STUDENT LEADERSHIP OF ICT FOR LEARNING

IN A HIGH SCHOOL

A thesis submitted to the University of Manchester for the degree of Doctor of Education in the Faculty of Humanities

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SCHOOL OF EDUCATION
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ABSTRACT

The research in this thesis explores how and why student leadership of learning with ICT can impact the knowledge, practice and environment in one high school. Interest in student participation and student voice increased with the adoption of the UN Convention on the Rights of the Child over a decade ago by countries including the UK, USA and Australia, but questions remain as to whether or not this has resulted in schools becoming more democratic. Although much valuable research has been done relying on the views of students themselves, few studies actually examine student participation in school leadership. This research therefore seeks to further understanding in this area by exploring student participation in school ICT policymaking, and the consequences of this involvement.

I set up a student-led project at a private high school in the south-east of England. This project, which lasted 8 months, became a lens through which I examine student leadership of ICT for learning. Twenty-five students aged 14–19 led staff at the school in developing research-based ICT policy statements for recommendation to the school’s senior management team. They formed a consortium in which the 13 staff members served as their ‘critical friends’, and worked with them in devising the policy recommendations. I studied this project over 33 months through observations using case study methodology. Data generated through participant interviews and document analysis, along with literatures in related fields of educational technology, educational leadership and student participation are used to address how and why student leadership of ICT for learning can contribute to changes in knowledge, practice and the school environment. Distinctly, the specific doctoral research investigates the role of these students in leading learning with ICT from the perspective of a researching practitioner: not just what role they can and do play but also what are the consequences of their involvement in school policymaking.

The findings show that (1) ICT leadership at the school is problematic, and students hitherto played no part in decision-making about school and classroom ICTs; (2) the student-led project highlighted the fact that students can provide knowledge and understanding about digital technologies, and that there is need for students and staff to develop a shared ethos about ICT for learning at the school; (3) students are quite capable of leading ICT changes in the knowledge, practice and environment at the school. The thesis goes further to use Bourdieu’s thinking tools—field, habitus, capital and strategy—to analyse student leadership at the school.
DECLARATION

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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CHAPTER 1

Overview of the thesis

Introduction

The research reported in this thesis seeks to explore the processes, experiences and impact of student leadership of Information and Communications Technology (ICT) for learning. Importantly, I am interested in how student leadership contributes to knowledge, practice and the school environment. I examine how an ethos of shared planning and decision-making might be developed, through student leadership, to improve ICT for learning at Oaktree High School (a pseudonym). Oaktree High School is one of three divisions—high, middle and low—overseen by the head of Oaktree School. Each division has its own administration, headed by a principal. The school is an independent fee-paying school located in the south-east of England, and it is one of four private schools owned by the same organization; two others are also located in the south-east and the fourth is overseas.

In 2009 I set up an action research project at Oaktree High School, involving 25 students aged between 14 and 19. They worked with staff at the school to devise policy statements about teaching and learning with ICT, for recommendation to the Senior Management Team (SMT). I call this project the Acorn Project and studied it over 33 months. The specific Doctoral Project began in 2009 and the research investigates the role of these students in leading learning with ICT from the perspective of myself as a researching practitioner: not just what role they
can and do play but also the consequences for the students, and the school, of their involvement in school policymaking. I have presented aspects of my work at several international conferences, including BELMAS 2012, BERA 2012 and EERA 2012, and have written four research papers: (Davies, 2008b), (Davies, 2009a), (Davies, 2010a) and (Davies, 2011b); two are published in peer-review journals. In examining the student leadership of ICT for learning and how it can and does contribute to changes in knowledge, practice and the school environment I use the Acorn Project as a lens through which to view student participation.

