO	Participate in discussions, presentations, performances, roleplay/improvisations and debates.	NO

Appendix 5: NGRT scores achieved by the case study class.

NGRT Scores	Raw Scores			SAS			Variance	
	Pupil	September	January	May	September	January	May	January vs September
Pupil 1	3	5	17	85	88	100	4%	14%
Pupil 2	23	31	42	105	108	114	3%	6%
Pupil 3	7	13	33	97	99	121	2%	22%
Pupil 4	6	9	34	87	89	100	2%	12%
Pupil 5	11	17	44	100	100	121	0%	21%
Pupil 6	19	23	43	102	102	115	0%	13%
Pupil 7	6	12	31	91	94	108	3%	15%
Pupil 8	10	11	27	95	96	110	1%	15%
Pupil 9	8	9	19	91	93	99	2%	6%
Pupil 10	8	14	18	95	97	101	2%	4%
Pupil 11	10	19	44	102	102	123	0%	21%
Pupil 12	37	41	45	119	121	123	2%	2%
Pupil 13	16	21	38	99	100	112	1%	12%
Pupil 14	8	16	40	99	102	118	3%	16%
Pupil 15	12	20	41	90	96	113	7%	18%
Pupil 16	5	9	30	92	97	110	5%	13%
Pupil 17	23	33	36	110	112	112	2%	0%
Pupil 18	32	37	40	109	111	111	2%	0%
Pupil 19	20	28	32	110	113	114	3%	1%
Pupil 20	24	30	35	113	113	114	0%	1%
Minimum Value	3.00	5.00	17.00	85.00	88.00	99.00	0.00	0.00
Maximum Value	37.00	41.00	45.00	119.00	121.00	123.00	0.07	0.22
Range	34.00	36.00	28.00	34.00	33.00	24.00	0.07	0.22
Average	14.40	19.90	34.45	99.55	101.65	111.95	0.02	0.11
Percentage Increase	-	38%	73%	-	2%	10%	-	-

Appendix 6- PIE scores achieved by the case study class.

PIE Scores Pupil	Raw Scores			SAS			Variance	
	September	January	May	September	January	May	January vs September	May vs January
Pupil 1	5	7	19	90	90	100	0%	11%
Pupil 2	25	27	32	101	105	116	4%	10%
Pupil 3	10	16	30	96	99	111	3%	12%
Pupil 4	8	10	20	88	89	95	1%	7%
Pupil 5	11	19	30	95	100	109	5%	9%
Pupil 6	26	25	33	105	102	117	-3%	15%
Pupil 7	16	16	31	100	100	112	0%	12%
Pupil 8	13	16	29	96	98	108	2%	10%
Pupil 9	7	11	28	89	93	107	4%	15%
Pupil 10	7	14	29	92	95	109	3%	15%
Pupil 11	15	19	30	102	100	111	-2%	11%
Pupil 12	31	33	34	117	122	122	4%	0%
Pupil 13	16	21	29	97	99	105	2%	6%
Pupil 14	11	19	30	98	102	112	4%	10%
Pupil 15	7	12	27	85	86	100	1%	16%
Pupil 16	5	8	29	90	91	110	1%	21%
Pupil 17	27	30	33	110	112	112	2%	0%
Pupil 18	21	25	31	97	105	116	8%	10%
Pupil 19	26	29	31	112	113	115	1%	2%
Pupil 20	25	30	32	110	113	115	3%	2%
Minimum	5.00	7.00	19.00	85.00	86.00	95.00	-0.03	0.00
Maximum	31.00	33.00	34.00	117.00	122.00	122.00	0.08	0.21
Range	26.00	26.00	15.00	32.00	36.00	27.00	0.11	0.21
Mean	16.05	19.35	29.35	98.50	100.70	110.10	0.02	0.10
Percentage Increase	-	21%	52%	-	2%	9%	-	-

Appendix 7::Year 1 words spelling assessment results achieved by the case study class.

