

**A small scale study to
explore the perceptions of
teachers and students in
the development of
independent and critical
thinking skills**

**MA in Education
(by research)**

**Jane Marshall
University of York
The Department of Education**

April 2012

Abstract

The aim of this study focussed on learning and what it is to be an independent thinker in the classroom, questioning what teachers and students feel their role is within an education system which promotes the development of independence and critical thinking alongside a quest to achieve the good examination results. The study investigated the extent to which teachers can adopt the role as a facilitator of learning and how students respond to the development of these skills in lessons.

In my research I reviewed the notions of independent thinking as discussed by psychology and pedagogical thinkers. In addition, it was crucial to explore the new educational frameworks, published by the QCA and other governmental bodies, as they are becoming increasingly focussed on producing 'independent thinkers'.

As an English teacher, the study took place in the school where I work using the students in my tutor group and the colleagues that I work alongside. Although my study was predominately from an action researcher perspective with the teacher as the lone researcher, I also used questionnaires which allowed me to gain a picture of students' understanding of the PLTS in education. The questionnaires for teachers and students provided me with a 'snapshot' which my study could then probe further through the individual interviews and lesson observations.

In its essence, the study has allowed me to explore the success of the PLTS in my school produced a number of findings which will inform my future practice. It has been interesting to examine the way schools have embedded PLTS in to a curriculum which is measured by examination success and in exploring how proficient students are with understanding the current provision of PLTS in lessons.

Contents

Page Number	
	Chapter 1 – Introduction 4
	Chapter 2 – Literature Review 10
	Chapter 3 – Methodology 24
	Chapter 4 - Teacher questionnaires 39
	Chapter 5- Student questionnaires 49
	Chapter 6 - Teacher interviews 61
	Chapter 7 - Lesson observations 70
	Chapter 8 – Conclusion 80
	Appendices
	<i>Appendix A.</i> 85
	<i>Appendix B.</i> 88
	<i>Appendix C.</i> 89
	References 85

List of tables

Table title	Reference number	Page number
Identifying importance	1.1	49
Skills	1.2	51
Skills recognition	1.3	53
Responses to 'team work'	1.4	54
Responses to 'creative thinking'	1.5	55
Responses to 'independent work'	1.6	57
Responses to 'effective participation'	1.7	58

List of Figures

Figure title	Reference number	Page number
Data gathering methods	1.0	27

Chapter 1

Introduction

The research question

In essence, the aim of my research is to understand the significance of independence and critical thinking in secondary schools. As an English teacher, I am becoming more interested in the shift in the learning process from the teacher to the student and through my research design I hope to gain a deeper understanding of how students perceive the role of independence and critical thinking in the classroom and beyond. Therefore, my study will be conducted in the school in which I am currently employed and will examine, through the use of questionnaires, interviews and observations, the views of the students I teach and the teachers I work alongside.

The principle focus of my question is to establish the current climate for teaching and learning of independence and critical thinking skills in schools. In order to explore my research proposal it was important for the research design to accommodate the perceptions and interpretations of both practitioners and students. Therefore my research questions aimed to elicit data to the following research questions:

- Do students feel they are equipped to develop independent learning skills? (1)
- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)
- Are lessons designed to encourage student independence? (3)

Using these questions as the cornerstone of my research design, the aim of this study is to explore how students respond to the development of 'thinking skills' in a practical setting, exploring to what extent lessons are designed and delivered to develop a student's ability to think both critically and independently. Crucially, it will be imperative to investigate the opinions students have about the implementation of the PLTS and if they are able to recognise the importance of developing these skills in lessons. Similarly, it will also be important for my study, to explore how teachers feel about the impact new Ofsted and DfE criteria have on the overall development of students and in the planning of lessons.

Consequently, I will ask if the current PLTS paradigm has allowed schools the opportunity to make provisions for students to develop as learners and, more importantly, if they are seen as a valued addition to the curriculum while in turn examining the wider significance of independence and its history in pedagogical scholarship,

Origins of interest

I aimed to focus on this particular area of educational research due to the increasing importance of independence and critical thinking skills in education. As a teacher, I am consistently witnessing an increase in emphasis on creating students who are independent critical thinkers as an ever strengthening goal of the Government. This persistent doctrine of the implementation of PLTS and the importance of embedding independence stimulus in lessons is repeated by the Government and Ofsted alike. As the DfE explored in its 2011 research in to thinking skills, the most pertinent factor to impact on independent thinking is, 'the shift of responsibility for the learning process from the teacher to the pupil' (2011:1). This means that in order to develop these 'independent skills' pupils need to acquire an understanding of their learning, which allows them to become motivated to learn and, more importantly, 'collaborate with teachers to structure their learning environment' (2011:1). The DfE found that the act of 'independence' is not merely the ability to work alone but it is teachers who have an active part in facilitating support for learners through structured modeling and group work (2011:1).

I have become particularly interested in how these overarching goals are ultimately translated in the classroom and to what benefit the skills are being taught in UK schools. It has been interesting, as a teacher, to witness the lack of independence shown by students throughout different key stages and this is also a concern echoed by my colleagues. Through this research I will be able to explore some of the issues which may be affecting the development of these skills. The notion has left me, and other professionals, questioning the value of this initiative in a climate that is so driven by examination results. If schools continue to promote the importance of GCSE results then students will be unable to fully engage and respond with the notion of independence. As a result, students could fail to find any worth in something that to them is intangible and culminates into nothing that can be explicitly used to make educational progress or to achieve GCSE success.

In response to this shift in education, to make worthwhile developments in the teaching and learning of independence and critical thinking, teachers are still being

highly pressured by the constant need to improve examination standards. Ultimately, schools remain highly incentivised to continually produce improved GCSE results, so if this is the case, can schools ever find the right balance for them to create students who are independent and critical whilst providing the much needed data for the league tables? Through this research I hope to explore the possible reasons affecting both teachers and students. Through this research I can examine the views of theorists such as Vygotsky, Lipman and de Bono who believe that the development of these goals sits firmly hand in hand, and the creation of a valued curriculum of independence and critical thinking can have a positive impact on the attainment of students in national exams. Subsequently, these opposing arguments have created the essence of my research question and are the areas of discussion the research will focus on.

Research strategy

In the development of my research proposal it is crucial to devise a research design which will allow a full exploration of the role of independence in education.

The foundations of my research questions are based on my concerns as a teacher with the growing importance of developing teaching and learning in independence and critical thinking in lessons. It was crucial that as a teacher-action researcher, the research design is firmly rooted in a practical school setting. Therefore, it was important for my research design that the study is conducted in a school that is in the infancy of its development of PLTS in the curriculum. My current workplace became the centre for my research design and is interesting as it is currently at the centre of a number of initiatives which are aimed at developing the independent and critical thinking skills in lessons. Through these initiatives the school has made changes to the curriculum for current year 7 students with the implementation of a focussed lesson which encourages students to take control of their learning and the introduction of a 'de Bono' lesson which attempts to develop a student's ability to retain information using de Bono's thinking hat philosophy. Subsequently, it was crucial that the research school was in the initial phases of developing a curriculum of independence and critical thinking so that the participants have some previous understanding of the concept.

The next step in my research strategy was to identify the participants for my design: for the purposes of convenience sampling I focussed my research on the English department and, as an English teacher myself, this allowed me convenient access

as a lone researcher. In addition, the students used for the sample were the students in my tutor group which again was a more realistic way of gathering my research data.

‘A humanist researcher would not see their main purpose as measuring but capturing the experiences that help us understand what we might do to change, manage or reproduce experiences’ (Dewey, 2010:36).

This notion of ‘capturing the experiences’ of my participants will be the essence of my research design. The research methods used will all aim to gather a picture of the participants’ interpretations and perceptions of the concept of independence and critical thinking skills in a practical setting.

My methodology links with the features of both ‘action research’ and ‘case study’ where I aim to gain an understanding of opinions and perceptions and will attempt to, ‘try to offer plausible and accessible explanations of examples of human activity located in the real world, which can only be understood and studied in context’ (2011:99). With this in mind, the research methods aimed to gather ‘real life’ opinions and interpretations of the development of independence and critical thinking in lessons.

I have chosen methods which allow me to gain a deeper understanding of the implementation of independent and critical thinking skills in lessons and as a whole school initiative. I aim to consider the opinions of students through the use of a student questionnaire which will examine how confident students are with the PLTS terminology and frameworks and more importantly, develop an understanding of their knowledge of what constitutes independence and critical thinking in lessons. As an extension of the examination of this ‘knowledge’ a range of videoed lesson observations will allow me to examine these perceptions in practice and gain an understanding of the level of opportunity for development that students are subject to in lessons. In turn, it will be interesting to witness how students respond to the teaching and learning of independence and critical thinking in the classroom. In opposition, my research design focuses on gaining teacher perceptions through individual interviews and post-lesson questionnaires. By using these methods I will aim to gain an understanding of how teachers perceive the acquisition of independence and critical thinking as an initiative and in the implementation of opportunities for development in lessons. The post-lesson questionnaires will aim to gain a picture of how successful teachers feel they were at devising a lesson to develop the PLTS and how they feel students responded to the stimulus in

particular lessons whereas the individual interviews aim to capitalise on these perceptions and gather data on perceptions of the PLTS as a governmental initiative and how successful they feel the focus has been since its' introduction in 2007.

Organisation of the thesis

The literature review explores the basis for theoretical discussion about independence and critical thinking; exploring the work of theorists such as, Matthew Lipman and de Bono's amongst others, and how they attempt to identify and define what independent skills look like in a practical setting whilst exploring the proposals set by more contemporary debates such as Ken Robinson's ideas on the future of the current educational paradigm. As a result of this discussion, this chapter moves from the theoretical debates to the practical perceptions of independence discussed in small-scale school studies in conjunction with the impact current DfE and Ofsted guidelines have on the promotion of independence in the classroom.

Through the methodology chapter I am able to define the research design and explore how aspects of 'action research' and 'case study' methodology impact on the exploration of my research questions. As in any research design, this chapter explores the implications and limitations of the design and how this will impact on the gathering of data from the video observations, individual teacher interviews and the teacher and student questionnaires. An important factor of the research design are the current initiatives of the study school and to highlight how the school is interesting for my research as the initiatives aimed towards developing the teaching and learning of independence are very much in the early stages of implementation.

Through the teacher questionnaires it was important to ascertain data from teachers that reflected their perceptions and opinions of independence in the classroom. The premise of the questionnaire encouraged its completion at the end of lessons so that the responses were rooted in lessons and attempted to divert teachers from providing generalised views of independence and critical thinking in lessons. Ultimately, the purpose of the questionnaires was to gain an understanding of how open students were to developing skills in lessons and if they perceived the PLTS initiatives as a valued addition to the classroom.

The student questionnaires focussed on gaining an understanding of student perception of the PLTS and more importantly, the questionnaires aimed to establish how accustomed students were with the terminology associated with the PLTS.

Through piloting I was able to refine the questionnaires so that they examined how students perceived independence and critical thinking skills in lessons and if they were able to identify the extent of their personal development of these skills. The questionnaire responses highlighted how confident students were with meeting the PLTS success criteria.

As an extension of the teacher questionnaires, the individual interviews pursued a deeper response to the introduction of the PLTS in 2007. The individual interviews provided the opportunity to respond in detail to how teachers felt about the development of PLTS in lessons and across the school. Furthermore, the interviews aimed to show how these teachers perceived the acceptance and disposition of students to respond to the teaching and learning of independence and critical thinking skills in the classroom. The interviews allowed teachers to examine if the introduction of the PLTS was successful and how they perceived their further development in the future.

The observations were the sole opportunity to observe both teachers and students in the real-life setting of the classroom. This opportunity would allow me to examine the findings from the questionnaires and interviews in practice and to gain an understanding of the opportunities for development in independence and the responsiveness of students to the stimulus. In addition, the observations were my opportunity to examine if the teaching and learning provided students with surface or in-depth development of their independent and critical thinking skills

During the conclusion I revisit the research questions and comment on the success of the research design and method and how the data was able to explore the aims of the questions. Ultimately, this chapter outlines the main findings of the research data exploring how schools can make the link with developing teaching and learning in independent and critical thinking skills when current GCSE attainment measures stand in opposition and more importantly, if the current provisions for independence are having a deep-rooted and lasting impact on students.

Chapter 2

Literature Review

The research questions

- Do students feel they are equipped to develop independent learning skills? (1)
- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)
- Are lessons designed to encourage student independence? (3)

The aim of this study is to explore how students respond to the development of their 'thinking skills' in a practical setting and how lessons are designed to develop a student's ability to think both critically and independently. As part of the theoretical research, it has been important to explore the existing ideologies in historic debate, for example de Bono's ideas on divergent and lateral thinking and the acquisition of independence through to Ken Robinson's questioning of educational paradigms in 2010. Understanding the foundations of independent thinking has opened a number of avenues for my research to explore including how these ideas have informed the provisions for independence in modern education. In particular, the development of Matthew Lipman's *'Philosophy for Children'* (2003) has influenced a number of small-scale studies which have suggested a number of benefits for embedding independence in the classroom. Through my research I will explore pre-existing ideas and current understanding in education to underpin my findings: understanding the theoretical arguments about the development of independence will form the basis for my study, allowing me to examine my findings in relation to the existing debates.

Theoretical debates and concerns

The idea of student knowledge has been central to the study of how students acquire information, leading theoretical debates to look to define the acquisition of independent skills through a number of different perspectives. In the absence of a shared common agreement or definitive explanation of the process involved in thinking and independence, it is not surprising to discover that there are many conflicting opinions about the nature of thinking. Consequently, some scepticism exists about the increasingly common stratagem of explicitly teaching independence as part of the existing curriculum frameworks.

Continuous attempts, through the introduction of educational directives, have tried to bring the development of independence to the forefront of education. My research will question how successful these directives are perceived to be from the teachers who have to implement them to the students who are supposed to be enriched by their development as both, critical and independent thinkers. Has the government succeeded in its attempt to enable students to achieve both independent thinking and examination success?

Arguably, it could be perceived that the education system is applying a simplistic approach to the whole notion of 'independence', as a range of skills that can be explicitly or implicitly taught. This is an area of thinking which has been long debated with little or no solid definition provided. Some, such as Mathew Lipman, discuss how the notion of independent thinking has become the focus for education since the 1970s and the importance of independence or 'critical' thinking skills is one that those in support or opposition struggle to define (2003:2). Lipman like many others continues to question what constitutes critical thinking; if this is the case it could be that educational initiatives, in the UK have provided teachers a range of methods to achieve this long disputed goal. These questions will be central to my research; allowing me to explore the differing theories of those supporters of teaching independence in the classroom, and those who oppose the notion that this can be achieved in a simplistic manner (2003:3). Educationalists such as Lipman and de Bono have attempted to identify what independent thinking skills are, how they can be recognised and ultimately how can they be measured in the practical setting of a classroom.

Understanding independence

The notion of 'thinking skills' is crucial when forming an understanding of students and their capacity to think independently. In the first instance, the problem of defining the nature of these skills is important so we understand the processes of thinking and how students acquire these skills. The main concern for the educational system is embedding the development of personal learning and thinking skills alongside the prescriptive nature of standardised testing.

Similarly, Lipman, who devised a Philosophy for Children programme supports this argument through his work outlined in *'Thinking in Education'*, where he discusses how thinking in schools has been developed in an unusable way - how some

models of thinking have been favoured or overlooked in the attempt to provide a 'fits all' model. Therefore, Lipman argues that in education:

'No effort has been made to connect the various dimensions of thinking into a whole, both conceptually and developmentally. Critical thinking by itself came to be seen as 'a disconnected, discontinuous fragment, shouldered with the responsibility of upgrading the whole of education' (2003: 6).

Lipman further questions how students can be expected to view the world differently or to explore multiple avenues of answers and interpretations when the nature of the curriculum stands in opposition. In the current curriculum, most examinations are governed by strict assessment objectives and exam techniques which act to limit student responses. More specifically, in the English GCSE, the need for students to produce comparative responses to texts has now been removed from the specification which restricts students to only being allowed to respond to single texts.

Similarly, Lipman believed that schools were failing to teach students to think which identifies with the questions debated between pioneers of lateral and divergent thinking and the mass introduction of a standardised curriculum. In large, the theories of independent thinking form one of two main pools of thought; is a student who exhibits good thinking one who is accurate, consistent and coherent or one who is an applicative, imaginative and creative thinker? Lipman, like others, supports the idea that the model of good thinking seems to vary depending on the discipline: for one philosopher, good thinkers can show rationality and logic whereas a different discipline will place emphasis on deliberation and judgement. This can also be the case when studying English or Literature, for one the ability for independent expression, interpretation and synthesis of ideas clearly and consistently is revered in English but the skills of logic, consistency and accuracy belong to the latter [discipline]' (2003:18). Therefore, the quest for a unified 'off the shelf' initiative which fits all schools and the full demography of students seems almost unattainable. If this is the case, then the idea of universal teaching of a set of independent skills is one faced with great difficulty.

The history of critical thinking

When exploring the development of independence amongst learners it is important to ask- do students who exhibit independent thinking do so through developing the process of thinking or through the acquisition of knowledge? This question has

been explored by the psychologist Edward de Bono (1976:15) who extensively reasoned with the idea of how learners can become the victim of an 'Intelligence Trap'. De Bono believes that some students can in fact close down to new disciplines and skills as they are governed by their existing knowledge, those knowledgeable students becoming remarkably unintelligent in their approach to learning and independence. In this case de Bono forges a link between what a student 'knows' and their susceptibility to learning and independence is limited by their need for factual information; they are unable to correlate the importance of independence as equivalent to the acquisition of factual information or 'knowledge', so in part they become trapped by their own form of intelligence.

This idea of the 'Intelligence Trap' is interesting when we are exploring the battle between the increasing development of standardised testing and the quest for independent, critical thinking skills. It could be suggested that a modern educational system accommodate the student's need to acquire knowledge - to fulfil the requirements of examinations, when this approach to learning according to de Bono can in fact close down any possible development of independence or critical thinking skills.

For the teaching profession, the idea of 'critical thinking' has been widely disputed by a number of different disciplines and, in particular how the idea of critical thinking has been adopted by education as the main goal and ultimate achievement when in fact many argue that criticism is 'easy' and can be easily gained and projected. In contrast, de Bono argues that critical intelligence is, 'a joy to operate since there is something definite to get to work on' (1975:15) and in a large part, requires no new information or exploration. As the DfE explored in its 2011 research in to thinking skills, the most pertinent factor to impact on independent thinking is, 'the shift of responsibility for the learning process from the teacher to the pupil' (2011:1). This means that in order to develop these 'independent skills' pupils need to acquire an understanding of their learning which allows them to become motivated to learn and, more importantly, 'collaborate with teachers to structure their learning environment' (2011:1). During their research the DfE found that the act of 'independence' is not merely the ability to work alone but it is teachers who have an active part in facilitating support for learners through structured modeling and group work.