Interest in student voice has increased over the past decade and research suggests that students have valuable things to say about teaching and learning (e.g. Fielding and Bragg, 2003; Reay, 2006; Rudduck and Flutter, 2004; Rudduck and McIntyre, 2007); however, few studies have investigated student participation in school leadership. My Doctoral research therefore seeks further understanding in this area by exploring student involvement in school ICT policymaking, and the consequences of that involvement. In other words, the research uncovers student leadership and examines whether student voice as described and promoted in the literature is indeed all that it claims to be. I address the following research questions:

1. How does leadership in ICT operate in the school, and what role do students play?
2. Where and how is knowledge about teaching and learning with ICT generated?
3. How and why can student leadership of ICT for learning contribute to changes in knowledge, practice and the school environment?
The thesis goes further to analyse student leadership using conceptual thinking tools provided by Bourdieu (2000): field, habitus, capital and strategy. His theory of practice offers insights and understandings through these concepts, which are not readily visible to other approaches, and which can be employed to elucidate a range of social phenomena. Using this approach I reveal a habitus of the Acorn Project field and discuss how the student participants used strategy to gain capital within the field, thereby developing a conceptualization of student leadership.

**Rationale for the research**

**Personal motivations**

My research questions have evolved out of my professional life and are influenced by, and reflect my experiences as a teacher. I have been head of computer studies at Oaktree High since 2002. My duties in this role are both academic and managerial; I teach three computing courses each year, and regularly run workshops focused on helping teachers infuse ICTs into their subjects. In 2006 I began to notice a change in students’ attitudes towards school technologies: they no longer seemed interested in the ICTs provided by the school, preferring instead to bring along laptops and other digital devices from home. I became exposed to the body of research on leadership of ICT for learning after starting a doctorate in education at the University of Manchester in 2007. My studies have provided an avenue for me to explore reasons for students’ disengagement with school ICTs.

My first Doctoral research paper was a 10,000 word literature review of school ICT leadership (Davies, 2008b). This analysis revealed that the voices of those
who are intended to be the beneficiaries of school ICTs have to a large extent remained silent. Instead, much research has relied on the views of proxy informants such as teachers, ICT co-ordinators and principals (Yee, 2001). I related these findings to my professional experience and it gave impetus to my second Doctoral research paper (Davies, 2009a). This second paper is based on an empirical study conducted at Oaktree in 2009, which examined students’ views about the access to and the uses of school ICT.

My work is situated within a socially critical epistemology, which dictates that I seek perspectives that encompass a richer understanding of the complexity of human life and the multitude of forces that act on the individual. I began by analysing the literature on school ICT leadership. I then examined the opinions of students at Oaktree High about the ways in which ICT was used for teaching and learning at the school. Their revelation that the ICT practices in the classroom neither prepare them for the digital culture of the 21st century, nor include them, led me to explore how these students might become involved in decision-making about school ICT. The Acorn Project was set up to illustrate one such approach.

Although I am working to include the voices of students who from the outside seem to be privileged due to their socio-economic backgrounds and attendance at a fee-paying independent school (Reay et al., 2001a), I have identified that within the context of the school system, because of the way power works, students at Oaktree are positioned in such a way that they are largely excluded from decision-making, except as beneficiaries of elite adult strategies and plans. I
also wanted these learners to realise and appreciate the differences in attitudes towards school ICTs that exist between teachers and students and, through dialogue, to find common ground with staff about ways in which to use ICTs to improve learning. I began to envisage the developing of joint understanding between staff and students that could lead to the construction of new knowledge about school ICTs; I also wanted to explore how student-teacher power relations at the school, which have traditionally been grossly skewed, could be diminished by developing shared concern about ICT for learning. Not only did I want to see if these types of interaction were possible, I also wanted to understand how they could develop.

In my Doctoral Project I am simultaneously an *insider*—by virtue of being an employee at Oaktree High—and an *outsider* because I was acting as a researcher within the school. The former role was necessary in organizing and facilitating the Acorn Project. The Project involved students who were enrolled in a course I taught at the school, and so I had direct access to them daily through my teaching. My teaching methodology is inextricably connected to my belief in constructivism, my commitment to social justice, and my recognition of the power of multiple voices, and this has greatly influenced my Doctoral work. The Acorn Project had as its basis students’ desires to become involved in school ICT decision-making. Even though I set it up, I felt it was necessary for those students involved in it to understand the project plan from their own perspective. My constructivist pedagogy revolves around two principles: first, learners construct knowledge rather than receive it passively from the environment; second, learners come to know by constantly modifying their experience of the
world. Constructivism requires that students become active managers of their own learning in order to prepare themselves better to be autonomous thinkers and learners. I spent much time thinking of how best to steer my students to interpret the Acorn Project within the context of their participation, while at the same time ensuring that the course encompassed the content of the set curriculum.