Spelling Pupil	KW			Variance	
	September	January	May	January vs September	May vs January
Pupil 1	10	15	29	50%	93%
Pupil 2	15	23	49	53%	113%
Pupil 3	20	32	59	60%	84%
Pupil 4	50	61	92	22%	51%
Pupil 5	51	72	94	41%	31%
Pupil 6	20	33	53	65%	61%
Pupil 7	25	33	59	32%	79%
Pupil 8	32	38	46	19%	21%
Pupil 9	4	6	15	50%	150%
Pupil 10	54	60	88	11%	47%
Pupil 11	58	61	103	5%	69%
Pupil 12	63	72	105	14%	46%
Pupil 13	18	21	30	17%	43%
Pupil 14	73	84	104	15%	24%
Pupil 15	70	75	95	7%	27%
Pupil 16	50	51	73	2%	43%
Pupil 17	11	14	25	27%	79%
Pupil 18	7	9	12	29%	33%
Pupil 19	75	77	110	3%	43%
Pupil 20	23	32	59	39%	84%
Minimum	4.00	6.00	12.00	0.02	0.21
Maximum	75.00	84.00	110.00	0.65	1.50
Range	71.00	78.00	98.00	0.63	1.29
Mean	36.45	43.45	65.00	0.28	0.61
Percentage Increase	-	19%	50%	-	-

Appendix 8: NGRT scores achieved by the control group class.

NGRT Scores Pupil	Raw Scores			SAS			Variance	
	September	January	May	September	January	May	January vs September	May vs January
Pupil 21	13	18	25	99	101	101	2%	0%
Pupil 22	9	14	19	87	89	90	2%	1%
Pupil 23	11	16	21	100	102	100	2%	-2%
Pupil 24	12	17	23	101	103	105	2%	2%
Pupil 25	9	14	23	97	100	102	3%	2%
Pupil 26	22	28	33	101	103	105	2%	2%
Pupil 27	9	12	24	97	98	100	1%	2%
Pupil 28	4	16	28	89	95	100	7%	5%
Pupil 29	38	43	45	118	119	121	1%	2%
Pupil 30	22	19	24	112	115	108	3%	-6%
Pupil 31	9	14	27	97	100	108	3%	8%
Pupil 32	8	10	25	99	99	109	0%	10%
Pupil 33	28	41	45	115	117	119	2%	2%
Pupil 34	35	40	46	120	120	125	0%	4%
Pupil 35	8	11	22	95	96	101	1%	5%
Pupil 36	10	14	20	87	97	100	11%	3%
Pupil 37	10	28	32	102	106	104	4%	-2%
Pupil 38	8	14	17	99	100	100	1%	0%
Pupil 39	40	46	48	120	127	133	6%	5%
Pupil 40	21	27	40	100	102	110	2%	8%
Minimum	4.00	10.00	17.00	87.00	89.00	90.00	-	-
Maximum	40.00	46.00	48.00	120.00	127.00	133.00	-	-
RANGE	36.00	36.00	31.00	33.00	38.00	43.00	-	-
MEAN	16.30	22.10	29.35	101.75	104.45	107.05	107.05	0.03
Percentage Increase	-	36%	33%	-	3%	2%	-	-

Appendix 9: PIE scores achieved by the control group class.

PIE Scores	Raw Scores			SAS			Variance	
	Pupil	September	January	May	September	January	May	January vs September
Pupil 21	17	19	21	100	106	108	6%	2%
Pupil 22	10	16	20	89	92	93	3%	1%
Pupil 23	15	27	29	100	108	108	8%	0%
Pupil 24	16	24	29	102	106	109	4%	3%
Pupil 25	12	18	23	97	100	102	3%	2%
Pupil 26	22	30	32	101	107	110	6%	3%
Pupil 27	15	32	33	100	118	121	18%	3%
Pupil 28	5	15	17	90	92	92	2%	0%
Pupil 29	29	32	33	111	116	118	5%	2%
Pupil 30	27	29	31	112	113	115	1%	2%
Pupil 31	30	33	33	117	122	121	4%	-1%
Pupil 32	11	18	20	98	102	102	4%	0%
Pupil 33	28	33	35	115	119	133	3%	12%
Pupil 34	31	33	33	118	122	121	3%	-1%
Pupil 35	10	18	22	95	100	101	5%	1%
Pupil 36	11	16	20	89	91	92	2%	1%
Pupil 37	15	28	32	102	105	111	3%	6%
Pupil 38	12	16	19	99	100	99	1%	-1%
Pupil 39	33	33	34	122	121	131	-1%	8%
Pupil 40	21	26	27	100	102	100	2%	-2%
Maximum	33.00	33.00	35.00	122.00	122.00	133.00	0.18	0.12
Mean	18.50	24.80	27.15	102.85	107.10	109.35	0.04	0.02
Minimum	5.00	15.00	17.00	89.00	91.00	92.00	-0.01	-0.02
Range	28.00	18.00	18.00	33.00	31.00	41.00	0.19	0.14
Percentage increase	-	-36%	0%	-	-6%	32%	-	-