In response to this argument, the idea of critical thinking has been considered central to the exploration of skills of independence. The educationalist, Robert

Fisher argues that 'The capacity for self-criticism is not something that is in born; it must be nurtured through practice and education' (1998:5). According to de Bono, critical thinking is a relevant and needed resource - however it should not replace other methods of thinking. Unlike Fisher, de Bono draws a link between how education perceives knowledge and the scholarly or *passive thinking* as valuable when, *generative thinking* is equally as important. Education is powered by scholars who dictate the value of skills and for them passive thinking skills such as descriptive and complete thinking are preponderant or as de Bono argues, 'education must free itself from the impractical myth that scholarly excellence will solve everything' (1975:16). Therefore, generative thinking such as practical, creative and constructive models of thinking need to be developed in students as this is one way to accommodate the development of society, as sometimes, it is not possible to have all the facts and information; 'active' thinking needs to take leading role in the curriculum (de Bono, 1975)

Fisher argues that 'education' should assist students in becoming critical about how their thinking makes their learning less effective. Conversely, de Bono argues that as practitioners, teachers often mistake 'fluency and argumentation for thinking skills' and connects with the notion of an 'Intelligence Trap', where able students make initial or snap judgements which they can then support with effective argument; however, their thinking skills may be flawed as they ignore huge aspects of the situation or ignore the impact of the situation (de Bono 1975:15).

In addition to de Bono's ideas, he questions whether education actually teaches thinking. Do school remain fixated with the acquisition of knowledge when knowledge is not a substitute for thinking. He continues to argue that teachers, 'teach a knowledge subject on the assumption that thinking skills will be develop' (1975:14): this assumption, according to de Bono, creates a knowledge driven system which over-loads students, where education fights for a common goal of *critical intelligence*.

The idea of re-evaluating the very foundations of what constitutes 'independence' is extremely pertinent and crucial to my research and offers a number of different alternatives to its ultimate destiny. Contemporary discussion focuses on the development of new ways of approaching education. The questions raised by de Bono, Fisher and Lipman all criticise the direction education has taken in tackling the issue. One educationalist who offers such radical thought is Sir Ken Robinson who also echoes the feeling that in fact education is inhibiting students' capabilities

as independent thinkers. Today's students are unable to explore the world and the situations they find themselves presented with. Again, he believes education is governed by a set of out-dated rules which focus on the acquisition of knowledge; a system which acclaims its approach to thinking and independence in the simplest form. As de Bono argues, the *critical intelligence* he discusses allows students to not become trapped by the constraints and failings of current educational ideologies and systems and therefore in turn allows us to create systems which are more usable and effective. (1975:15). The arguments presented by de Bono are still relevant in today's educational system which is still attempting to find a useable and effective model of independence to implement in contemporary education.

In support of this, Robinson has argued in his *Changing Educational Paradigms* lecture (2010) that education is hitting a crisis point where an international change is needed: he raises the pertinent question of 'How do we educate for the 21st century?' Robinson believes that education is attempting to address this problem with what it did in the past and in turn alienating students that do not see the linear process of hard work – education – career as a feasible, likely event. Like de Bono, Robinson explores how the current educational system was 'conceived for a different age'; from an age which was driven by the Enlightenment and the economic development of the industrial revolution and an age fuelled by the social class system. Therefore, given these comments we see education as having a misguided and distinct assumption based on social structures forging a divide between the 'academic' and 'non-academic'. Or similarly a class of people who could appreciate the art of deductive reasoning and knowledge of the classics against those who cannot: 'real' intelligence is recognised as 'academic ability'. A result of this dichotomy is two separate groups of students and the ones classed as 'non-academic' are predisposed to consider their abilities as inferior as they are being judged by an out-dated model of the mind. This idea of the academic model is supported by Pierre Bourdieu who argued that social structures provide some students with academic advantages as the 'criteria of evaluation' or standards of assessment are more favourable to children from particular class or classes (1977: 487). In addition, this 'model of the mind' links to de Bono's ideas of passive thinking and how this form of thinking is continually seen, by scholars, as the important outcome of education. Like de Bono, Robinson argues that in an increasingly globalized world with different social and economic structures students need to move away from this out-dated model of thinking and that, although passive

thinking has its place, it should not outweigh the skills required to think actively, this method of thinking being better suited to the fast-paced society we live in.

Today's academic model strives to encompass the unpredictable, structures of our global economies; preparing students to take an active part in this future; allowing students to recognise their own cultural identity whilst being part of this 'globalisation'. For Robinson (2010), the current academic model does not meet the modern needs of 21st century education. In his speech, Robinson shows he believes that in order to change the educational paradigm it is important to recognise the capacity for divergent thinking; to move away from the idea of 'creativity' in education and solely having valuable originality in our thinking; to recognise that there are different ways to interpret questions or to see multiple possibilities to answering them. de Bono also recognises these ideals in the form of 'lateral thinking' or to develop our facilities as thinkers and move away from thinking in a linear process or in convergent ways to adding divergence to our capabilities and the ability to see multiple answers not just a single, definitive conclusion. For the supporters of divergent thinking it is crucial that students embrace a number of avenues to explore and recognise that there are endless possibilities to explore in order to respond to education. In opposition to Robinson, de Bono does recognise the need for students to have a range of capabilities when developing independence. Therefore, it is important to recognise that despite Robinson's emphasis on divergence being the saviour of modern education that for some the necessity to give the 'correct' answer is still important for students – it is more that students need to recognise the importance and their abilities to move between the skills as required.

Governmental responses to the development of independent skills

As a response to the increasing concerns with the lack of independence in education the QCA published the Personal, Learning and Thinking Skills Framework in 2007 which consists of 'a framework of six groups of skills that, together with the functional skills of English, maths and ICT are essential to success in learning, life and work.... Learners will need to apply skills from all six groups in a wide range of contexts from ages 11-19' (QCA 2009:1). The introduction of the PLTS was seen as an essential part of meeting the aims of the Secondary Curriculum or to produce students who would ultimately become 'successful

learners, confident individuals and responsible citizens' (QCA: 2007). The framework sets out to address QCA's main aim for student development through six main areas: Independent Enquirers, Team Workers, Creative Thinkers, Self-Managers, Reflective Learners and Effective Participators.

A goal detailed by 'The Teaching and Learning Review', in 2007, which was carried out for Ofsted, outlined that, 'We [Ofsted] recommend that ... 'all children and young people leave school with functional skills in English and Maths, understanding how to learn, think creatively, take risks and handle change'. This goal, set to be achieved by 2020 highlights the direction of education and whilst this is the method by which teachers are currently scrutinised there will be more emphasis placed on tracking the development of PLTS in lessons. The setting of objectives for PLTS as well as content will require teachers to build a competency focus into lessons. Therefore, the consequence of this will be a need to raise awareness of methods for delivering progress in the PLTS in schools.

Additionally, the framework outlines a group of specific skills and a focus statement to sum up the range of skills and qualities involved. The objective of the framework allows teachers to access the skills, complete with success criteria which address the relevant skills, behaviours and personal qualities required to meet each of the criteria. The skills are recognised as being 'distinctive and coherent' and are all interconnected as students will be required to address more than one skill during a variety of learning experiences (Implementing QCA's framework for (PLTS) personal, learning and thinking skills, 2010). The PLTS identified by the QCA have recognised the need for students to learn beyond the subject specific information required to gain success at standardised testing and have implemented an overreaching criteria with cross-curricular links and common goals which has been embraced by schools in a variety of forms. Subsequently, there have also been a number of concerns raised about this 'bolt-on' approach to the development of independent learners. Is this response by the DfE sufficient considering the prevalent theoretical debates of Robinson, de Bono et al? An 'off the shelf' approach to developing independence is a surface remedy which could be seen as aesthetically meeting the changing opinions but in reality fails to develop any deep-rooted impact.

These are the questions raised by the educational professionals who are left to implement these skills as a number of head teachers and classroom teachers are concerned by the universal model offered by the PLTS frame work (*Embedding*

PLTS in Whole School Practice, 2010). In initial responses, teachers felt that the PLTS seek to unify all schools and all students to work towards a standardised goal which in turn, leaves school leaders wanting guidance on how to develop the skills of learners in their specific circumstances and 'student profiles'. They want a system which is personalised and is seen by staff as a meaningful initiative which empowers them to take control and implement for the development of their students. A number of schools and professionals see the PLTS framework as a 'tick box' audit exercise that fails to engage staff seriously in exploring how PLTs can be brought in from the periphery of the curriculum (2010:3). In addition, the notion of PLTs stands in opposition to what Lipman discussed as the development of thinking in the classroom and has seen the creation of a 'fits all' model which fails to consider alternative ways of thinking. Therefore, as Lipman argues, 'Critical thinking by itself came to be seen as a disconnected, discontinuous fragment, shouldered with the responsibility of upgrading the whole of education' (2003: 6) - an interesting statement in light of the PLTS development some 5 years later.

Since the publication of the PLTS Framework in 2007 schools have aimed to implement the skills throughout the curriculum, devising a comprehensive PLTS programme for their students. These programmes aim to encourage learners to be independent, reflective, team players and creative and for teachers to create and deliver lessons which enable students to develop in these ways. In addition, it becomes the responsibility of the classroom teacher to implement these skills throughout their lessons whilst on the other hand they are needed to teach their subject and prepare students for continual assessment and examinations.

Therefore for some such as Adrian Woods (2008:55) this is an impossible scenario in the modern classroom and this initiative is just another ball for a teacher to juggle in an already pressured position. In the modern educational system, examination results are the main indicator of a school's success. It could be argued that the introduction of the PLTS be seen as an unnecessary burden in an already overloaded system.

For its critics PLTS, is in its essence, about teaching beliefs, behaviours and cultures more than it is about teaching subjects. Creating a positive 'culture' in the classroom, and amongst learners is argued as being something 'good' teachers do already; culture is not taught but created and does not require the same skills.

Adrian Woods argues (2008:57) that, 'there seems to be an expectation that teachers can change the behaviours of students in large classes with little or no

training in this new skill, and no time to practise'. Consequently in a system driven by results, PLTS will be another initiative to be sacrificed for exam success.

Independent thinking in the classroom

Many of the theories discussed in this chapter identify the need for schools to shift their emphasis from imparting factual knowledge, as schools cannot predict what information students will need in the future. The societies students will be part of will consistently change and for most supporters of teaching students to think, it is more crucial to teach students how to adapt to their changing situations than to overload students with factual information. This notion of a philosophical approach to education has a number of counter arguments. Some subjects are bound by factual information: it is still important that students know how read and write and how to use maths in the 'real world'. This notion that the education system should be preparing students for a 'hypothetical' future could be counter effective. Mathew Lipman describes schools as having a 'strand of thought that the strengthening of a child's thinking should be the chief business of schools and not just an accidental outcome' (2003:1). In practice, it is a deep-rooted concern which in part can be seen to conflict with how schools operate under the current standardised curriculum and assessment. In an educational system which produces 39,000 students, (6% of all pupils in 2006-2007) who leave school without a GCSE in English and 51,000, (8% of all pupils in 2006-2007), in Maths (BBC: 2009) the issues of students developing independent skills can be seen to lose emphasis: preparing students for a life with literacy and numeracy could be seen as a more important focus for Government.

The Public Accounts Committee argues that despite the enormous amounts of funding in place for basic literacy development in the UK, 'large numbers of the adult working population of England remain functionally illiterate and innumerate' (2009:1). According to the report the UK has a population where 75% of the population have below grade C GCSE skills in literacy and numeracy (2009:1). Subsequently, the report looks to explore the role of gender and social and economic circumstances in the development of literacy amongst young people. These issues raise the question of importance and how we incorporate a system which encourages more independent and critical thinking skills when a large proportion of students fall below the acceptable levels of numeracy and literacy.

A prominent challenge for Secondary schools is tackling the deficiencies in literacy. Therefore, as part of the study in to how equipped students are at thinking independently in lesson, it is crucial to explore the opportunities available for students to identify, develop and demonstrate their skills. Fisher emphasises, along with de Bono, the need for students to deviate from the common fault in human thinking of 'haste'. Human response is to be impulsive and not take the time to think about different paths or possibilities. The need for students to 'hastily' offer a solution or impulsively respond in lesson instead of trying to predict a response is a prominent part of lessons. Students adopt a competitive role in the classroom, resulting in those who can compete and those who fall behind. This notion supports that of Robinson who criticises how education supports the quest for factual regurgitation by students when they need to be given the opportunity to explore different possibilities and alternatives. Students need to take the time to overcome the tendency for haste by emphasising the need to take the time to think about things fully. However, Paul Black and Dylan William argue, that what has been demonstrated by the double impact of assessment for learning:

'improves scores in national tests and examinations as well as metacognitive skills, including the capacity to learn how to learn. Techniques such as open questioning, sharing learning objectives and success criteria, and focused marking have a powerful effect on the extent to which learners are enabled to take an active role in their learning'. (2000:7)

Therefore it could be possible for schools to gain the ultimate - examination success - whilst working with the development of critical and independent thinking and the introduction of PLTS, handled in the right way, could have a positive impact on student achievement.

Response of schools

The role of PLTS in the classroom could be seen as only being accessible if education adopts a greater focus on 'how' we learn rather than just placing emphasis on students learning 'stuff'. These ideas about the acquisition of 'stuff' echo the work of de Bono and Fisher who made distinct divisions between the developments of critical thinking over the traditional Knowledge Trap. This paradigm shift in emphasis should include developing in students a deep understanding of their own learning profiles and how to use these to raise achievement and develop their full potential. For some schools, the idea of PLTS

has not been seen as a purely 'off the shelf' or 'bolt-on' approach to encouraging independence in the classroom. An alternative to this has been embraced by some schools who have taken the introduction of the PLTS to different levels encouraging students to take ownership of their learning.

A possible approach for schools can be offered through the medium of philosophy, and philosophical debate. The idea of philosophy allows students to redefine their boundaries of thinking, allowing them to remove the narrowness of their ideas, offering students different avenues for exploration. Schools which have been deemed as 'successful in the implementation of PLTS have developed an innovative approach to the delivery of lessons. Some schools have used initiatives such as the 'Enquiring Minds' (Futurelab, 2011) framework for developing their competency curriculum. These frameworks like similar initiatives such as 'Learning to Learn' and 'Xcel 2 learn' are a distinctive approach to teaching and learning which take seriously the knowledge, ideas, interests and skills that students bring to schools. These initiatives aim to use an 'enquiry cycle' to encourage a dynamic active approach to learning where students develop their capacity for critical judgement, rational understanding and democratic deliberation through collaborative learning.

One study that has explored the implementation of the P4C initiative was undertaken by Steve Williams in 1993; 'Evaluating Effects of Philosophical Enquiry in a Secondary School' and which focussed on increasing the provision of P4C by 1 hour a week for 27 mixed ability students, whilst providing the other 27 students with one hour of additional English with both lessons aiming to improve reading. During the P4C lessons, students were taught using the main principles of the P4C programme which focussed on students taking ownership of reading, in creating questions and in taking part in the development of detailed discussions in class. The study found that students from the philosophy lesson, 'in fact, they made greater gains over [English lessons] and above what might be described as 'normal progress' (1993:12). The use of the P4C programme in lessons had a positive impact on attainment in reading levels which suggests that there are benefits to students exploring the Philosophy for Children (P4C) programme as it focuses on a community of enquiry and presents new models of pedagogy that put students firmly in control of their own learning. It privileges the development of communication skills and competences above the acquisition of knowledge and so is seen as an effective strategy for developing the PLTS across the curriculum.

A response to the introduction of these initiatives highlights how a competency based curriculum model can develop an academic curiosity and independence that allows students to take more responsibility for their own learning. Many schools have found that the options provided by a more flexible curriculum introduces opportunities for a radical shift in focus from teaching content to learning skills. A response to the development of a flexible curriculum, conducted by the DfE (Meyer, 2011: 2), from the Thomas Telford School stated, 'Students in self-regulated learning environments are more motivated to learn, report more enjoyment of the material and are more actively involved in their learning than those who study in more restrictive environments.'

This report highlighted the need for a more philosophical approach to learning such as with P4C, and is mirrored in Mathew Lipman's research (2008:18). The idea of teaching students 'how they learn' is central to Lipman's research where he pondered why, 'children of four, five and six are full of curiosity, creativity and interest, and never stop asking for further explanations, by the time they are eighteen they are passive, uncritical and bored of learning?'. One response Lipman found was a need for education to make thinking rather than knowledge to become the main focus. Therefore, a shift is needed for education to do this. Similarly to Lipman, the philosopher Vygotsky also shares this notion and, in particular in relation to the importance of language: for Vygotsky language, 'provides the essential tools for thinking and children are able to function at an intellectually higher level when in collaborative and cooperative situations' (Fisher, 2008:17). For Vygotsky, the development of learning capabilities and the use of speech are intrinsically linked with words not just being, 'a unit of speech, but as a unity of generalization and social interaction, a unity of thinking and communication' (1996:40). Lipman continued his research of philosophical teaching by devising a programme which encourages students to contribute to discussion.

One small-scale study conducted by KJ Topping and S Trickey titled '*Philosophy for Children: deepening learning for 10 to 12 year old pupils*' (2007) explored the use of targeted intervention based on Lipman's P4C (1981) and more contemporary materials from Cleghorn (2002). The study, which was based in four Scottish Primary schools and included 177 students, of which 72 were not provided with any targeting, 'aimed to investigate whether learning gains made by pupils during work on verbal tasks could be transferred to learning in non-verbal areas' (2007:1). Interestingly, the main findings of the research were that students who developed their skills through P4C performed better in areas such as numeracy, verbal and

non-verbal skills than students who did not receive the intervention (2007:1). Furthermore, teachers who delivered P4C lessons were observed as using a greater number of open-ended questions which encouraged prolonged student responses providing lessons which were more student-led. The main areas of development for students was their ability to perform better in the pre-validated Cognitive Abilities Tests with gender and ability variations all showing improvements in pre and post-test results. One of the main issues identified in the study was the proportion of professional development before the research and the on-going commitment by teachers and school leaders. The study outlined that teachers were provided with approximately 18 hours of CPD which involved initial training, observing good practice and continual termly feedback (2007:8). In this study, the staff judged that this was minimal commitment for the gains. However, this was a small-scale study benefitting 105 students, and therefore developing this initiative in a large secondary school would commit a large proportion of school time and resources which could result in inconsistent delivery of the skills. In this study, the main strengths of the initiative rested on the consistent development of teachers through the provision of high-quality training: however, the lack of adequate training and a reliance on the PLTS frameworks and resources has left teachers with inadequate training in the delivery of critical thinking and independence.