For the Acorn Project I organised the students to lead the development of policy statements on ICT for learning by preparing them for their role as action researchers in the investigation. In my classes they were taught about how to prepare questionnaires, as well as collect, analyse and present data. For my Doctoral Project, I studied these students in their leadership role within the Acorn Project. I wanted to understand how they went about this task, their motivations, aspirations and interactions with adults involved in the Project, and how they were seen and accepted as leaders of the Project. Using case study methodology I collected data through observations, participant interviews and analysis of school documents.

**Situating my Doctoral research**

A natural starting point for my search for intellectual and methodological resources with which to approach my research is the literature on student voice/participation. The search revealed that while the body of research on student voice focusing mainly on the entitlements of students as espoused in the UN Convention on the Rights of the Child (UNCRC, 1989) has grown, little work has been done on the relationship between students and leadership (Mitra and Gross, 2009a). Scholars (such as Selwyn, 2011b; Whitworth, 2009) who
have undertaken social and political explorations of ICT urge researchers to take a critical look at the impact of technology on individuals and the communities within which they live. Student participation in school leadership seems an important issue to examine at a time when policy regimes ‘have made schools less hospitable places for students’ (Smyth, 2006a: 279). To examine how and why students can, and do, contribute to the development of school ICT policy, I track the development of educational technology (ICT) leadership since the 1980s to gain an understanding of the history of student participation in leading learning with ICT over the past thirty years. My fieldwork explores how an atmosphere of shared planning and decision-making might be developed through student leadership, to improve learning with ICT in school.

I build Smyth’s (2006b) argument suggesting that it is time for schools to move away from old regimes to a different kind of educational leadership that encourages authentic forms of student participation. He proposes learner-centred policy generation as a more inclusive, more democratic, way of generating school policies. Such arguments are akin to Luckin’s (2008) plea for the development of learner-generated contexts in educational technology, which she regards as a ‘more democratic learning economy ... where the balance between learner and teacher or mentor control is constantly changing’ (p 461). She contends that schools are now faced with the situation where many students know more than their teachers about digital technologies. There is also the argument that the students cannot use these tools in critical ways: they have facility with them in a technical way but not an educational one. But the political arguments in favour of student voice are strong, and in any democratic system
there should be checks and balances in place to ensure continuous renewal of its ideals: in other words the claim is made that democratic systems need to be publicly justified and have their legality defended regularly. Having students and staff collaborate on the development of ICT policy recommendations increases the chances of policy statements being evidence-based, with a facet of universality.

Unfortunately, the traditional structures of schooling do not coexist with these aims of student involvement in school life. Deep-rooted in the practice of schools is an ‘ideology of immaturity’ (Grace, 1995: 202), which claims that children and adolescents have not developed sufficient wisdom to be able to contribute to responsible decision-making about their own lives. This belief portrays students—regardless of their socio-economic backgrounds—as passive recipients of learning, irresponsible, and in need of discipline, which further undermines their rights as members of the school community. If the structures of leadership and knowledge production in schools are influenced by such convictions, then they can promote certain approaches to teaching and learning which ‘work in opposition to the development of qualities needed for a future that will demand collaboration, initiative, critical thinking and innovation’ (Carrington, 2007: 2). Therefore there is a need to position students as partners in school improvement.

The research aims to understand student leadership and uses ICT for learning as the setting for the investigation. My primary concern is about students’ emancipatory interests and the approach used takes into consideration the cultural practices within the school. The goal of the Acorn Project is in part
getting students at Oaktree to have a say in how ICT facilities are organised and used to benefit them. It is also about empowerment of these students through their negotiations with adults in the school, which has consequences for planning and implementing school ICT, and for ICT policymaking, rather than directly with teaching and learning with ICT. Student leadership is examined by drawing on Bourdieu’s (1977a) study of culture. His work has been used to understand education leadership (e.g. Gunter, 2001; 2003; Gunter and Forrester, 2010; Thomson, 2010; Wilkinson, 2010). Bourdieu’s (2000) approach allows researchers to transcend the dualities of structure and agency, objectivism and subjectivism. I use his concepts of field, habitus and capital to emphasise instead the relationship between agency—student leadership—and structure—the Acorn Project field. Agency allows for descriptions of the student leaders not simply in terms of their traits and characteristics but also in relation to the habitus of the Acorn Project. The Project field makes it possible to establish the context of student leadership as a structured social space, with its own properties and power relations. I use concepts from Bourdieu’s (2000) work to think through the interactions between the student leaders and adult participants in the Acorn Project, who are from other fields within the school with different hierarchies of influence and power structures.