Appendix 10: Year 1 spelling assessment results achieved by the control group class

Spelling Pupil	KW			Variance	
	September	January	May	January vs September	May vs January
Pupil 21	30	50	81	67%	62%
Pupil 22	10	15	20	50%	33%
Pupil 23	20	40	60	100%	50%
Pupil 24	45	56	76	24%	36%
Pupil 25	3	6	10	100%	67%
Pupil 26	45	49	55	9%	12%
Pupil 27	34	50	64	47%	28%
Pupil 28	8	16	16	100%	0%
Pupil 29	41	47	52	15%	11%
Pupil 30	20	41	60	105%	46%
Pupil 31	55	66	72	20%	9%
Pupil 32	30	57	65	90%	14%
Pupil 33	56	60	78	7%	30%
Pupil 34	63	69	78	10%	13%
Pupil 35	10	20	22	100%	10%
Pupil 36	50	68	74	36%	9%
Pupil 37	41	66	81	61%	23%
Pupil 38	11	16	20	45%	25%
Pupil 39	75	77	89	3%	16%
Pupil 40	26	36	59	38%	64%
Minimum	3.00	6.00	10.00	0.03	0.00
Maximum	75.00	77.00	89.00	1.05	0.67
Range	72.00	71.00	79.00	1.02	0.67
Mean	33.65	45.25	56.60	0.51	0.28
Percentage increase	-	34%	25%	-	-

Appendix 11: A weekly log of, the number of outcomes achieved by pupils in the case study class on the formative assessment system for writing.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
Pupil 1	7	7	8	11	11	12	12	13	13	13	14	14	14	15	15	15
Pupil 2	18	18	18	18	19	20	20	21	22	23	25	27	28	29	30	31
Pupil 3	12	12	14	15	17	18	20	21	21	22	23	25	26	26	27	27
Pupil 4	13	14	14	16	18	20	22	23	23	24	25	26	27	27	28	29
Pupil 5	13	13	13	13	14	14	15	16	18	19	22	22	24	26	26	28
Pupil 6	12	12	13	14	16	18	20	21	22	23	25	26	27	28	29	30
Pupil 7	9	9	10	10	11	12	13	15	16	18	19	20	22	23	24	25
Pupil 8	8	8	8	9	9	10	10	11	12	13	14	16	18	20	24	27
Pupil 9	5	5	6	6	8	8	10	11	11	13	15	17	18	19	20	21
Pupil 10	7	7	8	9	10	11	12	14	16	17	20	22	23	23	24	25
Pupil 11	13	13	13	15	16	17	18	18	20	23	25	26	27	27	29	30
Pupil 12	30	31	32	32	33	33	33	34	34	34	34	34	34	34	34	34
Pupil 13	16	16	16	18	19	19	20	20	21	23	25	26	27	28	28	29
Pupil 14	11	11	11	12	14	16	17	17	21	23	25	27	28	29	30	31
Pupil 15	6	7	7	8	9	9	10	11	13	15	18	22	24	25	26	26
Pupil 16	17	17	17	18	19	20	21	21	23	25	26	27	28	30	30	31
Pupil 17	27	27	27	28	29	29	30	30	31	32	33	34	34	34	34	34
Pupil 18	23	23	23	24	24	25	25	25	27	29	30	31	32	32	33	33
Pupil 19	27	27	27	29	30	31	32	33	33	33	34	34	34	34	34	34
Pupil 20	26	27	27	28	28	29	29	30	30	31	32	32	33	34	34	34