Therefore, it is this transition from finely focussed theoretical research, outlined by Lipman et al., to the reality of how these theories have been adopted and embedded in to education which will be the focus of my research. This research will explore how students have responded to the development of their 'thinking skills' in a practical setting. It will be important to explore the opinions students have about the implementation of the PLTS in lessons and if they are able to recognise the importance of developing these skills in lessons. Similarly, my research will look to explore how teachers feel about the impact new Ofsted and DfE criteria has had on the overall development of students and in the planning of lessons. My research will aim to ask if the PLTS have allowed schools the opportunity to make provisions for students to develop as learners and, more importantly, if they are seen as a valued addition to the curriculum.

Arguably, the National Curriculum has given schools a body of knowledge to deliver to students and then assess. However, one of the challenges for schools in delivering the PLTS is that it is much easier to assess the delivery of content than ways of thinking. The ultimate measure of success will be to assess how far they have developed the independent, resilient learners that they have set out to create.

Chapter 3

Methodology

The aim of this study is to explore the perceptions of educational experiences in developing 'independent and critical' skills held by groups of students. The study will also consider the notion of independence from the perspective of teachers, in particular to what extent teachers feel that students are properly equipped with the skills needed for them to fulfil the role of facilitator in the classroom and if the role of independence is actually realised in lessons.

The research questions:

- Do students feel they are equipped to develop independent learning skills? (1)
- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)
- Are lessons designed to encourage student independence? (3)

Theoretical perspective

'Humanist' research

In the development of my research model it was important to recognise the research philosophy that I plan to adopt as this will inform my judgements and research perspective. This notion is echoed by Dewey who states that 'Philosophical positions can influence not just how the research is conducted but rather more importantly what is researched and how it is interpreted' (2010:33).

The research approach can be categorised under the umbrella term of 'humanist' research' or as Dewey explains unlike a scientism approach, which believes truth has an independence existence, for humanist researchers, 'it is important to understand divergences in views...[and ultimately] there is a common belief in the value of human existence and particularly its significance in creating what is meaningful' (2010:33). Interestingly, Dewey's statement underpins my research model in a number of different areas so to answer my research aims, it is important for me to realise that the answer cannot be researched from a scientific stance as the singularities of my research model do not exist as independent entities: for example by looking at student understanding I will also have to acknowledge pre-conditioning by school policy or as part of other lessons within the school. It will be

important that in order for me to research my questions, I recognise that all the singularities contained in my research model are linked: as Dewey explains, 'Humanist researcher[s] would not see their main purpose as measuring but capturing the experiences that help us understand what we might do to change, manage or reproduce experiences' (2010:36). Therefore, I do not see my position in researching my aims as providing a single, finalised conclusion but that I will expose a number of different opinions, observations and viewpoints during my research journey, including my own.

This recognition of my position in the research landscape will take my research on a qualitative orientation, therefore I do not see my research as, 'a transcendent truth, but as a particular rendering or interpretation of reality grounded in the empirical world' (Luttrell, 2010:34). In order for me to collect data I will be relying on the ideas, thoughts, experiences and understandings of students and teachers. Therefore, their interpretations of my questions and, more importantly, their responses will be determined by their pre-existing understanding of independent and critical thinking skills. For example, as I have highlighted earlier, the fact that current school policy exposes Y7 students to the recognised PLTS framework and will impact on their understanding of the questionnaires and responses during lesson observations to tasks based on developing these skills. Similarly, it should also be recognised that this same issue could not only affect the student responses but could also affect how a teacher may respond to questionnaires and during lessons observations. A teacher with students who are more susceptible to developing or exhibiting independence in the classroom, such as year 7 students, may have a different interpretation of the success of this discipline than a teacher who responds to a questionnaire at the end of a year 10 lesson.

For my research design and to answer my research aims a humanist position will allow me to recognise and consider my data in view of being concerned with individual interpretation of my research methods. For people such as Dewey who writes about research methodology, qualitative research moves away from the preoccupation of processes and outcomes and places more emphasis on how and why things happen or as Dewey concludes, 'they [qualitative research approaches] draw on insight and interpretation, and allow researchers to draw on their subjective responses to evidence' (2010:116). All aspects of my research methods will have detailed connections between our social worlds, emotional and cognitive processes (2010:116).

Teacher as researcher and action research methodologies

The nature of my research designs draws links to what is largely referred to as 'action research' which recognises my position as researcher or more specifically a teacher as the researcher. The premise of action research is recognised as being a measured and solution-orientated study that is in my case individually investigated and conducted or as Kemmis and Carr comment, '[action research is] simply a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out' (2011:97). Although my design draws links with action research, it is important to recognise that although I will develop my own practice based on my findings, it will not be my primary focus. The research design will focus on recognising and reflecting on the practice of others- so cannot be described as action research in the traditional sense. Teacher action research is, according to John Elliott, "concerned with the everyday practical problems experienced by teachers, rather than the 'theoretical problems' defined by pure researchers within a discipline of knowledge" (Elliott, cited in Nixon, 1987). Therefore in this research design the study will be conducted by me, as a lone researcher, in the school in which I currently work. These connections will allow me to gain a deeper understanding of the challenges of developing the teaching and learning of independence and critical thinking skills in my own practice but also as part of a wider school concern.

In this sense, my research design does also make some limited links with 'case study' methodology which is a way of, 'try[ing] to offer plausible and accessible explanations of examples of human activity located in the real world, which can only be understood and studied in context' (2011:99). Therefore, by having a teacher as the researcher there are a number of positive outcomes for the design such as the development of a reflective practice which allows me to try out new ideas and reliably assess their effectiveness: it could also build confidence in my instructional decisions, contribute to the professional culture of teaching at my school and can create meaningful and lasting change in my practice, my students' learning, and my school. As Kemmis and McTaggart comment, using this aspect of action research action researchers can, 'act, observe and reflect more carefully, more systematically, and more rigorously than one does in everyday life' (2007:298).

Research methodology and data collection procedures

In response to my initial questions and the aims of my research design I have selected a number of differing research methods which will allow me to focus on both the students and the teachers. The methods will focus on gathering data from a range of students and teachers across the English department. My research design, as discussed previously, has a number of links with both action research and case study methodologies and will focus on the analysing and reflecting on the practice of other practitioners whilst simultaneously examining students' responses to teaching and learning of independence and critical thinking in the real context of the classroom (2011:97-99).

One of the main aspects of my research design is an absence of control: it is my intention to allow all research methods to not be preconceived or manipulated in any way. It is important, as outlined in my methodological review, that I try to gain a realistic understanding of the meanings and interpretations of the participants. Therefore, my observations will be spontaneous with teachers having no prior knowledge of the research question. In turn, all observed lessons will be a continuation of the current programmes of study and observations used in my research design will not be engineered to any ability group, gender mix or cohort.

Data collection will be gathered using the following methods (see fig 1);

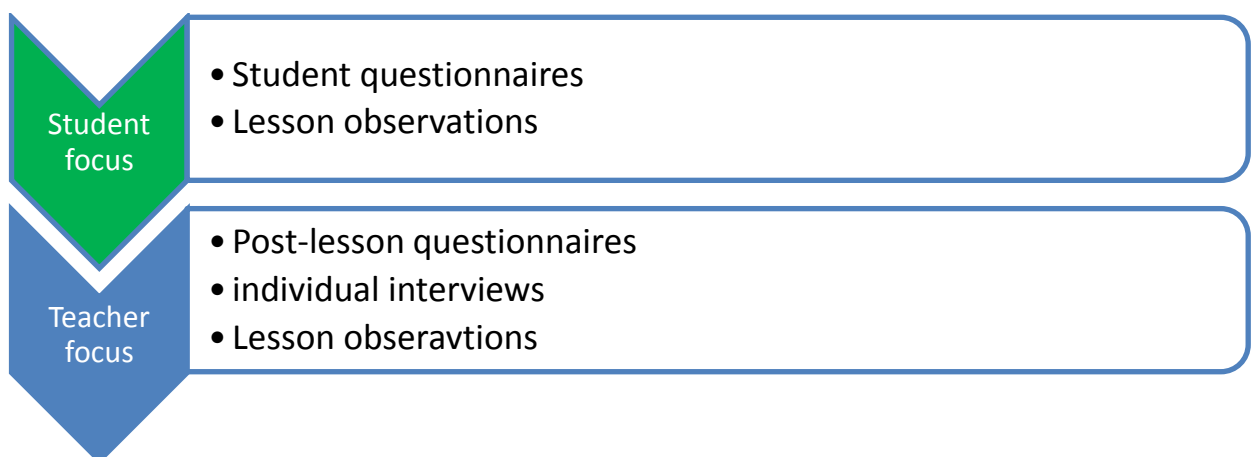


Fig 1.1

The forms of research I will be adopting will explore a number of different avenues and require different procedural elements to ensure that the optimum quality of data can be collected.

In order to explore my research questions fully and to apply the research methods connected with action research and case study methodology I chose to implement individual teacher interviews and lesson observations. In contrast to the traditional roots of my methodological approach, I have also chosen to gather information through questionnaires as I feel that this method will produce data that will allow me to examine the extent of student understanding of PLTS at surface level whilst also exploring the deeper understanding. I felt that these research methods were imperative to addressing the research questions and seek to gather evidence from both students and teachers.

One of the main concerns of my research question is the opinion and perceptions of teachers on students and their capacity to develop their independent and critical thinking skills. In response to my design, I devised a short questionnaire that is completed at the end of lessons and more detailed individual teacher interviews. The post-lesson questionnaires will allow my research to explore the perceptions of lessons and the success of student independence post lesson, which will encourage more lesson specific responses as opposed to generalisations. In addition, as a further extension of the questionnaires, the individual teacher interviews will seek to gain a deeper understanding of teacher perceptions and interpretations of the current PLTS: the interviews will allow teachers to respond verbally and with the use of open questions, teachers will have the opportunity to express their thoughts in detail. As Mairead describes, by using interviews my research requires, 'knowledge of specified social contexts and their accounts of that social arena' (2005:27).

In response to the focus on teacher opinions, the research design will also seek to gain an understanding of student perceptions of independence in the classroom. As a result, the questionnaires will focus on achieving a picture of how confident students are with the terminology of independence and if they feel that independence is a regular part of lesson.

The final research method will be the use of observation. This method will, 'offer the opportunity to gather 'live' data from naturally occurring social situations. In this way, the researcher can look directly at what is taking place in situ rather than relying on second-hand accounts' (2007:396). Ultimately, this form of research will allow the gathering of more data which can be seen as 'valid or authentic' and allow me to consolidate the opinions identified in the other methods of research. In order for me to complete the planned observations, it is important that I address a number

of different issues. Firstly, it is important to identify my justification for using 'observations' as part of my research model and, in response to this question, I feel observations are the best way to record student behaviour and responses in lessons to a range of tasks. The use of observations will be the only method of witnessing students in a lesson scenario as the remaining research methods are largely reflective methods of detailing student and teacher behaviour.

Ethics

The issue of ethics has also been central in the development of my research model and in particular, ensuring that no research was undertaken without the consent of those teachers and students involved. In order to overcome this obstacle, I initially gained the approval from my Headteacher and Line Manager and then I published a bulletin in the monthly school newsletter which gave parents the opportunity to have their child 'opt out' of any research material. In addition to this 'opt out' option, iRIS, which is an observation camera system currently used by the school (see 'lesson observations'), also has a blanket user agreement between the School and parents so that footage can be used for educational, research and school policy.

Piloting the methods

During the initial development of the questionnaires it was important for me to pilot both questionnaires to ascertain if the questions were valid and allow participants to give relevant and targeted responses. Also, by piloting I could ensure that all questions were understandable and that the questionnaires were user-friendly.

During both pilots, it was important for me to trial the questionnaires to identify any potential problems. Therefore, I completed one round of questionnaires with the student sample which consists of 15 students, and with two members of teaching staff for the teacher questionnaires. With both pilots, I had responses from all participants and was able to discuss the accessibility of the questionnaires upon completion.

Subsequently, during the pilot a number of issues were identified by the participants and by myself when analysing the data.

During the student questionnaire pilot it was identified that:

- The questionnaire was too lengthy, meaning that students were finding it difficult to complete them properly in the 15 minutes of tutor time.
- Some questions were identified as being too repetitive with little distinction between phrases or sections.
- Some terminology was difficult to understand by lower ability students
- Some questions encouraged closed, underdeveloped responses

During the teacher questionnaire pilot it was identified that:

- The questionnaire was too long
- One question led responses and needed to be made more open
- Some questions led to irrelevant responses.

As a result of piloting, I made changes to the questionnaires that addressed the issues above and reorganised, re-worded and reduced the questionnaires. For example, I removed the question 'What are thinking skills?' from the student questionnaire as I felt this question was limiting: if the students did not know what was meant by the word 'thinking' then they did not answer the question. I decided to replace this question with, 'Which of these skills do you think are most important'. The students then had a list of statements that they could tick. I also removed some of the statements from the second section of the questionnaire as students were becoming disengaged with the questionnaire due to its length.

This was also the case with the teacher questionnaires which after the two pilot responses, I realised that some questions were gaining the same types of responses and there was a number of closely mirrored or repeated responses: on the discovery of this issue I was concerned that the focus and quality of responses may be compromised if teachers felt they were being asked the same questions. The changes subsequently maximised the quality of participant responses.

I initially intended to obtain approximately ten individual interviews. However, as the research schedule began it was becoming increasingly difficult to obtain the necessary interview time with teachers. Due to the pressures of November

examinations and continued assessment across all key stages, teachers were unable to dedicate the time to completing my interview in the timescale of the research schedule. Therefore, it became increasingly relevant that I could take this area of research in one of two directions with the first being a reduction of the questionnaire so that the timing of the interviews was subsequently reduced and more teachers could be sampled or, alternatively, the other option was to retain the detail and length of the interview questions but reduce the size of the sample.

In light of these two options, I decided to take the latter option and reduce the sample from ten participants to five. This amount of interviews was feasible and I was able to complete and record all five interviews. I felt that this option was favourable if reduced, the interview would be very similar to the teacher questionnaire and the main function of the individual interview was the need to obtain a more detailed account of teacher perspectives of how teachers are introduced to government policy right through to devising lessons which are aimed at developing student skills.

Developing the research methods

Lesson observations

One of the key concerns of conducting lesson observations was ensuring that they were completed in situations that were as natural as possible. Therefore, an important element of my research model was in creating a naturalistic form of enquiry as much as possible during the lesson observations. Subsequently, I have attempted to create a 'natural' setting in which my observations were gathered: for example in my observations, due to them being recorded by a video camera, I was able to remove the impact a physical observer would have on the lesson. In similar circumstances students, depending on character, can take on a more forceful dominating role or in contrast retreat into a passive or submissive stance due to feeling less secure with an unfamiliar presence in the classroom. Therefore, as Dewey comments, my purpose was to, 'minimise the influence of an unrealistic research environment' (117:2010). However, it is still important to recognise that, despite the camera allowing the absence of a physical observer there is still an artificial element added just by introducing a camera into lessons. However, the impact of this camera has been lessened by how iRIS is implemented within the College. The main aim of the observations is to, 'be there when the action takes

place, participating in activities to a greater or lesser extent, by watching, listening and writing' (2005:55): although this is my research method aim, the video recording of the observations impacts on the overall observations as students may behave differently, knowing the camera is in situ or the teacher may change their teaching style in an attempt to second guess my requirements.

In order to obtain some degree of naturalism the implementation of iRIS and software was used in all lesson observations. iRIS is described by its creators as, 'a unique fusion of mobile lesson observatory and a secure online teacher learning community. Teachers can observe and record lessons captured in any classroom and then use our online tools to analyse, share and discuss the results' (iRIS connect.co.uk). Basically, the system consists of a stand-alone, wire-free camera which can be placed in the classroom; the sound can be accessed by either fixing the microphone to the camera for sound more realistic to conducting a lesson observation in person, or can be attached to the teacher or a group of students to gain a more focussed sound capture. The whole system is controlled via an online network where the teacher has full control of the camera angle and zoom, from their classroom PC. Alternatively, the system can be used as a live observational tool where other members of staff can be granted access and they then have control of the zoom and camera angles. Either way, the footage stays in the full possession of the class teacher and can only be accessed when permission is given, or when the footage is shared with other users.

For the school, the use of iRIS is a common policy and the camera and software is used throughout the College for a number of different reasons such as performance management observations or in sharing good practice. With this in mind, the issue of creating the most natural research setting as possible is greatly improved by this camera being a part of College life. Therefore, students are fully rehearsed with the use of iRIS in their classrooms. It could be argued that the students are in some way 'desensitised' to the whole observation process and this could cause an issue as they may have permanently altered their behaviour in view of knowing they are being observed in a way that students in other schools may not. By using this system I will have the luxury of being able to analyse sections of the recordings on a number of different occasions: as in a physical observation, I would need to make snap judgements about student and teacher behaviour which could alter over the course of the observations. The only issue to not being a physical observer are the

limitations of the camera's view and sound recording as in the classroom my observations will be limited to where the lens is pointing and the sound received by the microphone which would be different in a physical observation.

Student and teacher questionnaires

The aim and function of the questionnaire is to provide individual perspectives on the function of lessons and in the development of independent and critical thinking skills. Similar to the observations, in distributing the questionnaires, I was not concerned with the precise characteristics of the students or teachers but more in their response to and understanding of the concept of independent learning and thinking skills. Therefore, I did not attempt to manipulate the data by making conscious decisions about which teachers were asked or which students were targeted.

Although questionnaires are usually adopted to provide researchers with a broad range of data from which generalisations can be made, and may not be traditionally associated with action research, I felt that questionnaires would be an effective way of examining students' relationships with the PLTS. Crucially, the questionnaires allowed me to gain a way to check student understanding of the PLTS as surface 'labels' and in the understanding of the deeper success criteria.

One important factor to take in to consideration when implementing questionnaires is the idea of teacher as researcher: as John Elliott comments, "[action research is] concerned with the everyday practical problems experienced by teachers, rather than the 'theoretical problems' defined by pure researchers within a discipline of knowledge" (Elliott, cited in Nixon, 1987). Primarily, I aim to explore the reality of the teaching and learning of independence in the classroom, but it is also important that as a teacher researcher I have connections with both the student and teacher participants. In this case, all the participants may respond differently with this familiarity.

Student questionnaires

The aim of the student questionnaires was to allow students to reflect on the development of their independence during lessons and to establish how aware students were of them as a skillset.