I assert a socially critical epistemology, which assumes that democracy is necessarily participatory (Blaug, 2002). As long as young people are obliged to spend so much time in school—largely in classrooms—they should be given the opportunity to participate in deciding ways of utilizing digital technologies to optimise the quality of teaching and learning. In part, the Acorn Project can also
be seen as a way of helping young people to gain an understanding of their
democratic role within the school. Therefore the thesis is framed within the
theoretical perspective of symbolic interactionism, which offers a particular view
of the meaning of self, the nature of reality, the emergence and importance of
society, the nature of symbols, the importance of human communication, and the
future of humanity (Charon, 2009). In this view, meaningful reality is contingent
upon human practices being construed in and out of interaction between human
beings and their world, and developed and transmitted through symbolic
communication within social contexts. Individuals and groups use symbols,
especially language, to name, remember, categorise, perceive, think, deliberate,
solve problems, negotiate, create new ideas and ultimately direct themselves.
Symbolic communication provides a means of defining the present according to
a perspective or mental construction developed and altered in on-going social
interactions. It is through definition and action that, given the right knowledge
and tools, people can take control of themselves and their environment—
defining, thinking, and controlling their choices in the future. It follows that I can
only know what is going on if I understand what the actors themselves believe
about their world. The Doctoral Project therefore focuses on collecting,
analysing and interpreting the various perspectives of the participants in the
Acorn Project. Embedded in this theoretical framework is an epistemology of
constructivism that assumes a pluralist and relativist view of the reality. In this
view, student leadership of ICT for learning has multiple, mental constructions
held by individuals and groups. I therefore seek to capture a variety of
perspectives to enable me to come up with a holistic narrative that encompasses
the multiple views of the participants.
Structure of the thesis

The first five chapters of this thesis, including this introductory chapter, provide the conceptual and theoretical background that constitutes the narrative of my research. I include in Chapters 2 and 3 reviews of the relevant literatures on educational technology, learner-generated context, children’s rights, student voice/participation, democracy, educational leadership, power and policymaking in education; Chapter 4 contains a description of the research site, the Acorn Project, and the stages of my Doctoral research, and Chapter 5 provides a development of my research methodology, data collection and analysis techniques. Chapter 6 reports on and discusses my research findings. Chapter 7 describes my conceptualization of student leadership. Chapter 8 concludes the thesis by considering its contributions to knowledge, implications for policy and practice, and possibilities for future research.
CHAPTER 2

Student involvement in school ICT decisions

Introduction

This study is focused on examining the issues relating to student leadership of ICT for learning. Consequently, in this chapter I investigate the research evidence base from studies regarding the role of students in leading ICT for learning. I draw on literature on educational technology (ICT) and learner-generated context, and on children’s rights and student voice/participation to develop a multi-layered perspective that includes both a close analysis of the role of students in ICT leadership and the rights of students as citizens within the school community. There are no studies at present about student involvement in ICT decisions in private schools. However, as Green et al. (2008) point out, private schools recruit staff from state schools, so it can be inferred that while the internal organisations of schools within the state and private sectors may differ, many of the practices remain the same. The literature discussing studies carried out in the state sector (Arafah and Levin, 2003; Selwyn et al., 2009), revealed that little consideration had been given to students’ opinions on the impact of computers on their learning, which can be extended to private institutions. In sharp contrast are more recent ideas on learner-generated context—the appropriations, usages and connections that students make using ICTs outside the classroom—which provide motivation and justification for listening to students, and for learning about how they generate contexts that enhance their informal
learning. And as such, this chapter discusses why it is important for the student
voice debate to be concerned with learning with ICTs.