Appendix 12: A weekly log of, the number of outcomes achieved by pupils in the case study class on the formative assessment system for Reading and Speaking & Listening skills.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
Pupil 1	5	5	6	6	7	8	9	10	10	11	12	13	14	15	16	16
Pupil 2	11	11	12	12	13	13	14	15	15	15	16	16	16	17	17	17
Pupil 3	10	10	10	11	11	12	12	12	13	13	14	14	14	15	15	15
Pupil 4	9	9	10	10	11	12	13	13	13	13	14	14	15	15	16	16
Pupil 5	10	10	10	11	12	12	13	13	14	14	14	15	15	16	16	16
Pupil 6	11	11	11	12	12	13	13	14	14	14	15	15	16	16	17	17
Pupil 7	7	7	8	10	11	12	12	13	13	13	14	14	15	15	16	16
Pupil 8	8	8	10	11	12	13	14	14	15	16	17	17	18	18	19	19
Pupil 9	5	5	5	6	6	7	7	7	8	9	10	11	11	12	12	13
Pupil 10	6	6	6	7	7	8	8	9	9	10	11	11	12	12	13	13
Pupil 11	9	9	9	10	11	13	14	15	15	15	16	16	16	17	17	17
Pupil 12	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19	19
Pupil 13	13	13	14	14	15	15	16	16	16	16	16	17	17	18	18	18
Pupil 14	11	11	11	12	12	13	14	14	14	15	15	15	16	16	17	17
Pupil 15	6	6	6	7	7	7	8	8	9	10	10	10	11	12	12	13
Pupil 16	16	16	16	16	17	17	18	18	18	19	19	19	19	19	19	19
Pupil 17	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19
Pupil 18	17	17	17	17	17	17	18	18	18	18	19	19	19	19	19	19
Pupil 19	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Pupil 20	17	17	18	18	19	19	19	19	19	19	19	19	19	19	19	19

Appendix 13: Average time taken for pupils to independently begin a written task.

Month	Case study class	Control group class
January	8	6
February	8	6
March	7	7
April	5	7
May	3	9

Appendix 14: Number of pupils who voluntarily contributed on at least one occasion during a one hour English lesson.

Month	Case study class	Control group class
January	10	11
February	12	12
March	13	11
April	14	10
May	18	9

Appendix 15: The proportion of child-lead learning during an observed one hour lesson.

Month	Case study class	Control group class
January	50%	50%
February	55%	50%
March	65%	45%
April	70%	50%
May	75%	40%

Appendix 16: Activity observation sheet

Observation sheet.

Activity: _____

Pupil name	Observations

Appendix 17: Letter and consent form sent to the head teacher of The Boy's school

Dear Mr xxxx,

I am writing to enquire about conducting research in school this academic year. As you know, I am studying for the Master's in Learning and teaching at Oxford University, supervised by xxxxx. The title of my final research project is: Designing and implementing a formative assessment system to support and track pupil progress. A pilot with Year 1 boys in writing. The purpose of this investigation is to see if using formative assessment can enhance the progress the boys make in their writing.

The research will take place across Year 1 and will focus on supporting the progress of boys of mixed ability. Alongside the school's existing summative practises, they will be assessed formatively based on the schools expected outcomes for Year 1 pupils in writing, reading and speaking/listening. Small interventions may be put in place to help the boys achieve some of these outcomes. Ms X and Ms Y have agreed to work collaboratively with me on this.

By participating in the research, the school would be contributing to a project that will deepen the department's understanding of assessment for learning and how this can be used to support boys in their writing, and so contribute towards developing ways of improving attainment for similar students in the school in the future. It will also contribute towards assessment in education more widely.

I hope to conduct this research between January 2016 and July 2016. I will use formative assessment data, whole class writing samples, in addition to summative data taken from NGRT, PIE and spelling of Year 1 words assessments. Informal observations will also be made in the classroom environment.

Oxford University has strict procedures on conducting ethical research with teachers and young people, consistent with current British Educational Research Association guidelines. As practitioner research however, the University recognises that schools have the highest ethical standards in any event. Your consent is necessary in order for this investigation to go ahead. Additionally, I have attached a parent information leaflet that will be sent to the parents of the boys in my class to inform them of the project. Along with this I will provide the attached opt-out form for parents to complete and return to school if they do not want their son to take part in the research. Throughout the research, teachers, parents and pupils will be able to refuse to participate in any research activities at any time.

All participants, including pupils, teachers and the school, would be made anonymous in all research reports. The data collected would be kept strictly confidential, available only to my supervisor and myself, and not used other than specified without further consent.

If you feel you would like to take part in the study, or need more information about what is involved, please contact me.