Firstly, for the purpose of accessibility my tutor group was chosen as my sample of students who were to complete the questionnaires: they are subject to convenience sampling. It is important to recognise that the school currently divides students in to vertical tutor groups: each group has a range of students from year 7 to year 11. Although this is not a 'typical' group, due to the age differences of the students, the aim of my research does not need the group to be the same age. Again, my focus is on the interpretations and student perceptions of independence and critical thinking skills, so for the purpose of my research any sample group chosen would provide my research design with that information.

One issue that will arise from the use of my tutor group as the questionnaire sample, is the issue of conditioning and that by the students completing the same questionnaire on several occasions they will become preconditioned to the questions which may result in students responding to questions through habit and by being influenced by familiarity with the questions.

Structuring the student questionnaires

The student questionnaires allowed me to ask questions about a student's perspective about the lessons they attend and to explore their own development as independent learners. The questionnaires also looked at how students perceived the notion of independence in lessons and how important this aspect of the National Curriculum is on the development of their lessons (see appendix for a copy of the student questionnaire).

In order to achieve an honest sample of student responses, I aimed to provide students with little support when completing the questionnaires. In doing this, some students in the pilot questionnaires failed to complete their responses or were seen to be randomly ticking answers as soon as they perceived themselves to be 'stuck'. In response to the pilot samples, and after examining the quality of the responses, I amended the questionnaires to streamline the number of questions to include only the most pertinent questions. In addition, I tailored some of the language to suit all learners - and ultimately to make the questionnaire more accessible. Finally, I revised some questions so that they were no longer open questions and, conversely, adapted some closed questions to be open. The major difference between the pilot and final questionnaires was the second part where students were asked to respond to a series of skills using the Likert scale based

questions/scenarios. These questions provided a more detailed insight in to the skills identified as being needed in their last English lesson. Therefore, from this identification of skills (based on the PLTS 6), students then responded to more detailed examples of why or how that particular skill, may have been used in lesson.

Respondent support

At the beginning of the initial questionnaire session, I already had the questionnaires on student desks for when the morning registration bell signalled. On the whiteboard I had the following statement projected:

You are about to complete a questionnaire, similar to the questionnaires you have already completed earlier in the term. We are completing these questionnaires for the following reasons:

- *To help me in my practice as a teacher so that I can understand better how all students think about education and everyday learning. This understanding will be used to improve what I do now and in the future.*
- *To find out what you know about being independent learners' and how important you believe it is to be independent in lessons.*
- *To inform other teachers in how they plan and deliver lessons.*
- *To add something new, to the existing amount of research on independent and critical thinking in UK schools.*

You should read all the questions carefully, and try to answer them as honestly as you can. For them to be your opinion it is important that you do not speak to the person next to you and you complete them in silence. If you are stuck, with any of the questions, please put your hand up and I will help you, but, remember, I can help you with explaining any difficult words but cannot provide you with the answers. If you are still stuck, you need to miss out that question and come back to it at the end.

You will notice that the questionnaires are divided in to 2 parts. In part 1 you need to answer both questions. In part 2 you need to highlight the skills, you feel, you have used or developed in your most recent English lesson. You then only need to complete the sections which link to the skills you identified originally.

For example;

You highlight: 2 – Team work

You then go to: Section 2 – Team work and respond to the four statements.

When you have completed the questionnaires you need to place your pen on the desk and wait for other students to finish.

In addition to projecting the statement I also read the statement out for the initial session and ensured that all students understood the process.

Teacher questionnaires

In order to mirror the student questionnaires, the teacher questionnaires also were subject to convenience sampling: the English department was chosen as the participants. Again, similar to the student questionnaires, the participants had been chosen with no focus on selecting teachers for specific reasons. Therefore, the teacher sample had a mixture of experienced members of staff, alongside NQTs and recently qualified teachers in addition to post holders within the department.

Individual teacher interviews

The aim and function of the individual interviews is to provide individual perspectives on the effectiveness of lessons and in the development of independent and critical thinking skills in students. Similar to the observations, in identifying teachers for the interviews I was not concerned with the precise characteristics of the teachers but more in their response to and understanding of the concept of independent learning and thinking skills. Therefore, I did not attempt to manipulate the data by making conscious decisions about which teachers were targeted. However, a number of issues have to be addressed if the questionnaire results are to form part of my data collection.

Context of the research school

My research model will centre on State owned secondary school in Doncaster. The school is a mixed comprehensive school with approximately 1300 students currently

on roll. The school currently comprises KS3 and KS4 with approximately 300 students currently enrolled at Post-16. The school describes itself as a fully inclusive school which caters for all students irrespective of their social, cultural or emotional challenges.

The school currently runs a number of initiatives to develop the importance of independent and critical skills amongst students, resulting in the development of a number of targeted policies and initiatives. The current school policy seeks to embed the National Curriculum Personal Learning and Thinking Skills (PLTS) frameworks in to all programmes of study for each curriculum area. In addition, to the policy on PLTS the school also runs an 'XL2 Learn' initiative which is a programme designed in-house and is currently targeted at the Y7 cohort. In the XL2 Learn programme Y7 students attend two hours of lessons over a two week period with the class teachers allocated from a wide range of subject areas.

The XL2 Learn programme allows students the opportunity to identify personal areas of development to improve their competencies in areas such as study skills, learning styles and in developing student independence. The programme consists of focusing students with workshops and on-going projects which students complete throughout the course. The projects allow students to work as part of group, in pairs or as individuals with the guidance of class teachers. Students are encouraged to develop skills in conjunction with the PLTS in the main six areas. The aim of the XL2 Learn initiative is, by focusing on the PLTS, encouraging students to make links between the skills taught and developed in XL2 Learn and other curriculum areas which is then enforced with the PLTS forming part of the schemes of learning for each subject area.

As a further extension of the school's development of the PLTS and a student's independence and critical thinking skillset, the school identified that students were able to recognise their areas of learning in lessons but were unable to recall skills and information learnt outside lessons. In response to this discovery, in the current 2011/2012 year, the school is also piloting what they have termed as 'de Bono' lessons, for Y7 students, which encourage students to consolidate their knowledge and skills in a more structured and targeted way.

The initiative is largely based on de Bono's 'Thinking Hats' philosophy (2010:13), which encourages students to develop different stages of thinking through the

metaphorical image of coloured hats, with each colour representing a different state of thinking. For example, the white hat represents factual information; red hat represents feelings or hunches; black is judgement or possible failures; yellow represents optimism; green represents creativity through to the blue hat which used to manage the thinking processes.

Due to the current infancy of the school's initiatives to develop the students' exposure to the PLTS framework, the results and impact of the current programmes are not fully clear. However, the fact that the PLTS' independent and critical thinking skills are currently becoming more high profile amongst students will have repercussions on my research model. Therefore, one consequence for my research could be inconsistencies in student understanding throughout the year groups as Y7s have more targeted and explicit exposure to the PLTS and the terminology involved in the development of independence in education. In contrast years 8, 9, 10 and 11 currently do not receive explicit teaching of the PLTS in lessons: therefore, for these students, the development of such skills are implicitly embedded in to lessons and not necessarily disclosed to the students.

Overall, the school is interesting for my research as the initiatives aimed towards developing the teaching and learning of independence are very much in the early stages of implementation. By using my research methods I hope to gain a deeper understanding of the role of independence and critical thinking in a practical setting. My methods will allow me to examine how students and teachers have responded to the introduction of the PLTS and if their implementation has enhanced students' approach to lessons, and learning.

Chapter 4

Research findings: Teacher questionnaires

The teacher questionnaire sought to uncover the attitudes teachers' have about the emergence of PLTS as such a pivotal part of the National Curriculum and asking teachers how they feel about the success of the school, their departments and own attempts to embed the skills in students that will leave them as independent, critical thinkers at the end of their school career.

Through my findings I was able to explore, in detail, two main aspects of my research questions by addressing the questions:

- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)
- Are lesson designed to encourage student independence? (3).

And to some extent I could indirectly begin to gain a picture of feelings and attitudes towards the final research aim;

- Do students feel they are equipped to develop independent learning skills? (1)

One of the main concerns identified in the literature review was the notion of conflicting opinions about the nature of thinking, and in particular, what constitutes independent or critical thinking.

Introduction

The teacher questionnaires allowed me to ask questions about a teacher's perspective regarding their own lessons and their development; how they felt students approached lessons and which independent skills students exhibited during lesson. The questionnaires also looked at how teachers perceived the notion of independence in lessons and how important this aspect of the National Curriculum has been for the development of their lessons.

In brief, the questionnaires were completed by 20 respondents over the course of 6 weeks. It was important in the allocation of the questionnaires that the study aimed for a random distribution of responses from a range of teachers' in the English department. Subsequently, the questionnaires were completed by respondents with a variety of experiences, and for a range of classes from Y7 to Y13. In addition,

some respondents completed one questionnaire and some on more than one occasion – all respondents chose which classes, quantity and detail by which to respond. For the purpose of the study teachers were identified numerically.

Accessing independence in the classroom

The responses to the opening question, ‘What independent/critical thinking skills did students need to use to access your lesson?’ were very interesting, allowing class teachers to introduce the expectations that they had of the students before they entered the classroom. For example, Teacher A responded to this question with, ‘In this lesson students needed to demonstrate a range of independent skills such as taking part in discussion and thinking about the nature of their responses’. I thought this response was particularly interesting, as the idea that to be independent means students have to ‘take[ing] part in discussion’ is very ambiguous. However, this response could be seen to fall in line with the PLTS core requirements, one of which is ‘Effective Participation’. This teacher seemed to recognise the need for participation but did not elaborate, at this point, on the measurement of ‘effectiveness’. For the PLTS students would need to be seen to cover one of the following criteria for this to be classified as taking part in ‘effective participation’:

- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

(A Framework of personal, learning and thinking skills, DfE, 2007)

The extent to which students would or could meet these criteria would depend on this ‘expectation’ placed on students by their teacher. In this case the addition of ‘thinking about the reasons behind their responses’ connects with the idea of critical thinking. Just merely participating in a lesson is a difficult and ambiguous aspect to evaluate against any success criteria: however, asking students to consider and apply reasoning to their responses gives some value to the expectation.

Interestingly, the same teacher (Teacher A) when asked about how they assessed their students success, in displaying the independent skills, they addressed the

need for successful students to 'make clear choices about the quality of writing against the assessment criteria to inform improvements made to a model response'. They then added that 'successful students identified improvements' which makes strong links with the PLTS criteria.

A similar response was also acknowledged from Teacher B who made the connection between effective participation and students' identification of improvements to the model responses, their own work, or the work of peers. The only other connection made to effective participation came through the use of speaking and listening when KS3 students debated the motivations for Lady Macbeth's conspiracy against King Duncan. In this example the teacher outlined that students would need 'to be able to discuss in detail the motives behind Lady Macbeth's actions thinking of alternative reasons behind her actions'. These expectations from Teacher C allowed students the possibility of negotiating, reasoning and seeking resolutions which all allow students to meet the PLTS criteria in several places and mirrors the research Lipman completed with his P4C (2008:18). These initiatives, could be seen to move students away from the acquisition of 'knowledge' to develop how students think; encouraging them to think of multiple explanations and in formulating judgements, about in this case motives, provided students with some philosophical discussion.

Similarly, this idea of multiple explanations and choices echoes with how the DfE identify the ways students develop as critical thinkers. For the DfE they believe that there is a need for a 'shift of responsibility for the learning process from the teacher to the pupil' (2011:1) therefore, moving away from a 'teacher led' classroom, to one which is driven by the student.

The questionnaire completed by Teacher B made clear links with the framework for critical thinking on a number of occasions; drawing links with the tasks students were asked to complete in lesson with a number of the PLTS strands.

Subsequently, it would have been interesting to see the extent to which students 'led' the lesson and how they converted their ideas about the possible actions of characters and articulated their ideas through observation. When asked about how Teacher B would measure the 'success' of student independence, they responded with limited assessment measures, such as 'responses to questions' and 'completed motivation table' which for an observer, is a tangible way for student progression to be measured. However, it may have been more surface

interpretation given the measure of attainment in this lesson. The success of this development in 'critical' thinking may or may not have been meaningful, and in turn, successful.

Independence in lessons

Below, are a range of responses to question 2 which focus on establishing a range of activities which encourage students to develop independence and critical thinking skills. The question sought to gain a clearer picture about how teachers perceive the role of independence in the classroom and explored how lessons are designed to encourage independence.

Question 2

How did your lesson seek to develop these skills?

Teacher C - 'My lesson encouraged students to work as part of a team and evaluate the effectiveness of different types of writing before they then demonstrated the skills learned.'

Teacher D - 'My lesson was designed to allow students to look at character motives, looking at what Lady Macbeth's motives were for wanting King Duncan to die.'

Teacher E - 'The lesson had a number of stages of independence which asked students to gather information independently; through to reflecting on the work they had completed against the GCSE criteria to give them an idea of their own achievement.'

Teacher F - 'Independence was needed to complete the final written assessment'

Teacher G - 'The lesson explored what the exam paper would look like and identified processes in place for students to use during the examinations.'

The range of responses to this question highlighted a variety of expectations dependent on the scheme of work, age range and the necessary assessment. However, the point which does become apparent is the need for students to work

towards a common success or assessment criteria. From the responses I received, four made some reference to students using their opportunities to 'develop independence skills' and to work towards the National Curriculum or towards the GCSE assessment objectives. This focus on assessment links with initial apprehensions about the success of independence in a system which is heavily reliant on qualifications as a measure of a school's success. These findings seem to have a simple link with some of the critical opinions about the PLTS initiative, such as Graham Woods' (2008), and his comments on how there is a lack of professional development for teachers and resources to make real developments in the attainment of students. For critics such as Woods, the introduction of the PLTS was always limited, as schools are still measured by exam success, so it seems difficult for teachers to place the same amount of emphasis and resources on the teaching and learning of independence when exam results are a school's main indicator. In opposition to this point, the responses also made some suggestion that teachers are delivering the same lessons as they did before 2007 but are now just simply matching aspects of that to the 'language' of critical and independent thinking. The response by Teacher C identifies that, 'The lesson had a number of stages of independence which asked students to gather information independently; through to reflecting on the work they had completed against the GCSE criteria to give them an idea of their own achievement'. In this response the design of the lesson seems to be the dominating factor with which the PLTS labels have been attached.

In contrast to these ideas, de Bono also commented that from his research in the 1970s, that teachers' 'teach knowledge on the assumption that thinking skills will develop' (1975:14) which is an interesting thought when exploring the responses to the questionnaire. It could be possible that the teachers in this sample were fixated with the acquisition of knowledge and meeting the GCSE or KS3 criteria and, when asked, made tenuous links with the PLTS because they were the focus of the questionnaire or conversely, they could be subject to the 'ill-training' Woods discusses in 2008.

In either instance, it becomes difficult to measure the extent to which lessons are designed to develop these independence skills. Responses such as, 'The lesson explored what the exam paper would look like and identified processes in place for students to use during the examinations.' (Teacher G) give a limited response when placed against the PLTS framework. To what extent and range independent skills were needed is unclear and, on the surface, seems very limited in contrast to

responses such as, 'My lesson encouraged students to work as part of a team and evaluate the effectiveness of different types of writing before they then demonstrated the skills learned.' (Teacher C). The latter response provides more details which could be seen to encourage students to take on more independent roles in the classroom by becoming a 'part of a team' and in the 'evaluation' and 'demonstration' of skills. This response shows links with a number of the PLTS, in particular, in students becoming 'reflective thinkers'. From the two responses, judgements can be made of which lesson was more 'designed to encourage student independence' however the limitations of the questionnaire and in the absence of a physical observation, gaining a conclusive opinion to that question would be difficult.

The Success of the PLTS in the classroom and beyond

It is possible to gain further understanding when we examine the responses given by the same teachers in their responses to questions 3 and 4. Teacher G, who initially responded with the more limited response on the exam paper, again gave a vague response to question 3:

'Students were able to understand the format of GCSE exam papers and showed knowledge of how to respond to questions. This lesson had a limited focus on the development of independence skills as the lesson is preparing students for the GCSE exam next week.'

With this response it becomes clearer that Teacher G is aware of the limitations placed on the lesson's development of independence for a more practical focus on allowing students the opportunity to explore the format and expectations of the impending GCSE paper, which for that teacher, was more important at that time. Again, responding to question 4, teacher E identified that the lesson did require some 'group work' which could be linked with the PLTS and its 'team workers' strand but in the absence of a lesson observation to explore the nature of the group work, it would be difficult to ascertain. More importantly, teacher E recognises that the lesson does not 'fit' the expectations of a lesson designed to encourage independence but in this instance was the priority for these students.

In contrast, Teacher D who responded to question 2, made a more specific response to how students met the PLTS criteria:

'The lesson proved to be very successful in the terms of independence as students took an active role in the lesson making clear judgements about how 'good' different examples of writing were and then allowed them to work as a team to create a 10 point plan for reproducing their own writing examples'.

It seemed for Teacher D, that the lesson was fully devised and designed to develop independence in students and allowed students to make some progress against all the stands of the PLTS framework. In response to question 4, Teacher D made allowance for the students to have all independently demonstrated their 'new writing skills' in the latter phase of the lesson and when they were asked to write their own response to the task. At this point it is important to consider that, at the point of completing the questionnaire, Teacher D only had a snapshot of success against the lesson objective; any success was based on the student responses to targeted questioning which did not cover the entire class. This issue of time frame is an important consideration in the assessment of PLTS. Could it be that the nature of these skills and their development is something that has a long gestation and cannot be assessed as successful in one lesson. Therefore can this be a criticism of Ofsted in the fact that assessing the quality of lesson is something atomised and almost unachievable?

Displaying 'success' in the classroom

A further focus of the teacher questionnaires was to explore how teachers' feel about students and if they feel that they are equipped with the skills necessary for teachers to be facilitators of learning (2). This question is interesting when exploring some of the responses to questions 6 and 7 which focus on students who are 'unsuccessful' as independent learners in their lesson. At this point, it is interesting to point out that none of the responses highlighted all students made progress towards meeting the PLTS framework. In the one response, that intimated that all students made progress, it was not supported by any strong evidence: on the contrary, the response cited that 'the quieter students find it difficult to respond confidently' which could be seen to raise some doubt about the responsiveness of students to teachers as facilitators.