A look back at school ICT

The societal role of ICT is important in considering the current social, cultural
and economic functions of computers and the Internet. For these reasons ICT has
a strong impact on the development of school curricula in many countries. The
National Curriculum for ICT in England was suspended in September 2012 after
education minister Michael Gove deemed it ‘demotivating and dull’ (The
Guardian 2012: unpaged). This followed recent criticism by Eric Schmidt,
chairman of Google, who said the curriculum gave students no insights into the
development of computer software (The Guardian 2011). The Department for
Education is planning to introduce a revised ICT curriculum by 2014.

Similarly in the United States, Microsoft founder Bill Gates made the following
proclamation at the 2005 National Governors’ Conference:

Our high schools were designed fifty years ago to meet the needs of
another age. Until we design them to meet the needs of this century, we
will keep limiting—even ruining—the lives of millions of Americans
every year’ (eSchool News 2005: unpaged).

While not an education researcher, Gates’s comments reflect the concerns of
many educators, policymakers, and scholars regarding the effectiveness of high
schools in the United States. The conference at which Gates spoke was convened
specifically to discuss how to initiate change to improve public high schools. ICT
gets driven even higher on the political agenda in western countries as China and
India emerge as super-economies. The strength of their sheer numbers poses a
threat to the more established world powers, and one of the ‘commodities’ at
stake is technology-skilled personnel now required in almost every sector of society. An article in TimesOnline (2008: unpaged) revealed that computer technologies giant Cisco plans to accelerate its drive to train 360,000 network engineers in India to deploy its technologies by 2013 simply because ‘America isn't producing enough network specialists’.

Schools worldwide continue to spend large sums of money annually on technology infrastructure, with the aim of infusing ICTs into the curriculum. Recently there have been studies to examine the extent to which schools are developing the capacity to integrate ICT into learning, teaching and management processes. Much of the evidence gathered shows that there has been an increase in the number of computers and ICTs in most schools allowing them ‘to achieve baseline targets for computer-to-pupil ratios’ (Condie and Monro, 2007: 3), and that teacher competence and skills have improved in part due to increased ICT professional development opportunities (Schibeci et al., 2008). ICT is also now more embedded in the everyday practices in school than ever before: electronic attendance systems, online grade books, etc. However, there is a growing body of research (Eynon, 2009; Furlong and Davies, 2011) which confirms that students make more use of ICTs, particularly the Internet, at home than in school. So despite many years of huge investments in networks, computers and ICTs in educational institutions the actual implementation and use of school ICT is far less extensive and sophisticated (Selwyn, 2011a; 2011b) than it could be, and many questions remain surrounding who determines why and how computers are used to improve learning and instruction.
The use of computers in schools began over thirty years ago; however, a clear definition of educational technology remains to be reached despite various attempts at describing the scope of the field (Ely, 1972; Ely, 2008; Seels and Richey, 1994). There have been many shifts over the past four decades, due more to the introduction of new technologies than by conceptual reconfiguration, although ‘both have been influential’ (Ely, 2008: 244). The terms ‘educational technology’ and ‘instructional technology’ are sometimes used interchangeably in the literature. Ely (2008) points out that educational technology may encompass all uses of technology within the educational sector and not only technology’s use in instruction. I use educational technology throughout to refer only to ICTs intended to enhance learning, and investigate its development since the 1970s.

The rich developmental history of the field shows how several other fields have influenced it, in particular, learning psychology, instructional psychology, and cognitive psychology. It is the last of these that has promoted constructivism: a student-centred learning approach, which is now adopted by many practitioners (Duffy and Jonassen, 1992). The recent rise in new digital technologies, including education media, has served to increase the elusiveness of the scope of the field. Many educators now equate these digital technologies with educational technologies, using the terms interchangeably, but there is a conceptual distinction of the latter worth noting. Educational technology is concerned with processes of instructional design and learning. ICTs by themselves do not necessarily mediate learning; instead knowledge is produced through the cognitive processes produced by ICTs. This means that educational technology
serves the purpose of generating appropriate instructional designs that produce fruitful cognitive processes to facilitate the desired learning objectives. The understanding is therefore that the knowledge produced may be related to a variety of subject areas, and that there is a highly practical element to educational technology, which often involves the analysis of a pedagogical or other educational problem (Plomp and Ely, 1986), the use of ICTs to implement a solution, and then the evaluation of this solution by all affected parties (Carr and Kemmis, 1986). In other words, educational technology is about academic problem-solving with ICTs, rather than the ICTs being a solution to academic problems: ICTs are simply tools that could be used for solving problems.