I look forward to hearing from you.

Yours sincerely,

Designing and implementing a formative assessment system to support and track pupil progress.
A pilot with Year 1 boys in writing boys.

xxxxxxx

University of Oxford, Department of Education

We do not wish to participate in this project.

We would like to find out more about this project.

We would like to take part in this project.

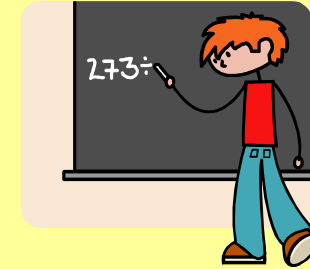
If you would like further information, please contact me, or my supervisor. If you require clarification of the ethical approval, process please contact Chair of Department of Education Research Ethics Committee, Dr xxxxxx.

Please return this form to me.

Thank you for your help

Appendix 18: Parental information leaflet

*Designing and implementing a formative assessment system
to support and track pupil progress.
A pilot with Year 1 boys in writing.*



Oxford University
Department of Education

What do you do now?

If you are happy for your son to participate in this project, then you do not have to take any further action. However, if you do not want your son to be part of this project please return a signed and dated copy of the opt-out form and your son will be exempt.

Please contact me if you have any questions about the research and I will be happy to talk with you in more detail.



Thank you for your help.

Dear Parent or Guardian,

I am studying my Masters in Learning and Teaching at The University of Oxford. For my Research and Development project I will be investigating how I can support pupil progress in writing through the use of formative assessment. Formative assessment involves the practices teachers carry out in the classroom on a daily basis to monitor and support pupils. Examples of formative assessment include observations, questioning and marking. My aim is to develop a system that would enable the evidence provided by formative assessment to be recorded and acted upon. The purpose of this is to enhance the progress your son will make in his writing this academic year.

I hope that you will see the potential benefits this project will have on your son's academic progress and will therefore want your son to take part. However, before you decide, it is important that you take some time to read through the information provided in this pamphlet to gain a full understanding of what is involved.

What will your child be asked to do?

Your son's lessons will continue as per usual. As his class teacher I will be drawing upon information collected through formative assessment to help support the progress he is making in his writing. This may mean that a small individualised intervention is put in place for your son in the classroom. Examples of these may include support with spelling, the use of a pencil grip or extension work. These interventions will only be put in place if they are felt to be of benefit to your son in furthering his progress in writing. If any intervention were felt to be of support to your son, this would be discussed with you first and you can decide if you would like it implemented.

Ethics

Any research with young people needs to be conducted with care and sensitivity. Anonymity will be upheld for all pupils at all times. My research will be consistent with the strict guidelines required by Oxford University. This study has received ethics clearance through the University of Oxford's ethical approval process for research involving human participants.

Taking part in this research is completely voluntary. You and your child are free to say you do not want to participate. Your son will be free to withdraw from the research at any point, without giving any reason. This would not affect your son's education in any way.

I will make the data I collect in the study anonymous. I will also maintain confidentiality consistent with current UK law. I will not identify the school, teacher or any pupils in any reports of the research.

Appendix 19: Parental letter



OPT OUT FORM

If you **DO NOT** want your son to participate in the research: *‘Designing and implementing a formative assessment system to support and track pupil progress. A pilot with Year 1 boys in writing’*; please fill out the form below and return it to the school by **Wednesday 16th December 2015**. If we do not receive an opt-out form from you, your child may be invited to take part in this study, as described in the accompanying pamphlet.

I, the undersigned, hereby DO NOT give permission for my child to take part in the above study.

Name of child:

Name of parent/guardian:

Signature: _____

Date: _____

Name of

researcher: _____

Appendix 20: Copy of writing frame given to pupils for support during a story writing lesson.



Castle Adventure story

One day _____

Next _____

After that _____

Just then _____

Suddenly _____

In the end _____

© Copyright 2011. www.sparklebox.co.uk

Appendix 21: Pupil 8's achieved and unachieved outcomes for writing on the formative assessment system in the fifth week of the investigation.