A number of responses cited behaviour as a direct result of students not achieving success in lessons. One detailed response highlighted that certain tasks in lessons gave students the opportunity to 'switch off'. In this particular lesson, the act of reading made them disinterested in completing the task which snowballed when the

student then had to respond to questions based on that reading in the next task. Teacher I, further remarked, 'Some students are fixated on the goal of completing the task and not by how they completed the task'. Importantly, this idea of students only being interested in the sense of achievement they receive from completing a task, even if the act of completing the task was merely copying the answer, links, in part, with the work of de Bono who concluded that students are unable to correlate the importance of independence as equivalent to the acquisition of factual information or 'knowledge', so, in part, they become trapped by their own form of intelligence (1976:15). In this case, the end goal of writing down the answer is the students' main goal, not in the fact that they were able to arrive at an answer 'independently'.

In your opinion, what prevented these students from not displaying the skills they needed for success?

Teacher H - 'Behaviour. Some students cannot respond sensibly to any changes in their routine. The use of teamwork gives students the opportunity to misbehave or not complete any work.'

Teacher I - 'Some students automatically switch off when there is reading involved, so they cannot answer questions because they have not read the text. One student wanted me to sit next to him and basically tell them the answer. If they write that answer down they think they have achieved something. Some students are fixated on the goal of completing the task and not by how they completed the task. '

Teacher J - 'I believe all students showed some degree of independence. Some more vocal students dominated the discussion which makes it difficult for quieter students to respond confidently.'

Teacher K - 'Students were very good when creating ideas verbally but struggle to write ideas down at the same quality. This makes it difficult for them to engage with the work.'

Teacher L - 'Poor behaviour during active tasks. Some students are unable to cope in situations that don't guide them through tasks

A large proportion of the responses to question 7 identified that a number of students displayed a lack of independence when given the opportunity to develop these skills. Although behaviour was given as one of the reasons, a lack of motivation could also be seen as a contributing factor, as there seems to be an assumption in the study of developing independence in students that all students are open to learning and committed to their education – I think it would be naïve to suggest that students possess a universal predisposition to wanting to learn.

In addition, this idea that students are ‘unable to cope in situations that don’t guide them through tasks’ shows a conflict with the DfE who found that the act of ‘independence’ is not merely the ability to work alone but it is teachers who have an active part in facilitating support for learners through structured modeling and group work (2011). If this is the case, and the DfE wants teachers to ‘support’ as an active method of developing independence: however teachers want to see some degree of ability for students to move beyond structure to a full independence.

Teachers’ responses to questions 6 and 7 were negative in describing how successful students are with coping with independence in their classroom and to some extent the ‘quantity’ or ‘quality’ of independence seems to vary from the sample of teachers questioned and the guidelines of the DfE.

Assessing success in the classroom

The final stages of the questionnaire focused on how teachers assessed the ‘success’ of students at meeting the desired PLTS objectives. Similarly, as discussed in the responses to earlier questions, teachers seem to measure the ‘success’ by tangible means. Therefore, they viewed a completed written task or verbal response as the measure of success which in a practical sense is entirely valid. Subsequently, how can teachers assess success in independence, as discussed previously? These skills are not achievable in single lessons. Ultimately, student success is measured by written or spoken means so surely this should be the indicator used by teachers. This discord between assessing curriculum attainment and independence is highlighted by Lipman and describes independence as a ‘disconnected, discontinuous fragment, shouldered with the responsibility of upgrading the whole of education’ (2003: 6). This could be seen to hold some truth when examined alongside the questionnaire responses. Lipman further questions how students can be expected to view the world differently or to

explore multiple avenues of answers and interpretations when the nature of the curriculum stands in direct opposition (2003:6).

One interesting response from Teacher E identified that, 'They [students] are used to finding one answer and being satisfied – they are not used to exploring other possibilities'. Some lessons have to explore the practical nature of the curriculum and, due to the importance of exam success that has to override the development of independence in the classroom.

Conclusion

The teacher questionnaire highlighted how difficult it is for the teachers to make real judgements on how successful students are in their development as independent learners. The responses to the questions highlight the inconsistencies teachers face with what the guidelines expect them to do and what they are faced with on a daily basis. The discrepancies between the overarching goal of the National Curriculum and the development of independence results can lead to a fragmented approach to education where teachers' seem to have become accustomed to implementing the language of the PLTS to satisfy the DfE and Ofsted when in fact, the development of these skills is largely the same as it was before the introduction of the PLTS in 2007.

It could be argued, that education needs to explore alternative methods of assessing success by unifying the academic and independent elements of the current model. A new paradigm could seek to retain the same academic benchmarks found in the current qualification system, but also look to recognise the development of independent and critical learners. If independence is to be embedded fully in to the National Curriculum, it would need to have a valid place beside the current qualification system. As it currently stands, some sample teachers do not seem to engage fully with the initiative and in some respects feel that independence has always been a furtive goal which they now need to emphasise more in lessons.

For PLTS to have a successful and meaningful future in education, teachers need to raise both their worth and validity in education and, in contrast, if this cannot be achieved is independence a real and meaningful concept at all?

Chapter 5

Research findings: Student questionnaires

The student questionnaire sought to uncover the attitudes students have about their development of independent and critical thinking skills. Therefore, ultimately, asking students how they feel about the success of their own level of independence in English lessons, and how they feel about their own abilities as independent learners'.

Through my findings I was able to explore, in detail, one main aspects of my research aim by addressing the question;

- Do students feel they are equipped to develop independent learning skills? (1)

And to some extent I could indirectly begin to gain a picture of feelings and attitudes towards the final research aim;

- Are lesson designed to encourage student independence? (3).

One of the main concerns identified in my literature review was the notion of conflicting opinions about the nature of thinking, and in particular, what constitutes independent or critical thinking. This idea of independence becomes particularly difficult to measure through the perceptions of students. Due to the nature of my sample the students involved were all of varying ages, abilities, ethnicity and gender.

Questionnaire response – part 1 findings

Responses to question 1 – Identifying importance (Table 1.1)

Which of these skills are the most important?	Number of respondents
When I am stuck I wait for the teacher to tell me the answer	24
I can assess my work and make clear targets	5
I work better with friends	15
I can see other points of view	0
I can organise my time	0

Initially, it was through the questionnaire I aimed to obtain an understanding of what students' perceived as important skills to possess. From the sample of 50 questionnaires completed, I had four blank responses, and two responses which identified more than one skill as the most important: therefore, for the analysis of this opening question, I had 44 valid responses. (see table 1.1)

Surprisingly, an overwhelming proportion of students, a total of 24 respondents, identified that the most important skill was the ability to 'wait for the teacher to tell me the answer'. The idea that students perceive an effective skill was to 'wait for the answer' is an interesting one and can link with how students perceive their learning and the purpose of their schooling career. In some ways, links are also made with the teacher responses from the questionnaires which also identified students as having a misguided perception of achievement, and in particular, this idea that obtaining the answer is their main goal and not in the appreciation or acknowledgement that they are developing their skills in the process of formulating an answer, whether that answer is correct or not. Over 50% of valid responses, to question 1, gave this response as the most important skill which raises a number of questions about what students' actually perceive as learning: for students, is learning simply the process of arriving at the right answers? If this is the case, the students are standing in opposition to current government policy, with the DfE stating that in order for students to become independent thinkers, there has to be a 'shift of responsibility for the learning process from the teacher to the pupil' (2011). In the case of the students in the research sample, there seems to be a void between what the government policy is suggesting: they are placing emphasis on students acquiring an understanding of the learning process, which they hope, will foster a new breed of motivated students who will ultimately, 'collaborate with teachers to structure their learning environment' (2011). If this is the case, it would raise questions about how teachers can bridge this gap between the reality of students, in a practical setting, and the idealized version of government policy. Such a huge shift in ideology, on the part of the students, will require an enormous amount of resources and time dedicated to achieving the idea that teachers can facilitate learning, whilst it is the students who take control.

The second highest ranking response, with 15 valid responses, was the skill of 'working better with friends' with the final five respondents identifying the ability to 'assess work and make clear targets'. No students identified any value in the ability to, 'see other points of view' or in the 'organisation of time'. Interestingly, some skills, such as the ability to emphasise, are crucial in the study of literature and will

be a skill most students will have experienced on a regular basis, but which they don't recognise as a valid skill.

In addition, the notion of 'working better with friends' was also a high response and links with how students prioritise the skills developed in lesson, compared to the aspects of a lesson which make it enjoyable. As a result of the questionnaire, the notion of 'working with friends' links with the second section which will be discussed, in conjunction with this question, in the next section

Responses to question 2 – Skills (Table 1.2)

What skills do you develop in English lessons?	Number of respondents
Reading and writing	29
Grammar	1
Vocabulary and language	10
Independent and creative thinking	7

The second question was worded as an open question with no multiple choice options. I decided to remove the guided options in this question to encourage students to respond independently with no external influence. However, it is important to recognise that some students may have been influenced by what they were covering in English lessons at the time of completing the questionnaire and not looking at the lessons as a whole unit (see table 1.2).

Interestingly, from this sample of responses four were invalid with either the response left blank or simple replies which repeated the main skill developed as just 'English'. The main response identified by students, with 29 responses, reported that English lessons developed their ability to 'read and write' with one response including the use of grammar as an important skill developed in lessons. Similarly, 10 responses made explicit reference to English developing 'vocabulary or language' or more specifically 'new words' or 'hot words'. Furthermore, from these responses seven made reference to lessons encouraging students to 'think independently' or 'creatively'. The idea that English is the lesson that develops a student's abilities to read and write is interesting, as very little functional development of 'reading' is accounted for in the curriculum. In English: there is a requirement to read and this is directed and targeted at abilities. However, it is

assumed that students have a suitable reading age to cover the NC requirements and for those students with low reading ages, alternative provision is made with the school SENCO. Therefore, it could be argued that students have chosen the traditional stereotype that English develops reading and writing when, in most part, this is not the case.

Interestingly, the 20% of respondents who cited the development of 'independence' or 'creativity', as a skill developed in English lessons, could suggest that students possess some awareness of the concept as a whole and would be an interesting place for further investigation and in some part, is tackled in part two of the questionnaire, when students are required to respond to more detailed skill success statements. Unfortunately, no student developed their response to include any more specific details which may suggest that they are attempting to respond in the way, they presume, I would want them to respond.

Questionnaire response – part 2 findings

The second section of the questionnaire led students to the 6 skills identified by the PLTS. However, the original question does not stipulate a number of skills students needed to highlight, so was therefore open for them to identify as many skills as they felt they had used/or been encouraged to use, in their most recent English lesson. After identifying the PLTS skills students then progressed to identify which particular skills they developed and/or experiences in that particular PLTS skill. Again, the PLTS were used in the more detailed stages and I adapted, and made, the 'official' questionnaire, produced by QCA, more accessible for the sample.

In order to respond in more detail, once the students has identified the skills developed, they were then required to complete the corresponding section using the Likert scale-style response (never, rarely, sometimes, usually, always) to four statements which detail some ways in which 'success' in this skill could be measured.

Skills recognition (Table 1.3)

Highlight which skills you feel you needed in today's English lesson.	Number of respondents
Self-management	0
Team-work	12
Creative learning	12
Reflective learning	0
Effective participation	1
Independent work	12
More than one response	9

In the initial identification of skills students made varied responses, which will reflect the differences in key stages and in differentiation of lessons by teachers. A more even spread of responses was identified across the skill strands with only four responses being classed as invalid, due to failing to comment on the in-depth statements. The 46 valid responses provided a range of data with 12 respondents identifying 'creative learning' as the main skill developed in English lessons. Secondly, 12 respondents identified 'independent work' as their developed skill and a further 12 respondents identified 'team work' as the main skill developed in lesson.

Finally, from the remaining 10 respondents, only one student identified 'effective participation' as the main skill needed in lesson, and nine respondents identified more than one skill development. The two skills that were not identified by any respondent were the skills of 'self-management' and the development of 'reflective learning'. Interestingly, the lack of 'self-management' and 'reflective learning' as skills being developed in lessons was a surprising feature of the responses, as the idea of students being 'reflective' is seen as a corner stone of good teaching with lessons structured in a way that allows students the opportunity to be reflective through the use of the plenary and, in some way, contrasts with the responses in the opening question when respondents highlighted assessment of work and target setting as the most important skill (see table 1.3).

Responses to 'team work' (Table 1.4)

Team Work	Number of respondents				
	Never	Rarely	Sometimes	Usually	Always
I work well in my groups, even if it's not a group of friends	0	0	9	2	1
I change how I behave to lead a group or help others	0	3	8	0	1
I encourage other people to share their views	5	6	0	1	0
I give good advice on how to improve.	2	8	1	1	0

When students identified 'team work' as the most developed skill in their recent English lesson, they responded to certain statements in a similar way. For example, in statement one, 'I work well in my groups, even if it is not a group of friends' only one student responded as 'always', two students with 'usually' and the remaining nine responded with 'sometimes' which is interesting when compared to the part one question, when 'working with friends' was one of the highest performing responses. It may seem that the word 'friend' is the influential variant which highlights the discrepancies between what a teacher acknowledges as 'developing independence' and students' perception of the same goal. It could be argued that students rate success in lessons as being allowed to work with friends, and alternatively, working in non-friend groups is not perceived as an activity which develops any independent skills. In addition, the notion of most students thinking they 'rarely' work well in non-friend groups is an interesting one and may be one that links with a students' lack of enjoyment, when working with non-friend groups, rather than their ability, or success, in this particular situation.

As a whole, it was interesting to identify how many students acknowledged 'teamwork' as a skill they had developed but then, when responding in more detail, stated that they had 'little or no influence on the functioning of that group'. They

recognise the opportunity to develop the skill but felt that they were unable to demonstrate the skills of successful team-work. Only one respondent, identified an 'always' or 'usually' response for the remaining statements which showed a sign of confidence in ability as a team worker whereas, the remaining respondents seemed to become less confident, by moving one place down the Likert scale, as the statements progressed. They seemed to lose confidence in their abilities when the emphasis of the statements shifted to them and their abilities to 'encourage others to share their views' or 'in giving good advice on how to improve'. Therefore, students seemed to respond to the development of the skill of 'team work' on its literal level e.g. in the fact that they had been 'asked' to work as a group by their teacher but do not really have any understanding of what the success criteria are for achieving that particular skill (see table 1.4).

Responses to 'creative thinking' (Table 1.5)

Creative Thinking	Number of respondents				
	Never	Rarely	Sometimes	Usually	Always
I think of original and new ideas to complete a task or solve a problem	0	0	6	3	3
I think of ways to extend my learning by asking new questions	1	5	3	3	0
I ask questions to check my thinking is correct	1	7	2	2	0
I changed my ideas to adapt new circumstances	4	4	2	2	0

Similarly, creative thinking was also identified as a skill that is developed in lessons with 12 respondents identifying that they had opportunity to make progress towards that skill in lesson. Unlike with team work, students responded more positively to the statements with six students identifying 'usually' and 'always' to the opening statement. In particular, students responded well to the statements which identified that students can 'think of original and new ideas to complete tasks and solve problems' and in that they 'ask questions to check that their thinking is correct'. Therefore, of the six students, four identified they rarely 'changed their ideas to adapt to new circumstances' with a further two stating they 'sometimes' adapted to a change in circumstances. Similarly, five students identified that they 'rarely' extended their learning by asking new questions.

Interestingly, the majority of students seemed to lose confidence with their choices once they had progressed from the general statements of the opening question. When they began to read the finer details of success, they began to become less self-assured; this led the research to consider the idea that maybe students are largely proficient with the 'labels' associated with the PLTS and the perceived skills of independence. However, when asked to comment on the finer details students are unaware of their meaning in relation to the skill. As highlighted in the team work skill, students seemed to recognise the label as a task or part of lesson but are unsure of the success criteria. Therefore, it be argued that teachers are not allowing students to experience success at these skills, and are in fact the ones who use these terms arbitrarily, allowing students to adopt the terminology which creates a false impression of understanding. Alternatively, are students the ones who are not open to the differing stages or opportunities for success and are the ones who see the 'skills' at surface level? Subsequently, students are becoming proficient at using the terms but possess none of the knowledge that is required to explore each skill and its success criteria (see table 1.5).

Responses to 'independent work' (Table 1.6)

Independent Work	Number of respondents				
	Never	Rarely	Sometimes	Usually	Always
I think of things that I want to learn about for myself	0	3	7	1	1
I find out about things on my own	1	3	7	1	0
I can look at things from other peoples' point of view	0	0	4	8	0
I work out what information is useful and accurate	0	1	6	3	2

Furthermore the questionnaire also highlighted 'independent work' as a skill which had been recently developed in lessons, with 12 respondents identifying that they had made progress towards developing this skill. Again, students seemed to identify this as a skill developed in lesson but when introduced to the finer success criteria, specified in the PLTS, students seemed to lose confidence with what constitutes 'effective independent work'.

Interestingly, the highest result identified that eight students believed that they 'usually', 'look at things from other people's point of view', with the remaining four respondents stating they 'sometimes' developed this skill. These results signified this ability to empathise with others as being the most developed skill in English lessons; it would be interesting to further question students to discover if students recognised their peers as the 'others' in this statement or more subject specific individuals such as, different characters in texts. The idea of 'empathising' is a subject specific skill that is recognised as part of the NC and is used in detail as a skill needed for the GCSE reading paper. With this in mind, it would be interesting to question these responses in more detail to ascertain if the response was due to the importance placed on 'empathy' as a core subject skill or in the development of independence and critical thinking skills.

For the remaining statements, there seemed to be a large number of respondents' who identified 'sometimes' as the frequency of development. It is important to recognise that students may have identified the central choice due to being unsure of which to respond to or simply, that students felt that they were given opportunities to develop this skills during lessons. Interestingly, there was only one respondent who identified 'never' to all of the statements. Therefore, as a whole, students seemed more confident with this type of skill compared to the others' responses. This confidence could be due to the terminology with students possessing a clearer idea of what 'independence' is, unlike the other PLTS skills. It could be argued that students are more familiar with the terminology associated with the skill but this does not mean that they have a clear understanding of the skill in relation to PLTS. As argued in their research the DfE found that the act of 'independence' is not merely the ability to work alone but it is teachers who have an active part in facilitating support for learners through structured modeling and group work (2011). Therefore, students could see 'independent work' as purely working on their own or could associate success in this skill with the ability to take ownership, question, investigate and empathise as part of their learning. (See table 1.6)

Responses to 'effective participation' (Table 1.7)

Effective Participation	Number of respondents				
	Never	Rarely	Sometimes	Usually	Always
I take part in a discussions	0	0	0	1	0
I can make a clear argument to persuade others	0	1	0	0	0
I think of ways to help my group to solve problems or achieve goals	0	1	0	0	0
I support my team and work towards a goal, even if I don't agree	0	0	1	0	0

The final, and least popular, skill identified by students was 'effective participation' which was highlighted by one student. This student's response to the statements ranged from 'rarely' to 'usually', with the most confident skill being the ability to 'take part in discussions'. On the whole, it was surprising that only one student identified that they take part in regular discussions. I would have anticipated that more respondents would have identified this as a skill developed in lessons, on a regular basis; this could again be a case of students not recognising the terminology associated with the PLTS. If this was the case, then most students would not have recognised that 'effective participation' as taking on an active role in lesson and consequently, a higher number of respondents may have identified this skill if they had a greater understanding of the terms.