In 1977 the American-based Association for Educational Communications and Technology (AECT) provided the following definition of educational technology, which encompasses all these ideas and highlights yet another important dimension of the field: that it involves people.

Educational technology is a complex, integrated process involving people, procedures, ideas, devices, and organization, for analyzing problems and devising, implementing, evaluating, and managing solutions to those problems, involved in all aspects of human learning (AECT, 1977, p. 1).

This definition mirrors what their British counterpart—the National Council for Educational Technology (NCET)—devised at around the same period: that educational technology is about computing for education rather than education about computing (NCET, 1969 as cited in Capel, 1992). Unfortunately, what was to follow throughout the 1980s and 90s seemed to focus on the organisation of the roles of school principals as technology leaders, rather than how learning and instruction with ICTs could be organised to impact on student achievement.
During this period ICT leaders had little or no concern for students’ opinions, and certainly not those of teachers. Capel’s (1992) scrutiny that leadership of ICT ‘has had as its central focus the computer and its associated technologies with little regard for the wider human relations which produced it and on which it has an effect’ (p 56) can still be observed in many schools.

More recently, there have been newly created roles, such as ICT co-ordinator and educational technologist or technology integrationist: individuals responsible within or across schools in a district for technology integration. But Kowch (2005) notes that these individuals are often not involved in influential leadership decisions, even though ICT leadership is crucial in bringing about sustainable and effective environments in schools. This, he argues, is a missed opportunity because ‘educational technologists are “very good” at bonding, bridging and linking between instructors and learners’ (p 3). These characteristics can be directly linked to three forms of social capital (Bourdieu, 1998): bonding—develops as individuals work together; bridging—develops between cross-cutting diverse horizontal social entities; and linking—develops when people work and link hierarchical social entities. Nevertheless, the practice of not involving students and teachers in leadership decisions, including those about ICT, is still prevalent in publicly funded institutions throughout the UK and the USA (Tondeur et al., 2007; Troman, 2000; Wetherill and Applefield, 2005). Unfortunately, there is a dearth of published research on private independent schools in the UK, possibly because only about 8% of schools are private (Green et al., 2008: 387). Bee and Dolton’s (1985) comment that independent schools
‘are much closer to the conventional business organization than state schools’ (p 30), together with my experience at Oaktree High, lead me to suspect that their leadership structures are more about enterprise than about empowering students and teachers.

**Understanding learner-generated contexts**

Luckin (2008) in her work on the ecology of resources similarly observes a missed opportunities when schools do not involve students in ICT leadership decisions. She comments that students often have little or no impact on school curricula, nor on the organization of their learning environment. Her observation that the ubiquity of mobile technologies now makes it possible for learners ‘to create learning contexts beyond teachers, academics, designers and policy makers’ (p 460) is important for those interested in developing a better understanding of how ICTs facilitate students’ learning. It is now necessary to encourage students to assist with creating contexts that support their learning best. A Learner-Generated Context (LGC) is one created by students and teachers working together in a didactic manner ‘with a common, self-defined goal’ (Luckin, 2008: 460). Such collaborations must take into consideration the important relationship between the learner in their context, and the knowledge that is generated as a result of their interactions within this context. Allowing students to become involved in ICT decisions which affect their daily lives in school is suggested by Luckin (2010) to help them make connections between what they learn in school and the real world in which they live.