Composition	Achieved	Grammar and punctuation	Achieved	Handwriting	Achieved	Spelling -	Achieved
Compose a sentence orally before writing it.	YES	Use simple connective such as 'and' to join sentences.	NO	Form capital letters.	NO	Spell vowel digraph words ((ai, oi, ay, oy, ar, ee, ea, er, ir, ur, oo, ou, oa, oe, ou, ow, ie, or).	NO
Sequence sentences to form short narratives.	NO	Begin to punctuate sentences using a capital letter and full stop.	NO	Form digits 0-9.	NO	Spell ll, ss, zz and ck words.	YES
Use key features of narratives in writing.	YES	Use commas to create a list.	NO	Understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these.	NO	Spell split vowel digraph words (a-e, e-e, i-e, o-e, u-e).	NO
Convey information and ideas in simple non-narrative forms.	YES	Begin to punctuate sentences using a question mark and exclamation mark.	NO	Clear distinguish between ascenders and descenders.	NO	Spell nk words (eg. bank).	YES
Structure chronological texts.	NO	Use a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'.	NO	Letters correctly sitting on the line.	NO	Spell -tch words (e.g catch, fetch, rich).	NO
Proof read work checking that it makes sense.	NO	Use of adjectives in writing.	NO	Letters formed of a suitable size.	NO	Spell words containing /v/ sound at the end of words (eg. live, give).	NO
Discuss what has been written with the teacher or other pupils.	YES	Use of imperative verbs in writing.	NO	Use finger spaces between words.	NO	Recognise and use alternative ways of spelling phonemes, (e.g. the /ae/ sound can be spelt with 'ai', 'ay') and begin to know which words contain which spelling alternatives.	NO
Read writing aloud clearly enough to be heard by their peers and the teacher.	YES					Using the spelling rule for adding -s or -es for plurals.	NO
						Use the prefix un-.	NO
						Use -ing, -ed, -er and -est where no change is needed in the spelling of root words.	NO
						Spell the days of the week.	NO
						Name the letters of the alphabet.	YES

Appendix 22: Screenshot of the Reading and Speaking & Listening section of the formative assessment system, taken in week one of the investigation, showing that Pupil 9 had not achieved any word reading outcomes.

Word reading	Achieved	Comprehension	Achieved	Speaking and listening	Achieved
Apply phonic knowledge and skills as the route to decode words.	NO	Discuss a wide range of poems, stories and non-fiction.	YES	Listen and respond appropriately to adults and their peers.	YES
Respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes.	NO	Ability to link what is read to own experiences.	YES	Ask relevant questions to extend their understanding and knowledge.	NO
Read words by blending sounds in unfamiliar words.	NO	Ability to identify simple particular characteristics of key stories, fairy stories and traditional tales.	NO	Use relevant strategies to build their vocabulary.	NO
Read words with –s, –es, –ing, –ed, –er and –est endings.	NO	Make inferences on the basis of what is being said and done.	YES	Articulate and justify answers, arguments and opinions.	NO
Read words with contractions and understand the role of an apostrophe.	NO	Make simple predictions when reading stories.	NO	Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comment.	NO
		Comment on obvious features of language, including rhyming patterns.	NO	Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.	NO
		Participate in discussion about what is read to them, taking turns and listening to what others say.	NO	Participate in discussions, presentations, performances, roleplay/improvisations and debates.	YES

Appendix 23: Screenshot of the writing section of the formative assessment system, taken in week one of the investigation, showing that Pupil 9 had not achieved any spelling outcomes.

Composition	Achieved	Vocabulary, grammar and punctuation	Achieved	Handwriting	Achieved	Spelling -	Achieved
Compose a sentence orally before writing it.	YES	Use simple connective such as 'and' to join sentences.	NO	Form capital letters.	YES	Spell vowel digraph words ((ai, oi, ay, oy, ar, ee, ea, er, ir, ur, oo, ou, oa, oe, ou, ow, ie, or).	NO
Sequence sentences to form short narratives.	NO	Begin to punctuate sentences using a capital letter and full stop.	YES	Form digits 0-9.	NO	Spell ll, ss, zz and ck words.	NO
Use key features of narratives in writing.	NO	Use commas to create a list	NO	Understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these.	NO	Spell split vowel digraph words (a-e, e-e, i-e, o-e, u-e).	NO
Convey information and ideas in simple non-narrative forms.	YES	Begin to punctuate sentences using a question mark and exclamation mark.	NO	Clear distinguish between ascenders and descenders.	NO	Spell nk words (eg. bank).	NO
Structure chronological texts.	NO	Use a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'.	NO	Letters correctly sitting on the line.	NO	Spell -tch words (e.g catch, fetch, rich).	NO
Proof read work checking that it makes sense.	NO	Use of adjectives in writing.	NO	Letters formed of a suitable size.	NO	Spell words containg /v/ sound at the end of words (eg. live, give).	NO
Discuss what has been written with the teacher or other pupils.	NO	Use of imperative verbs in writing.	NO	Use finger spaces between words.	NO	Recognise and use alternative ways of spelling phonemes , (e.g. the /ae/ sound can be spelt with 'ai', 'ay') and begin to know which words contain which spelling alternatives.	NO
Read writing aloud clearly enough to be heard by their peers and the teacher.	YES					Using the spelling rule for adding -s or -es for plurals.	No
						Use the prefix un-.	No
						Use -ing, -ed, -er and -est where no change is needed in the spelling of root words.	No
						Spell the days of the week.	NO
						Name the letters of the alphabet.	NO