Conclusion

The student questionnaire opened a number of different avenues for discussion and development. Interestingly, the student questionnaires suggested how students perceive English lessons and how they think lessons develop them as learners: the fact that an overwhelming proportion of respondents believed that English developed 'reading and writing' was fascinating. It would be interesting to ask students to clarify this statement to identify if students believed this to be the case on a 'literal' level or if they had a deeper understanding of how English develops these skills.

The notion of dialogue and applying a consistent and universal range of terminology for students became an interesting point during the research, as it became apparent that there was a discrepancy between student understanding of terms and the skills identified by the PLTS. Students seemed to focus on the skills that they recognised such as, 'team work' and 'independent work' but then lost confidence when identifying the frequency of use. This is an interesting point, as it seems that students can use some of the skill labels with confidence however, they are seemed not to be proficient with the finer details which make-up this skill. Students seemed to identify the literal meaning of the skill and failed to show that they regularly made developments towards the PLTS success criteria. Consequently, it has to be recognised that if students are uncertain about the terminology of PLTS and more importantly, the success criteria, then this may have had an impact on the results. Therefore, some students may have chosen labels based on recognition and again, highlighted the frequencies based on comprehension.

Also, as a result of the findings, it could be argued that teachers are using the labels but are failing to delve deeper into the skills, and forge a dialogue based on the success criteria with students. If this is the case, students only being exposed to the PLTS at surface level could be incapable of identifying how they go about making progress towards developing their independent and critical thinking skills.

Chapter 6

Research findings: Teacher interviews

The teacher interviews sought to uncover the attitudes teachers have about the development of independent and critical thinking skills in the practical setting of the classroom and asking teachers how they feel about the success of their own learners' independence in English lessons. Through the research I will examine how teachers feel about students' abilities, as independent learners' and attitudes towards the importance and acquisition of these crucial skills.

Through my findings I was able to explore, in detail, one main aspects of my research aim by addressing the question;

- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)

And to some extent I could indirectly begin to gain a picture of feelings and attitudes towards the final research aim;

- Are lesson designed to encourage student independence? (3).

One of the main concerns identified in my literature review was the notion of conflicting opinions about the nature of thinking, and in particular, what constitutes independent or critical thinking. This idea of independence becomes particularly difficult to measure through the perceptions of teachers-the teacher interviews revealed misunderstandings and differences of opinion about the meaning of critical thinking and independent learning.

Teacher reluctance

During the responses to these questions a range of ideas and thoughts about the perceptions of independence were expressed. On a whole, there seemed to be a negative approach to the idea of independence - taking a more active role in lessons. However, on reflection, I am unsure if the negativity was fully directed towards independence but more towards other aspects of education, 'in one moment we are 'training' students to pass exams and, in the other, we are trying to make students independent...it doesn't really equate, does it?' In this response it is clear to see that this teacher places the development of independence in opposition

to examination success and this idea is also echoed in the response to, question 1, from Teacher 1:

'They are very dependent on the teacher for guidance and to be basically told what to do. You can make references to the skills in lessons, which to be honest, is very limited as there is usually so much to do in lesson, but when you do make a reference to 'group work' or being 'independent' students find it very difficult.'

There seems to be a deep rooted resentment towards lessons and programmes of study consisting of large proportions of assessment, assessment preparation and the need to develop these skills in conjunction with independence which may suggest that teachers do not feel comfortable using the skills alongside the curriculum content. This could suggest that, teachers' seem to feel that developing independence and critical thinking skills is not a valid addition to the curriculum and in support of this Teacher 4 expresses, 'Like everything else in teaching we seem to be doing everything for the powers that be's benefit- my lessons aren't better because I have to write in down, it is just a paper trail exercise similar to PLTS.' Consequently, there seems to be an assumption, by staff, that they are already making provisions for development in lessons and, any additional aspects, are just to satisfy School Leaders and DfE. This reluctance to examine their own practice may be the limiting factor as to why students continue to lack self-sufficiency in lessons.

These ideas about independence could link in with Lipman's findings in *'Thinking in Education'*, where Lipman (2003:6) discusses how thinking in schools has been developed in an unusable way; how some models of thinking have been favoured or overlooked in the attempt to provide a 'fits all' model. During responses, teachers seemed to approach each part of a lesson as different sections or 'bolt-ons' that need to be ticked off during each lesson- there seems to be a lack of teachers seeing how independence can develop exam success and vice a versa. Consequently, this could also suggest that teachers' are uncomfortable with the concept of independence and critical thinking in education which will link with further discussion on the 'development of practitioners', later in the chapter

In addition to teachers failing to recognise the links between independence and exam success Teacher 2 comments:

'If anything, I think the constant need to model and scaffold leaves students with an ingrained need to have that support constantly in lesson, and in the end, these students don't get modelling or scaffolding in the actual exams'.

Again, this comment suggests there could be a misperception about the notion of independence and supporting students in the development of independent skills. The DfE (2011) examined this link and found that the act of 'independence' is not merely the ability to work alone but it is teachers who have an active part in facilitating support for learners through structured modeling and group work. Therefore, the need for teachers to forge a link between the different elements of lessons and the development of independence is crucial in the modern classroom.

Throughout the responses it could be argued that some teachers feel they cannot accommodate all of the demands of the current educational system and that independence is seen as another initiative for them to implement in lessons. In most schools classes are organised according to ability but given the comments on accommodating differences in skills, it would be an interesting point to explore organising classes in a way which could allow students to work in an environment that is tailored to their independence: how schools could achieve this would depend on how they assess/value these skills.

Measuring success

The responses to question 3 exposed the debate about measuring success and, in some respects, what is to be assessed. Edward de Bono and Mathew Lipman both discuss how the notion of independent thinking has become an increasing focus for education and the importance of independence or 'critical' thinking skills is one that those in support or opposition struggle to define (2003:2). Lipman, like many others, continues to question 'what constitutes critical thinking?' Understandably, the definition of 'independence' will be something that is subjective and individualised to reflect the predisposed opinions of individuals. The response given by Teacher 3 is interesting as for them independence is successful, and for others this is not the case as in Teacher 3's response to question 3, 'like the development of children in all other areas, with independence they all progress at different times.' This idea of development and the sporadic nature of the acquisition of independence is one that was touched on in the responses to question 2 and like academic success, there will always be some students who develop these skills at a quicker rate and tackling this uneven acquisition would be one area for education to explore in the future.

The response to question 2, from Teacher 4, was one I found particularly interesting, especially the idea that students are at different levels of independence and will therefore display different abilities in the development of these skills. This again links with the notion of tailoring for abilities in the formation of classes. As Teacher 4 explains:

‘Most teachers see success as the finished product and not necessarily the process of becoming more independent. I think that students do show signs of progressing towards being independent but because it is not consistent or radical enough for some and therefore it is seen as ‘not being successful.’

It could be possible that some teachers expect students to be fully ‘independent’ in lessons, when realistically; students should only be developing this skill throughout the course of their academic career. It could be the case that, unlike academic attainment, independence cannot be measured in the same way therefore the success of student attainment for some students may be difficult to measure especially, in a system which essentially values those aspects of education which can be measured, such as, exam results.

Teacher 2 (question 2) feels that, ‘If the provision of independent learning is well planned and organised, students enjoy this type of learning and if there was opportunity in the curriculum more, then students would be better at using the skills.’ It could be shown that in this response the teacher recognises the importance of ‘enjoyment’ on both a student’s academic attainment and independence and critical development. This is also echoed in teacher 1’s response to the same question, ‘In some environments, with the right resources, independence could be developed in students’. In both these statements the teachers recognise that that an effective development of these skills can be achieved in lessons, so surely students can be receptive to the development of critical and independence skills? The main concern may be the measurement of the success, and in how schools approach the PLTS model.

In the responses to question 1, teachers seem to view the importance of these skills as something that will be a passing phase in education like many others that have been its precursor and an initiative that is seen as something that ‘has to be done’ in lessons. The response by Teacher 3, [That] ‘until that happens all we can do is keep doing what we always have been doing but make it more explicit in lessons.’ suggests that there is a belief that teachers do already feel that they provide opportunities to develop students as independent learners but, since the

introduction of the PLTS, now have to make it more visible in their planning and delivery of lessons. In addition, Teacher 3 comments:

‘How do you measure success in independence? That’s the problem and I am not quite sure what is expected from this model independent student and until that happens all we can do is keep doing what we always have been doing but make it more explicit in lessons.’

Again, in this response it is unclear if the teacher requires the ‘model of success’ or if it is the school. Maybe for independence to work, schools and teachers need to remove the idea of students achieving something tangible. As discussed, independence and critical thinking are not skills that can be assessed and therefore, unnecessary pressures are being placed upon teachers who create their own definition of success.

The removal of the ‘bolt-on’ approach to independence and a move towards the skill being taught in lessons would then leave timetable space which could be used to target students on a more personal level or to develop the understanding of teachers through effective professional development.

Developing practitioners

The responses to question 1 opened up a variety of avenues to be examined, such as the response from Teacher 3’s response:

‘I think some students are very independent and they do see the benefits with not relying on the teacher but I can’t really say that I think that has been taught I think it is probably something in their make-up’.

Which further echoes the notion that some students are resistant to independence or that students are somehow ‘predisposed’ to the skills in lessons, ‘Realistically, most students don’t respond well to independence; most cannot behave appropriately when they are given the chance to develop these skills.’ If this is the case, it is extremely difficult for teachers to differentiate lessons for both ability and for independence and as Woods discusses in his findings (2008:55), ‘there seems to be an expectation that teachers can change the behaviours of students in large classes with little or no training in this new skill, and no time to practise’ which is an interesting statement in light of these responses. Is it possible for teachers to personalise lessons for independence, as well as ability, given the current class

sizes, resources and non-contact time that teachers have to plan lessons to develop these skills?

I think that Teachers 1 and 2, raise some very pertinent points, in response to question 3, which link to what the teachers have raised previously about this 'bolt-on' approach to the development of independent learners. Teacher 1 comments, 'I think the School is under resourced to implement independence fully in the curriculum. The School does currently make some attempts to embed the skills through subjects like XL2Learn but this is a bolt-on approach to the issue'. Similarly, Teacher 2 extends this concern as, 'the teachers of IXL2Learn are from other subject areas and therefore the subject is treated as a secondary addition to their timetables and therefore doesn't get the attention it needs.' In these responses, the idea of developing independence through targeted lessons therefore seems to have been adopted as a secondary addition to the timetable.

It could be argued that the IXL initiative is seen as a poor relation to the core curriculum for teachers and probably, in some respects, the students who are taught by unmotivated, under resourced teachers. As an extension to the provision of independence by targeted lessons, is the idea that these lessons are lost from the timetable as students move from Y7 to Y8 and beyond. If this is the case, it could be argued that without the reinforcement of these skills it is naive approach to believe that all independent skills can be learned in 1 hour a week. Surely, for the lasting development of these skills the school needs to develop how independence is supported once students move in to Y8.

The absence of staff development sits in opposition to the small-scale study conducted by KJ Topping and S Trickey in a number of Scottish primary schools' (2007) where that study showed that the success of the initiative could not have been received without a commitment to the targeted and in-depth development of staff (2008:8). In this study, Topping and Trickey noted key improvements amongst learners' achievements in the Cognitive Ability Tests against those students who received the conventional method of delivery. And although, this was a small-scale study, the findings open a number of important areas to consider in the implementation of independence and critical thinking in the curriculum. It may be considered that the introduction of the PLTS has removed the need for schools' to develop their own provisions and, as a result of their introduction in 2007, a reliance upon them has had a negative impact on the application of PLTS.

Existing practices

During the responses to question 5, a number of links were forged between the previous questions where teachers highlighted the extent to which the current climate requires independence to be identified explicitly. Most teachers feel that they already incorporate the PLTS in lessons pre-2007 as Teacher 1 identifies, 'this doesn't mean that the skills aren't being developed the rest of the time, because they are.' Further to support this, Teacher 4 comments, 'I don't think that teachers change their lessons to adapt the skills- I think they have always been used.' Both teachers create the assumption that staff already create a climate for developing independence and critical thinking. Therefore, it could be negative to make these practices explicit in lesson plans and observations for external agencies to observe the skills teachers are developing in students.

In response, Teacher 1 (question 5) draws this distinction between the differences in official observations and normal day-to-day lessons where, during observations, there is a need to make references to the PLTS more explicitly, 'In some lessons, especially during observations, teachers plan for PLTS more explicitly.' This conscious attempt, by teachers, to plan for independence more explicitly, will derive from the current Ofsted frameworks where they state 'We (Ofsted) recommend that ... 'all children and young people leave school with functional skills in English and Maths, understanding how to learn, think creatively, take risks and handle change'(2007). This goal, set to be achieved by 2020 highlights the direction of education with current observation criteria geared towards students 'understanding' how they learn and to think creatively- all of which link with the PLTS framework. In addition, Teacher 3's response (question 5) also adds to this discussion with an interesting observation about the explicit incorporation of independence in lessons, 'I think it is questionable to say that students are more independent because they can talk about it.' This is an interesting point which questions how effective students' learning how they learn is and if students could be just as equipped to succeed without the terminology. However in response, Paul Black and Dylan William argue, in *How People Learn: Brain, Mind, Experience and School (2000)*, that what has been demonstrated by the double impact of, initiatives to increase student awareness such as, assessment for learning in fact:

'Improves scores in national tests and examinations as well as metacognitive skills, including the capacity to 'learn' how to learn. Techniques such as open questioning, sharing learning objectives and success criteria, and focused

marking have a powerful effect on the extent to which learners are enabled to take an active role in their learning' (2000:7).

Further support for the importance of students' understanding their own learning comes from Ofsted (2011) where they believe there is a need to 'shift responsibility for the learning process from the teacher to the pupil'. This means in order to develop these 'independent skills' pupils need to acquire an understanding of their learning which allows them to become motivated to learn and, more importantly, 'collaborate with teachers to structure their learning environment' (2011). A main goal for any educational developments in independence is to gain a deeper understanding of the impact of the PLTS in developing learners both academically and holistically and more importantly how effectively the implicit and explicit teaching of independence is in today's schools.

Conclusion

The teacher interviews allowed the study to examine, in detail, the perception of independence and critical thinking in lessons and it was interesting to hear some negative attitudes expressed by the sample and how the 'reason' for introducing the PLTS in 2007 could be one that still has not materialised. Subsequently, their introduction could have caused an additional burden to teachers and schools. It could also be seen that the introduction of the PLTS has had a negative impact on the provision of independence and critical thinking in lessons, due to a reliance, and acceptance, that the PLTS framework, and the resources produced by the DfE are sufficient for schools to use.

Interestingly, the idea that teachers already teach the skills of independence continued to be evident throughout the interviews and if teachers teach with this assumption then students will fail to recognise the importance of independence and again place all emphasis on academic attainment and qualifications. It may be a concern for teachers, and one which is covered in question 1, that students do not recognise the importance of independence to them in both education and later on during their working life. Therefore, it will be important for education to raise the profile of these skills further over future years. Furthermore, if the acquisition of independent skills is recognised, as a crucial skill in the development of students, it is something that needs to move beyond a conversational or 'tick box' tool between teachers and students and move towards the more 'personalised student profiles' schools possess in their student demographic.

Interestingly, responses highlighted how PLTS created a 'unification' for teachers and students, so that students have a consistent learning experience, with the PLTS providing a consistent opportunity to discuss their independence and the steps that students need to take to improve their skills. In initial responses, teachers felt that the PLTS seek to unify all schools and all students to work towards a standardised goal, as Teacher 1 comments [to question 6], 'If the students have a framework they have something tangible to work towards but the issue of assessing yourself or others against this criteria is very subjective.' However this 'standardisation' achieved by the PLTS, can only work as a base for schools to develop further. Again, schools will still need guidance on how to develop the skills of learners' in their specific circumstances and 'student profiles', which is something that currently the PLTS fail to provide.

Furthermore, the response by all teachers, suggested that the assessment of these skills is one that is impossible to achieve. Interestingly Teacher 2 suggested that 'You [teachers] can measure if students actually do the things in the criteria on that day but it is impossible to say that those skills are actually embedded in students fully.' This point is crucial in understanding the unreliability of arbitrary forms of assessments such as the PLTS framework and if education is truly dedicated to the development of student independence.

Ultimately, if the PLTS are to be seen as something that has value and worth, schools need a system which is personalised and seen by staff as a meaningful initiative which empowers them to take control and have responsibility for implementation supporting the development of their students; in its current state the PLTS appear to fall short of this need for personalisation.

Chapter 7

Research findings: Lesson observations

The lesson observations sought to uncover the practical setting for the implementation of the PLTS and how the PLTS frameworks are used, if at all, to develop or enhance student development alongside the demands of the National Curriculum. This research method allowed the 'reality' of lessons to be observed in contrast to the other methods used. Therefore, ultimately, observing how teachers attempt to embed skills in students that will leave them as independent, critical thinkers at the end of their school career.

Through my findings I was able to explore, in detail, one main aspects of my research aim by addressing the questions;

- Are lesson designed to encourage student independence? (1)

To some extent I could indirectly begin to gain a picture of feelings and attitudes towards the final research aims;

- Do students feel they are equipped to develop independent learning skills? (1)
- Do teachers feel that students are equipped with the skills necessary for them to be facilitators of learning? (2)

One of the main concerns identified in my literature review was the notion of conflicting opinions about the nature of thinking, and in particular, what constitutes independent or critical thinking. Therefore, it was important and vital to ascertain how teachers used the PLTS in lesson and to, in turn, explore teacher reservations about the impact external influences have on the development of PLTS and to what extent students are both open to and provided with opportunities in a practical setting.

Student responsiveness in lessons

One of the main issues to be presented by teachers, during both the post lesson questionnaires and the teacher interviews, was the concerns that students are resistant to developing independence in lessons. As Teacher 2 recalled in the interviews, 'realistically, most students don't respond well to independence; most

cannot behave appropriately when they are given the chance to develop these skills.' which was an issue echoed by teachers in the post-lesson questionnaires and something that could potentially have an impact on the learning environment. It seems, at times, that the contemporary theories of the development of independence fail to address the importance of student motivation and acceptance of lessons that encourage these skills: if students are disenchanted with education is it possible to develop 'additional' skills in students or do teachers have to focus on the core curriculum and the 'coaching' of students begins to manifest in lessons? It is important for education to explore how teachers can develop reluctant students to have a consistent and lasting impact. With this in mind, it was crucial for the observations to acknowledge and identify the extent to which students are responsive to independence.

Lesson 1: At beginning of lesson, students were outside the lesson waiting to come in to lesson. The teacher had a bell activity displayed on the IWB which required students to make links between inanimate objects (flowers, a boat, a car). As students came in to lesson they had to identify an odd one out. Some students appeared confused on first look and sought confirmation of the intended outcome. The teacher responded by saying, 'you have to decide on the odd one out, which one is up to you but be prepared to tell me why'. With this most students appeared engaged with the activity, suggesting possible ways to divide the items up. After approximately 1 minute, the teacher asked to feedback ideas with which the students responded with a range of replies such as, 'the flower as it is the only one living', 'the car, as the other two need water' and 'the boat, as the others need land to work'.

This activity, in terms of independence, could be seen as successful in a number of different ways, as the activity allowed students to interpret their own ideas. After the initial reservations and confusion, students became engaged in the activity and enthusiastically discussed each other's interpretations. During the observation, it was possible to hear students present their point of view and deliberate their responses compared to other students – this was evident in the responses, when alternative interpretations were provided for the answers. It was interesting that

students were not quite comfortable with the exercise and did need the reassurance from the teacher to clarify if there was a 'set answer' – therefore, as an observer, it seemed that students reacted in a way that would suggest that this type of activity e.g. one without an answer, was not something they had regular practice in. The need for students to clarify the outcome before engaging with the activity linked with the responses made during the teacher interviews.

Another factor to highlight was the fact that this bell activity, like most, was not linked with the actual lesson objective and was used to engage students positively from the beginning of lesson and therefore seen more as a behaviour management tool than for the independent value. This idea of independence being disconnected from the core curriculum content and was identified by Lipman who suggested that, 'independence and critical thinking by itself came to be seen as a disconnected, discontinuous fragment' (2003:6), therefore despite the initial engagement it was interesting to see, as the lesson progressed, how the class teacher could engage the same students and maintain their enthusiasm when the lesson focussed more closely on the National Curriculum requirements.

Lesson 1: As the lesson progressed through the starter, in to the main activity, students were studying non-media texts and, in particular, the use of language techniques in newspaper headlines. The main activity required students to work in groups and devise possible headlines for set stories. During the activity students were given a briefing on what was expected from the activity – to produce 5 headlines, and a checklist for students to monitor which language techniques they were using. During the 10 minute activity, students were observed in a number of different ways. On all but one table there seemed to be one main student who devised and constructed the headlines, however, the other students on the table were observed having personal conversations, having cross-classroom conversations, drawing in books and other non-task focussed activities. There was only one table which had more than one student collaborating in the discussion effectively.

As this lesson progressed, it was interesting to see how students were very clear on the activity that they were to complete and given good quality resources and lesson planning to aid their development; however, at no point during the lesson, did the class teacher refer to how students should work as a group. In this case, the comments de Bono argued in 1975 was that teachers 'teach a knowledge subject on the assumption that thinking skills will be develop' (1975:14). During this activity, the teacher did not acknowledge with students how to work in groups effectively: they were given a curriculum task and expected to develop all non-academic skills individually. However, as observed during the task, most students did not know how to work as a group: this is true of the students who took control and did not consider other opinions to the students who were off task throughout the time. If students had been given additional resources to help them work as a group, would the task have been completed more effectively? It could be argued that if students knew their place and purpose, as part of a group, then the quality and depth of learning would have benefitted. It would be interesting to see if the teacher, of this lesson, deemed the behaviour of students as 'poor' and that, their lack of motivation and engagement was the root cause of the off-task behaviour or that the format in which students were asked to learn was managed in a way which limited both independence and learning.

Limitations of knowledge recall

Another, main concern raised in the theoretical debate, was the idea that students are more concerned with the acquisition of knowledge and place unnecessary prestige on finding a concrete answer. This problem in education is discussed by de Bono as the 'Intelligence trap' which sees intelligent and able students close down to new disciplines as they become preoccupied with the acquisition of knowledge and content, and become remarkably 'unintelligent' when asked to complete activities that develop independence and critical thinking skills (1976:15). This idea of the 'Intelligence trap' is interesting when we are exploring the battle between the increasing development of standardised testing and the quest by the DfE for students to be independent and critical learners.

This issue of 'knowing the answers' was also a concern raised by teachers with one commenting in the post lesson questionnaire that, 'If they [students] write that answer down they think they have achieved something. Some students are fixated on the goal of completing the task and not by how they completed the task'. This is an important issue to address in understanding how independence is implemented

in lesson: in a system so driven by surface knowledge and learning, how can education and, more importantly teachers, raise the profile of critical independence amongst its' students? Therefore, it was important to explore, during the observations, to what extent students perceived 'knowing the answers' during lessons and whether students placed less importance, in lessons, on the skills which cannot be used to fulfil their goals. Or as de Bono described that students close down any possible development of independence or critical thinking skills due to their preoccupation with 'knowing the answers'.

Lesson 2: During the opening of the lesson the teacher addressed the impending examination and that the lesson would be focused on students developing exam skills in 'writing formal letters'. One of the main focuses of the lesson was to explore how formal letters are organised in terms of the formatting and the structure of persuasive arguments. The teacher initially explored the positioning of addresses, dates, recipient address and sign-off as a quick starter activity to recap on previous learning. The main part of the lesson focussed on the content of the paragraphs, and more importantly, how to structure a persuasive argument. The students completed the starter task and worked in pairs to decide on how best to structure a persuasive letter through a card sort. During feedback from this activity, the teacher described the examination weighting and how examiners would award possible responses; the main weighting would be awarded to content and how students constructed their arguments.

After the discussion, students appeared quite clear on how the examiner would award responses, and students were given a past exam question to respond to in the exam time frame. Interestingly, at this point, students became increasingly concerned about where the addresses, dates, etc. would be placed asking 'if they should be on the right or left hand side?' and 'Is it sincerely or faithfully?'. The teacher responded, 'Although the format is important, no explicit marks would be awarded for getting the address in the right corner. You need to focus on the content, as this will get you the marks'. After this response, students continued to ask, 'What address should I use? I don't know the School's address.' During this activity, students continued to ask format based questions for 12 minutes of the 20 minute time allowance.

I found this observation particularly interesting, in relation to the idea that students are preoccupied with the acquisition of knowledge and factual, 'right or wrong answers'. In this case, students seemed to become fixated with remembering the formatting and layout of formal letters. They were so preoccupied with where the addresses are placed, where the date is placed and whether they are using 'faithfully; and 'sincerely' correctly. Interestingly, even after the teacher made it very clear that the examiner would look for a student to understand they were writing a formal letter but not explicitly award marks for the correct layout, students were still only interested in the part which they could get, as far as they were concerned, right or wrong. It could be argued, that students may have moved to what they perceived as the 'safest' part of the task as they were unconfident with completing the part of the task which would require them to think independently. I think, as was argued in the teacher interviews, 'these students don't get modelling or scaffolding in the actual exams which is what we are here to make them achieve that this lesson' and, as the point the teacher was making, the lesson observed was the last lesson on this type of writing before the exam, so students should have been in a position to approach the task confidently. Therefore could it be argued, as further described in the teacher interviews, 'If anything, I think the constant need to model and scaffold leaves students with an ingrained need to have that support constantly in lessons.'

This idea of interpretation and developing individuals is seen as something difficult in non-fact based subjects such as English and, it could be argued, that students are not made to appreciate, and have confidence, in their own ideas and opinions and that this 'appreciation' and 'confidence' should be something built up over time, where scaffolding and modelling is phased in. Out of lessons this occurs in a way which develops independence and critical thinking skills in a more strategic way; not just being a case of removing all support in the lesson before the exam. Therefore, a student's confidence would increase as they were required to leave the scaffolding behind.

Also, questions could be raised about the effectiveness of independence at this stage of a student's education- could it be seen as being 'too late'? At this point in their education, is it only rational that GCSE students place higher emphasis on 'knowing' the crucial information and facts, as opposed to thinking creatively? The students who are about to sit their GCSE exams have been subject to the same rhetoric about the importance of these qualifications throughout their education, so therefore, they could already have been predisposed to the acquisition of

examination knowledge well before the actual event. And subsequently, any attempts by the teacher to steer students in to a different type of learning may be doomed to failure.

Opportunities to extend knowledge

An important part of developing independence and a students' ability to think critically is in providing students with the opportunities to extend their knowledge in lesson or to have opportunities in lesson to consider possible ideas and deliberate over various interpretations. This is an important skill for teacher to develop in students as it is one way that teachers can build confidence in students when it comes to their own abilities and it is this confidence that will ultimately provide students with the ability to achieve both academically and holistically. One theorist who places great emphasis on opportunities to extend knowledge is de Bono who recognises these ideals in the form of 'lateral thinking' or to develop students facilities as thinkers and to move away from thinking in a linear process, or in convergent ways, to adding divergence to their capabilities and the ability to see multiple answers not just a single, definitive conclusion. For the supporters of divergent thinking it is crucial that students embrace a number of avenues to explore and endless possibilities to explore in order to respond to education (1976:15). This idea of interpretive and divergent thinking is also shared by more contemporary commentators such as Robinson who also agrees that students in a changing world should be taught to think in different ways and not to only consider the linear options (2010). Although, in relation to this idea of students thinking about multiple answers, there needs to be a sense of reason adding to these ideologies at some point: a student's ideas and interpretations need to work in conjunction with reality and feasibility but in essence being able to see, recognise and appreciate alternative viewpoints and interpretations is a skill needed by students on both the academic level and as a matter of personal development.

During a number of observations a range of opportunities for students to extend their knowledge was observed through a range of methods and for differing durations. However, in contrast to this, a number of lessons limited student responses and sought to force students into a singular train of thought which limited the responses from students.

Lesson 3: The objective of the lesson centred on students analysing the language of conflict in Romeo and Juliet and aimed for students to make links with the development of conflict in set scenes through Shakespeare's use of language. As the lesson progressed students were taken through a number of initial activities such as defining the term 'conflict' in the starter activity and then identifying possible evidence to support the rising tensions in the scenes. The teacher had placed 4 categories, or types of conflict, for the students to place their evidence under on the IWB. These categories were used for students to feedback during the plenary.

The students prepared their responses and were asked to explain how they had divided their examples in to the 4 categories. During this plenary students were eagerly articulating their reasons for their choices to which other groups were asked if they agreed or not – the choice was then opened up for the whole class to discuss. During this discussion the students dominated the feedback, suggesting possible reasons for and against the other groups choices- the students began to develop a discussion based on their prior knowledge and interpretations of the text. In addition, each group was asked to feedback and, in turn, all students were asked at some point to participate in discussion.

Observing this activity reinforced the thoughts of de Bono and Robinson. During this lesson it was clear to see the engagement of students in the lesson and how they were, to some extent, taking ownership for their choices. Although, not all students participated equally, students were asked to engage in some way and to make clear reasoning for their choices. Equally, the teacher adopted a different type of role from what was observed in the previous parts of the lesson, where the lesson was more teacher-led: in the final stage the teacher moved away from the discussion allowing students the opportunity to articulate their own thoughts without interruption. When the teacher spoke, it was to prompt the discussion or to add another dimension for consideration. Therefore, through the development of a well-resourced lesson, where the teacher allowed the students sufficient time to consider ideas and interpretation, (in terms of students having opportunity to extend their knowledge), this lesson showed evidence of this development.

Alternatively, I was able to observe a similar lesson by a different teacher which once again shared the same topic and objective which saw the lesson approached in an alternative way.

Lesson 4: Students were given a number of pieces of evidence which were colour-coded so they could be grouped easily. In the final ten minutes of lesson the teacher re-visited the four types of conflict and asked students to group their evidence in to the 4 categories. The teacher then asked one group to say which coloured quotes they had placed under which category. The group responded and the teacher then revealed the correct position of the quotes, the students who fed back in the plenary had mixed their grouped quotes against the categories. The students were then asked to stick the quotes in to their books in the corresponding places.

In opposition, this lesson although very similar, limited student responses. By having a preconceived 'correct' list the teacher removed all opportunity for students to discuss their answers. Therefore, students saw the quotes as only fitting under one category which was something that the other group had realised was not the case. In addition, this lesson, by activity, limited the opportunity for students' to engage with the language of Shakespeare and consider the impact of the language in a more practical manner. The latter lesson, removed all creativity, individual interpretation and consideration of ideas. This was further compounded by the colour coding of the quotations, therefore, already placing the quotes into groups which removed the need for students to even read them in detail and made the whole process more mechanical and functional. Although the ability of this group was slightly lower, I didn't feel that the students' were supported by the additions; I felt they were more restrictive in terms of the engagement of students and ultimately, their development as independent and critical learners.

Conclusion

The observations sought to explore a number of different areas and, in particular, they were the study's main opportunity to observe teachers and students in 'reality' and to make links with the comments made during the questionnaires and interviews.

Overall, it was possible to observe how students respond in lessons to the activities set by their teachers and how the role of independence was, if at all, embedded into lessons. Subsequently, for some teachers, the development of independence was successful in terms of providing opportunities for students to develop these skills through discussion, independent and group working. The lessons, I observed all had opportunities to develop independence and critical thinking in students'; however, not all lessons fully exploited these opportunities to the full potential. In some cases, it was apparent that teachers were not using the dialogue of independence and, as described by de Bono, teachers seemed to teach core curriculum on the assumption that independent and critical thinking skills would just develop in students (1975:14). Therefore, a more focussed implementation of the terminology of independence would be a way forward. It could be argued that, although students were given the opportunities, they did not always know how to react or conduct themselves. Therefore more explicit reference to what 'effective participation' or 'team work' actually looks like in a practical setting would benefit students. Alternatively, the more successful lessons were the ones that allowed students opportunities and time to respond to tasks and maximised on the opportunities for development.

Chapter 8

Conclusion

Research question

Gaining a deeper understanding about the role of independence and critical thinking skills was the main aim for my research design. The essence of my question was to establish the current climate for teaching and learning of independence and critical thinking skills in schools. In order to explore my research proposal it was important for the research design to accommodate the perceptions and interpretations of both practitioners and students.

The study explored how students responded to the development of 'thinking skills' in a practical setting; exploring to what extent lessons are designed and delivered to develop a student's ability to think both critically and independently. It was imperative to investigate the opinions students have about the implementation of the PLTS, and if they are able to recognise the importance of developing these skills in lessons. Similarly, it was important for my study to explore how teachers feel about the impact new Ofsted and DfE criteria has on the overall development of students and in the planning of lessons.

Consequently, I will ask if the current PLTS paradigm has allowed schools the opportunity to make provisions for students to develop as learners and, more importantly, if they are seen as a valued addition to the curriculum.

Summary of main findings

The success of PLTs

One of the main areas highlighted by my findings was the extent to which PLTS have become embedded in education, as part of the framework which they are assessed by, and the intangible measure of success. For some schools such as the Thomas Telford School and Topping and Trickey's small-scale study (2007), where there was an intensive development of the teaching and learning of independence and critical thinking, evidence suggested student attainment increased; for these schools, development of tailored programmes are showing benefits. However, these schools only seem to belong to a small minority and in fact, are forced to take

their commitment to developing independence to a new level with targeted CPD development for teachers being the common factor in both cases.

It could be argued that the introduction of the PLTS did not go far enough in allowing schools opportunities and resources to develop worthwhile programmes. In essence, the DfE provided schools with the framework and limited resources and told them that this was now 'important' which then left all responsibility to school leaders with no additional provisions to ensure effective implementation.

In the current educational climate, is the development of the PLTS a concept that can only be embraced by the 'academically successful' schools or schools who are not under scrutiny for behaviour, attainment or attendance? Understandably, schools are forced to address the issues that are measurable and more importantly those which make the school appear to be achieving which leaves the development of independence and critical thinking as an inferior counterpart.

Recognising independence

This leaves the bigger question to be asked about whether the PLTS were always doomed from the start. The current system is driven by targets and success measurements so implementing independence and critical thinking as a valued part of the curriculum would always be challenging. From the research, it became apparent that teachers shared the notion that they did nothing different in their lessons since the introduction of the PLTS in 2007 and in fact the PLTS had become another 'tick box' exercise and made no impact on the way they delivered lessons. If this is the case, then it could be argued that in the current system the PLTS are an ineffective burden, and in order for them to work the ideology about reassessing the current institutional schooling arrangements needs addressing: the revolutionary paradigm suggested by Robinson and de Bono may be one of the ways to tackle this issue.

In its current form, my findings indicated that students were proficient with the labels associated with the PLTS but when probed further to describe these skills in more detail they seemed to lose confidence. Although this does not mean that they are incapable of being 'successful' in this area, it could show that students do not 'know' about their learning or that they do not understand the concept of independence and critical thinking. Either way, this lack of understanding stands in opposition to the doctrine set out by the DfE and Ofsted who want to see a, 'shift of responsibility for the learning process from the teacher to the pupil' (2011:1).

Interestingly, the only way for Ofsted to measure the success of this 'shift' in schools is through observing lessons during Ofsted monitoring which stands in contradiction to the holistic nature of the development of independence and critical thinking. Realistically, it seems naïve for DfE and Ofsted to assume that they can measure the success of something so complex during a 20 minutes observation. Therefore, if this is the case, our schools may be right to place less emphasis on developing independence and more importantly, the whole notion of independence and critical thinking could be seen as an unworkable concept in education.

Climate for learning

One idea to arise from the research was the idea that behaviour impacted on the development of students both independently and academically, 'Some students cannot respond sensibly to any changes in their routine. The use of teamwork gives students the opportunity to misbehave or not complete any work.' (Teacher H, teacher questionnaires). Despite these concerns, there seems to be a preconception by proponents of critical thinking that all students are predisposed to learning when realistically this is not the case. During my research into the concept of theoretical arguments about independence, the idea that all students had a desire to learn became an unwritten assumption when it could be suggested that my findings stand in opposition to these notions.

Through the research it became apparent that students place more emphasis on 'knowing the answer' or completing aspects of their qualifications that are tangible or they recognise as directly linking to their 'academic worth' (1976:15). In contrast, as with developing independence, it could be argued that students do not see the benefits associated with the skills of independence and critical thinking because as discussed previously, we currently have a system driven by exam success which has permeated student psyche.