Appendix 24: Overview of intervention planning for Pupil 9.

Week number	Outcome focus
1	Name the letters of the alphabet.
2	Spell nk words (eg. bank)
3	Spell -tch words (e.g catch, fetch, rich).
4	Spell vowel digraph words (ai, oi, ay, oy, ar, or).
5	Spell vowel digraph words (ee, ea,)
6	Spell vowel digraph words (er, ir, ur)
7	Spell vowel digraph words (ou, ow, ie)
8	Spell vowel digraph words (oo, ou, oa, oe).
9	Spell split vowel digraph words (a-e , e-e)
10	Spell split vowel digraph words (i-e , o-e, u-e)
11	Recognise and use alternative ways of spelling phonemes , (e.g. the /æ/ sound can be spelt with ‘ai’, ‘ay’) and begin to know which words contain which spelling alternatives.
12	Spell words containg /v/ sound at the end of words (eg. live, give).
13	Spell ll and ck words.
14	Spell ss and zz words.
15	Using the spelling rule for adding –s and –es for plurals.
16	Spell days of the week.

Appendix 25: Screenshot of the writing section of the formative assessment system, taken in week one of the investigation, showing that Pupil 15 had not achieved any handwriting outcomes.

Composition	Achieved	Vocabulary, grammar and punctuation	Achieved	Handwriting	Achieved	Spelling -	Achieved
Compose a sentence orally before writing it.	NO	Use simple connective such as 'and' to join sentences.	NO	Form capital letters.	NO	Spell vowel digraph words ((ai, oi, ay, oy, ar, ee, ea, er, ir, ur, oo, ou, oa, oe, ou, ow, ie, or).	NO
Sequence sentences to form short narratives.	YES	Begin to punctuate sentences using a capital letter and full stop.	YES	Form digits 0-9.	NO	Spell ll, ss, zz and ck words.	NO
Use key features of narratives in writing.	NO	Use commas to create a list	NO	Understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these.	NO	Spell split vowel digraph words (a-e, e-e, i-e, o-e, u-e).	NO
Convey information and ideas in simple non-narrative forms.	YES	Begin to punctuate sentences using a question mark and exclamation mark.	NO	Clear distinguish between ascenders and descenders.	NO	Spell nk words (eg. bank).	NO
Structure chronological texts.	NO	Use a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'.	NO	Letters correctly sitting on the line.	NO	Spell -tch words (e.g catch, fetch, rich).	NO
Proof read work checking that it makes sense.	NO	Use of adjectives in writing.	NO	Letters formed of a suitable size.	NO	Spell words containing /v/ sound at the end of words (eg. live, give).	NO
Discuss what has been written with the teacher or other pupils.	YES	Use of imperative verbs in writing.	NO	Use finger spaces between words.	NO	Recognise and use alternative ways of spelling phonemes , (e.g. the /ae/ sound can be spelt with 'ai', 'ay') and begin to know which words contain which spelling alternatives.	NO
Read writing aloud clearly enough to be heard by their peers and the teacher.	YES					Using the spelling rule for adding -s or -es for plurals.	NO
						Use the prefix un-.	NO
						Use -ing, -ed, -er and -est where no change is needed in the spelling of root words.	NO
						Spell the days of the week.	NO
						Name the letters of the alphabet.	YES

Appendix 26: Writing outcomes achieved (Yes) and unachieved (No) by Pupil 15 in May (week 16).