Furthermore, it could be contradictory to assume that independence can inflate exam success when students can cram for national examinations: maybe there is an argument to question the current examination system where there is a need to retain the academic benchmark but to better reflect the development of independent and critical thinking skills. If the development of students as independent and critical thinkers is a genuine goal in education then more needs to be implemented to ensure its survival and impact on achieving its goal. The research conducted suggested that in their current form, PLTS are ineffective in school with students

reluctant to embrace them and teachers sceptical about their value which if this continues leaves the future of PLTS in a dubious position.

Study limitations

This study aimed to examine the role of independence and critical thinking to make the connection between theory and the reality of teaching independence and critical thinking in modern schools. I was concerned with the assumption that teachers trained in a specific subject, were expected to deliver a new and in some ways radical discipline using the same academic constraints that govern the success measurement for schools and which in some cases students were not disposed to learning.

One of the main concerns as a lone researcher is ensuring that the research methods are realistic and more importantly, that they are suitable methods to achieve worthwhile findings. Although the research conducted raised a number of different questions and areas of exploration it would have been interesting to widen the scale of the teacher questionnaires and individual interviews to accommodate the interpretations and perceptions of teachers from different departments. It would be interesting to examine how students respond to the development of independence and critical thinking skills in different curriculum bases, especially non-core subjects – would students have different perceptions of independence in subjects which are not deemed as crucial to a student's academic future?

Using action research as a methodological approach allowed my research to examine the concept of independence and critical thinking in a real life and practical setting. The research design exposed areas of discussion in light of the theoretical debates about the acquisition of independence. However, on reflection my research could be enhanced by more detailed enquiry in to the students and their abilities as independent and critical learners. Although the student questionnaires provided some answers to the research questions in order to strengthen my research design I would look to examine in more detail the relationships students have with the development of independence and critical thinking. In particular: I would use focus groups or individual interviews to further explore the perceived benefits for students both in contributing to academic success and in the wider holistic development of students.

Further research

The current political climate has many new and emerging implications for education over the coming years. The publication of '*The Importance of Teaching: The Schools White Paper*', in 2010, outlined a number of goals for education which will have an impact on the future development of independence and critical thinking. The new frameworks introduced by Ofsted in January 2012 highlighted the focus on inspectors spending more time observing lessons during inspections - as the HMCI speech in 2011 stated, 'The slimmer framework will allow inspectors to spend even more time observing the quality of teaching in classrooms' (2011:5). This change of focus will impact on the development of independence in the classroom. With this as the future focus, schools will need to embed effective provision for students to take on a more active role in the classroom: ultimately, Ofsted will judge lessons based on, 'the shift of responsibility for the learning process from the teacher to the pupil' (2011:1). Therefore, these changes to the Ofsted criteria have indicated a change in education philosophy and with the introduction of 'The Education Bill', this change is set to continue. It will be interesting to see how the development of teaching and learning will fit in to this new model.

One area highlighted by this study was the value and importance of further study of the impact of independence and critical development on student attainment, particularly in challenging schools and for students who are not predisposed to developing their skills as learners. There would be opportunities to further research the impact of provision in challenging schools and how these schools allocate time and resources to the teaching and learning of independence. Therefore, could there be a link between the success of PLTS implementation and the academic achievement of students? It could be argued that students have to be predisposed to learning for development to happen or are challenging schools missing an opportunity to develop their students by using behaviour an excuse to not dedicate the time and resources.

Finally, this study has allowed me to examine the concept of teaching and learning in a way that will change how I perceive the development of independence and critical thinking of my own students and as a whole school concern. My findings will inform how I, as a practitioner, devise and implement the PLTS provision in my own teaching but will also allow me to explore how my school can deepen the experiences our students have with their development as independent, critical thinkers.

Appendices:

Appendix A.

From: Qualification and Curriculum Authority

A Framework of personal, learning and thinking skills, DfE, 2007

The framework comprises six groups of skills that, together with the functional skills of English, mathematics and ICT, are essential to success in learning, life and work. In essence, the framework captures the essential skills of: managing self; managing relationships with others; and managing own learning, performance and work. It is these skills that will enable young people to enter work and adult life as confident and capable individuals. The titles of the six groups of skills are set out below.

- Independent enquirers
- Creative thinkers
- Reflective learners
- Team workers
- Self-managers
- Effective participators
-

For each group of skills, a focus statement sums up the range of skills. This is accompanied by a set of outcome statements that are indicative of the skills, behaviours and personal qualities associated with each group. Each group is distinctive and coherent. The groups are also interconnected. Young people are likely to encounter skills from several groups in any one learning experience. For example, *independent enquirers* set goals for their research with clear success criteria (*reflective learners*) and organise and manage their time and resources effectively to achieve these goals (*self-managers*). In order to acquire and develop fundamental concepts such as organising oneself, managing change, taking responsibility and perseverance, learners will need to apply skills from all six groups in a wide range of learning contexts from ages 11 to 19.

Independent enquirers

Focus:

Young people process and evaluate information in their investigations, planning what to do and how to go about it. They take informed and well-reasoned decisions, recognising that others have different beliefs and attitudes.

Young people:

- identify questions to answer and problems to resolve
- plan and carry out research, appreciating the consequences of decisions
- explore issues, events or problems from different perspectives
- analyse and evaluate information, judging its relevance and value
- consider the influence of circumstances, beliefs and feelings on decisions and events
- support conclusions, using reasoned arguments and evidence.

Creative thinkers

Focus:

Young people think creatively by generating and exploring ideas, making original connections. They try different ways to tackle a problem, working with others to find imaginative solutions and outcomes that are of value.

Young people:

- generate ideas and explore possibilities
- ask questions to extend their thinking
- connect their own and others' ideas and experiences in inventive ways
- question their own and others' assumptions
- try out alternatives or new solutions and follow ideas through
- adapt ideas as circumstances change

Reflective learners

Focus:

Young people evaluate their strengths and limitations, setting themselves realistic goals with criteria for success. They monitor their own performance and progress, inviting feedback from others and making changes to further their learning.

Young people:

- assess themselves and others, identifying opportunities and achievements
- set goals with success criteria for their development and work
- review progress, acting on the outcomes
- invite feedback and deal positively with praise, setbacks and criticism
- evaluate experiences and learning to inform future progress
- communicate their learning in relevant ways for different audiences.

Team workers

Focus:

Young people work confidently with others, adapting to different contexts and taking responsibility for their own part. They listen to and take account of different views. They form collaborative relationships, resolving issues to reach agreed outcomes.

Young people:

- collaborate with others to work towards common goals
- reach agreements, managing discussions to achieve results
- adapt behaviour to suit different roles and situations, including leadership roles
- show fairness and consideration to others take responsibility, showing confidence in themselves and their contribution provide constructive support and feedback to others.

Self-managers

Focus:

Young people organise themselves, showing personal responsibility, initiative, creativity and enterprise with a commitment to learning and self-improvement. They actively embrace change, responding positively to new priorities, coping with challenges and looking for opportunities.

Young people:

- seek out challenges or new responsibilities and
- show flexibility when priorities change
- work towards goals, showing initiative, commitment and perseverance
- organise time and resources, prioritising actions
- anticipate, take and manage risks
- deal with competing pressures, including personal and work-related demands
- respond positively to change, seeking advice and support when needed
- manage their emotions, and build and maintain relationships.

Effective Participation

Focus:

Young people actively engage with issues that affect them and those around them. They play a full part in the life of their school, college, workplace or wider community by taking responsible action to bring improvements for others as well as themselves.

Young people:

- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

Appendix B.

Post-lesson teacher questionnaire

1. What independent/critical thinking skills did students need to use to access your lesson?

2. How did your lesson seek to develop these skills?

3. How successful do you think your lesson was in terms of student independence?

4. For those students who succeeded, what skills did they exhibit to show this success?

5. How did you assess this 'success'?

6. Were any students unsuccessful in displaying or utilising the necessary independence/critical thinking skills?

7. In your opinion, what prevented these students from not displaying the skills they needed for success?

8. How will the development of these skills impact on your future lesson planning?

If you have any further comments, please use the reverse – **Thank you!**

Appendix C.

Student Questionnaire

Which of these skills do you think are the most important?

- When I am stuck I wait for the teacher to tell me the answer
- I can assess my work and make clear targets
- I work better with friends
- I can see other points of view
- I can organise my time

What skills do you develop in English lessons?

Highlight which skills you feel you needed in today's English lesson;

- | | | |
|------------------------|----------------------------|----------------------|
| 1. Self-management | 2. Team-work | 3. Creative learning |
| 4. Reflective learning | 5. Effective participation | 6. Independent work |

Section 1: Self-Management

	Never	Rarely	Sometimes	Usually	Always
I look for a new challenges to get involved with	1	2	3	4	5
I keep trying with tasks, even when it is hard	1	2	3	4	5
I can organise my time and resources well	1	2	3	4	5
I can balanced my time between school work, homework and other activities	1	2	3	4	5
I manage my own emotions and have good relationships with others	1	2	3	4	5

Section 2: Team-Working

I work well in my groups, even if it's not a group of friends	1	2	3	4	5
I change how I behave to lead a group or help others	1	2	3	4	5
I encourage other people to share their views	1	2	3	4	5
I give good advice on how to improve.	1	2	3	4	5

Section 3: Creative Thinking

	Never	Rarely	Sometimes	Usually	Always
I think of original and new ideas to complete a task or solve a problem	1	2	3	4	5
I think of ways to extend my learning by asking new questions	1	2	3	4	5
I ask questions to check my thinking is correct	1	2	3	4	5
I changed my ideas to adapt new circumstances	1	2	3	4	5

Section 4: Reflective Learning

I set my own targets for improving my work	1	2	3	4	5
I look back over my work and identify how to improve it for myself	1	2	3	4	5
I take compliments, and advice for improvement positively	1	2	3	4	5
I identify ways in which I could improve as a learner	1	2	3	4	5

Section 5: Effective Participation

I take part in a discussions	1	2	3	4	5
I can make a clear argument to persuade others	1	2	3	4	5
I think of ways to help my group to solve problems or achieve goals	1	2	3	4	5
I support my team and work towards a goal, even if I don't agree	1	2	3	4	5

Section 6: Independent Enquiry

I think of things that I want to learn about for myself	1	2	3	4	5
I find out about things on my own	1	2	3	4	5
I can look at things from other peoples' point of view	1	2	3	4	5
I work out what information is useful and accurate	1	2	3	4	5

What was the best thing you did this lesson?

References:

- BBC (2007). 'Too Many' Cannot Read and Write, Article. Retrieved October 20, 2011 from <http://news.bbc.co.uk/1/hi/education/7856001.stm>
- Beere, J. (2010). Embedding PLTS in whole school practice. Article. Retrieved October 21, 2011 from jackiebeere.com/documents/articles/embedding%20plts%20final.pdf
- Bell, J. (2010). *Doing your research project*. Maidenhead: Open University Press.
- Bransford, J., Brown, A., Cocking, R. (2000). *How People Learn: Brain, Mind, Experience and School*. Washington: National Academy Press.
- Bourdieu, P. (1977). Cultural Reproduction and Social Reproduction. In Karabel, J., & Halsey, A. H. (eds.) *Power and Ideology in Education* (pp. 487-511). Oxford University Press: New York.
- Claxton, G., (2004), Learning is learnable (and we ought to teach it). In Cassell, J. (Eds.), *National Commission for Education report Ten Years On* (pp.237-250).
- Claxton, G., (2006). Cognition: Beyond cleverness: How to be smart without thinking. Publication. Retrieved May 27, 2011 from <http://www.guyclaxton.com/documents/Henry%202006%20chapter.pdf>
- Claxton, G. (2006), Cultivating creative mentalities: A framework for education. In *Thinking Skills in Education*, vol. 1, pp. 57-61.
- Cohen, L., Manion, L., Morrison, K. (2007). *Research Methods in Education*. London: Routledge.
- Cottrell, S. (2011). *Critical thinking skills: developing effective analysis and argument*. Basingstoke: Palgrave.
- Daniels, H. (1996). *Introduction to Vygotsky*. London: Routledge.
- De Bono, E. (2010). *Six Thinking Hats*. London: Penguin.
- Dewey, P. (2010). *Research Methods for Education*. London: Pearson.
- DfE (2010). The Importance of Teaching: The Schools White Paper. Department for Education publication. Retrieved October 20, 2011 from <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/CM%207980>

Entwistle, N. (1996). *Styles of teaching and learning: an integrated outline of educational psychology for students, teachers and lecturers*. London: David Fulton.

Fisher, A. (2001). *Critical thinking: An introduction*. Cambridge: Cambridge University Press.

Fisher, R. (1998). *Teaching Thinking: Philosophical enquiry in the classroom*. London: Cassell.

Fisher, R. (2008). *Teaching Thinking: Philosophical enquiry in the classroom* (3rd ed). London: Cassell.

Futurelab (2011). Enquiring Minds. Website. Retrieved February 18 2011 from <http://www.enquiringminds.org.uk/>

Gorard, S. (2004). *Combining methods in educational and social research*. Maidenhead: Open University Press.

Glaser, R. (1983). Education and thinking: the role of knowledge. University of Pittsburgh Learning Research and Development Centre, pp 1-31.

Glevey, K. (2006). *Thinking and education*. Leicester: Matador.

Hitchcock, G. (1995). *Research and the teacher: a qualitative introduction to school based research*. London: Routledge.

Hopkins, D. (1993). *A teacher's guide to classroom research*. Buckingham: Oxford University Press.

iRIS Connect Ltd (2011). iRIS Connet, website. Retrieved October 20, 2011 from <http://www.irisconnect.co.uk/iris-connect/what-we-do,2011>

Jarvis, M. (2005). *The psychology of effective learning and teaching*. Cheltenham: Nelson Thornes.

Jarvis, P. (2003). *The theory and practice of learning*. London: Kogan Page.

Kemmis, S., & McTaggart, R. (1982). *The Action Research Planner*. Victoria, Australia: Deakin University Press.

Kettley, N. (2010). *Theory building in educational research*. London: Continuum.

Lipman, M. (2003). *Thinking in Education* (2nd ed.). Cambridge: Cambridge University Press.

Lipman, M. (2008). *Teaching Thinking: philosophical enquiry in the classroom* (3rd ed.). London: Continuum.

- Lutterll, W. (2010). *Qualitative Educational Research*. London: Routledge.
- Mazur, J. (2006). *Learning and behaviour*. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Meadows, S. (1993). *The child as thinker: the development and acquisition of cognition in childhood*. London: Routledge.
- Meyer, B., Haywood, N., Sachdev, D. and Faraday, S. (2008). What is independent learning and what are the benefits for pupils? Department for Education publication. Retrieved May 28, 2011 from <http://www.education.gov.uk/schools/toolsandinitiatives/tripsresearch/digests/a0013261/themes-thinking-skills>
- Meyer, B., Haywood, N., Sachdev, D. and Faraday, S. (2011). Themes: Thinking Skills/Assessment for Learning, DfE Publication. Retrieved May 28, 2011 from <http://media.education.gov.uk/assets/files/doc/i/independentlearning.doc>
- Mairead, D. (2005). *Becoming a Researcher: a research companion for social sciences*. Maidenhead: Open University Press.
- Munn, P. (2004). *Using questionnaires in small-scale research: a beginners' guide*. Glasgow: Scottish Council for Research in Education.
- O'Hara, M., Carter, C., Dewis, P., Kay, J., Wainwright, J. (2011). *Successful dissertations: the complete guide for education and childhood studies students*. London: Continuum International Publishing Group.
- Ofsted (2007). The National Teaching and Learning Change Programme: A review of teaching and learning frameworks, Report. Retrieved October 20, 2011 from <http://www.ofsted.gov.uk/resources/national-teaching-and-learning-change-programme-review-of-teaching-and-learning-frameworks>
- Ofsted (2009). Inspection report: Balby carr CSC, Report. Retrieved 20 October, 2011 from <http://www.ofsted.gov.uk/inspection-reports/find-inspection-report/provider/ELS/106802>
- Ofsted (2011). The New School Inspection Framework, Report. Retrieved January 14, 2012 from <http://www.ofsted.gov.uk/resources/inspection-2012-proposals-for-inspection-arrangements-for-maintained-schools-and-academies-january-2>
- Pring, R. (2004). *Philosophy of Educational Research*. London: Continuum.
- Public Accounts Committee (2009). Skills for Life: Progress in Improving Adult Literacy and Numeracy, Publication. Retrieved May 28, 2011 from

<http://www.publications.parliament.uk/pa/cm200809/cmselect/cmpublic/154/154.pdf>

QCA (2007). A Framework of Personal, Learning and Thinking Skills, Department for Education, Publication. Retrieved May 28, 2011 from http://www.britishcouncil.org/session_8_plts_framework.pdf

QCA (2008). Implementing QCA's framework for (PLTS) personal, learning and thinking skills, e-Bulletin. Retrieved May 21, 2011 from <http://www.teachingexpertise.com/e-bulletins/implementing-qcas-framework-for-plts-personal-learning-and-thinking-skills-3087>

Robinson, K. (2010). Changing Education Paradigms, speech. Retrieved July 10, 2011 from http://www.youtube.com/results?search_query=ken+robinson+changing+education+paradigms&aq=4&oq=ken+robinson

Ross, K. (Ed.). (2005). Education research: some basic concepts and terminology. International Institute for Educational Planning: Paris

Schunk, D. (2004). *Learning theories: an educational perspective*. Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.

Simpson, M. (1995). *Using observations in small-scale research: a beginners' guide*. Edinburgh: Scottish Council for Research in Education.

Thomas, G. (2009). *How to do your research project: a guide to students in education and applied social sciences*. London: Sage.

Topping, KJ., and Trickey, S. (2007). 'Philosophy for Children': deepening learning for 10 to 12 year old pupil, in *British Journal of Educational Psychology* (2007), 77, pp. 271-288. Retrieved February 15, 2012 from <http://www.google.co.uk/search?hl=en&q=%E2%80%99Philosophy+for+Children%E2%80%99+deepening+learning+for+10+to+12+year+old+pupil+Author%28s%29%3AKJ+Topping+and+S+Trickey+Publisher%3A+British+Journal+of+Educational+Psychology+%282007%29%2C+77%2C+pp.+271-288+%5BOriginal+title%3A+Collaborative+philosophical+enquiry+for+school+children%3A&meta=>

Tylee, J., Litt, M. (2007). Teacher as facilitator: one of the face-to-face teacher roles, publication. Retrieved October 20, 2011 from www.education4skills.com/jtylee/teacher_as_facilitator.html

Williams, S. (1993). Evaluating the effects of philosophical enquiry in secondary schools. The village community school philosophy for children study. Retrieved January 3, 2012 from <http://p4c.com/files/p4c/villagep4c.pdf>