Composition	Achieved	Vocabulary, grammar and punctuation	Achieved	Handwriting	Achieved	Spelling -	Achieved
Compose a sentence orally before writing it.	YES	Use simple connective such as 'and' to join sentences.	NO	Form capital letters.	YES	Spell vowel digraph words ((ai, oi, ay, oy, ar, ee, ea, er, ir, ur, oo, ou, oa, oe, ou, ow, ie, or).	YES
Sequence sentences to form short narratives.	YES	Begin to punctuate sentences using a capital letter and full stop.	YES	Form digits 0-9.	YES	Spell ll, ss, zz and ck words.	YES
Use key features of narratives in writing.	YES	Use commas to create a list	YES	Understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these.	YES	Spell split vowel digraph words (a-e, e-e, i-e, o-e, u-e).	YES
Convey information and ideas in simple non-narrative forms.	YES	Begin to punctuate sentences using a question mark and exclamation mark.	NO	Clear distinguish between ascenders and descenders.	YES	Spell nk words (eg. bank).	YES
Structure chronological texts.	YES	Use a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'.	NO	Letters correctly sitting on the line.	NO	Spell -tch words (e.g. catch, fetch, rich).	YES
Proof read work checking that it makes sense.	NO	Use of adjectives in writing.	YES	Letters formed of a suitable size.	YES	Spell words containing /v/ sound at the end of words (eg. live, give).	YES
Discuss what has been written with the teacher or other pupils.	YES	Use of imperative verbs in writing.	YES	Use finger spaces between words.	YES	Recognise and use alternative ways of spelling phonemes, (e.g. the /ae/ sound can be spelt with 'ai', 'ay') and begin to know which words contain which spelling alternatives.	YES
Read writing aloud clearly enough to be heard by their peers and the teacher.	YES					Using the spelling rule for adding -s or -es for plurals.	NO
						Use the prefix un-.	YES
						Use -ing, -ed, -er and -est where no change is needed in the spelling of root words.	NO
						Spell the days of the week.	YES
						Name the letters of the alphabet.	YES

Appendix 27: Overview of intervention planning for Pupil 15.

Week number	Focus
1	Fine motor development: <i>bead threading and colouring activities.</i>
2	Fine motor development: <i>sewing</i>
3	Fine motor development: <i>icing biscuits, play dough</i>
4	Letter formation. Understanding which letters belong to which handwriting ‘families’ and distinguish between each. Activities: <i>making letters out of play dough, painting letters, writing letters onto the iPad.</i>
5	Fine motor development: <i>coloured pasta threading and colouring activities.</i>
6	Letter formation activities: <i>making letters and words out of play dough, painting letters, writing letters onto the iPad.</i>
7	Letters correctly sitting on the line: <i>pencil control activities and tracing.</i>
8	Use finger spaces between words: play the finger space astronaut game, copying patterns involving spacing.
9	Fine motor development: <i>sewing</i>
10	Capital letters: <i>salt dough capital letters modeling.</i>
11	Fine motor development: <i>lego model building.</i>
12	Fine motor development: <i>designing and copying patterns.</i>
13	Fine motor development: <i>finger painting and cartoon drawing.</i>
14	Fine motor development: <i>making sandcastles in the sand pit and painting.</i>
15	Letter formation activities: <i>creating words using paint, oil pastels and felt tip pens</i>
16	Spell the days of the week

Appendix 28: Overview of intervention planning for Pupil 1.

Week number	Focus
1	Confidence building games: fruit bowl, Chinese whispers, the rhythm maker.
2	Confidence building activities: friendship web, things I like about you game, reading and reflecting on 'I'm Special Poem'
3	Blob tree confidence building activities.
4	Confidence building games: What's the time Mr Wolf, Grandma's footsteps, Chinese whispers.
5	Singing songs.
6	Compliment diary: each child in the class writes a compliment to themselves first thing in the morning. Confidence games.
7	Playing on playground trikes with peers.
8	Making own shield of strengths.
9	Building a ladder of accomplishments.
10	Board games with peers.
11	Board games with peers.
12	Playing playground games with peers.
13	Lego building with peers.
14	Cake baking with peers.
15	Reading a story to a Reception child.