Given that new digital technologies are often intertwined with learners’ identities (Furlong and Davies, 2011), it is also important for school leaders to gain an
understanding of learners’ perspectives on effective uses of school ICT. The ways in which students embrace ICTs may depend on their cultural backgrounds, extent and levels of ICT use in and outside school, their economic and social interactions involving ICTs—all of which contribute to defining who they are, who they wish to become, and the role ICTs play in their personal lives. Although research so far has documented differences in home computer access depending on students’ socio-economic status (Selwyn, 1998; Zickuhr and Smith, 2012), no studies currently exist that examine differences in student access to ICTs at state and private schools. While the research shows that students who attend private institutions have social, economic and symbolic capital acquired partly through their educational experience which students in the state sector do not have (Ball et al., 1996; Reay et al., 2001b), what is also the case within their school experience is that there are similarities as to how they are positioned in the power structure. Fielding (1973; 2001a; 2006a; 2009) has repeatedly criticised the tokenism of Student Councils, which are to be found in both public and private schools, saying, ‘nobody in power takes their recommendations or comments seriously’ (2001a, p 103). However, one study by Vekiri (2010), which explored possible links between student socio-economic status and their beliefs about ICTs, stresses the need for school leaders to take into account student differences in prior ICT experiences and to become familiar with students’ home computer use. It is therefore crucial that schools, private or state, acknowledge what students bring with them to school in their ‘virtual schoolbags’ (Thomson, 2011).
Examing students’ rights and participation opportunities

There is also the issue of students’ participatory rights, such as those elaborated on by Thomson and Gunter (2006b). Article 12 of the Convention on the Rights of the Child, which assures ‘the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child’ (UNCRC, 1989: unpaged), is both a substantive and procedural right entitling children to participate in matters affecting them, such as schooling, as well as enabling them to defend these rights and to challenge the abuse of these rights. Lansdown (2000) describes three main ways in which the participation of young people can be effectively organised in accordance with the convention: consultative processes, where the aim is to solicit children’s opinions for informing adult-led initiatives; participative initiatives, in which children are made to understand and apply democratic processes in matters concerning themselves; and promoting self-advocacy, where children are allowed to set the agenda and go about fulfilling these goals themselves. Even though these provide means through which students can participate in the running of a school, only the last one relates directly to student leadership. The Convention does not address student leadership directly; instead it opens up avenues through which students may become involved in daily school life, including leadership.

According to Thomson and Gunter (2007: 328), the more common ways in which the Convention has been enacted in England are through ‘(a) the development of forms of school governance where students have a place on formal committees and councils, and/or their own student representative body, and (b) a move to involve students in school improvement’. However, as Smyth
(2006a) suggests, democratic approaches differ both in their scope and in their interpretation. It is therefore not surprising that there is a tendency for school leaders to choose interpretations which best fit in with their personal goals and objectives. In Bourdieu’s (1998) view any social formation consists of a hierarchy of multiple, relatively autonomous fields with their own logics or laws of practice, hierarchies and power relations between agents and their positions within the field. Agents within the field compete for control of interests specific to the field and utilise their capitals (economic, cultural, social and symbolic) in this competition.

Even some of the governmental educational initiatives claiming to address the Convention use it in a rather limiting manner. For example: provision for young people in England to contribute in a systematic way towards policy decisions arrived with the introduction of the Children and Young People’s Unit following the 2001 general election. The Green Paper Every Child Matters (ECM) (HM Treasury, 2003) was subsequently released. It was followed in 2004 by the Children Act, which represents the main piece of legislation in relation to children’s rights in England. The Act stipulates that local children’s services should reflect the needs of children and young people and that, accordingly, local authorities and partners need to encourage a good level of participation by children and young people in the design and delivery of services relating to the ‘health, safety, enjoyment and achievement, making a positive contribution, and economic well-being’ (UNICEF, 2006: unpaged) of children. Although these five outcomes of ECM are supposed to be based on young people’s views collected in a national survey, the final document being delivered to schools and
other institutions does not have anything to say about children’s participation in making decisions about their learning or any other issues.

In addition, despite these attempts to spread policies based on the Convention nationally, Britain does not have a strong tradition of applying democratic principles in its mainstream schools (Fielding, 1973; 2011; Osler and Starkey, 2006). A recent survey of 982 teachers in England and Wales found that very few schools (2%) consider UNCRC as a motivation for listening to students’ opinions (Whitty and Wisby, 2007). However, since 2004 there have been more vigorous attempts to precipitate UNICEF UK’s Rights Respecting Schools Award (RRSA, see http://www.unicef.org.uk/rrsa) initiative. RRSA encourages schools to use the Convention as a framework for their values, to teach students about their rights and responsibilities, and to model these by allowing students to participate actively in school decision-making.

With student participation becoming part of the popular and political discourses, schools now find it necessary to include students in leadership decisions. Student voice is often associated with a wide range of public activities that take place in and outside schools about the leadership decisions at various levels throughout the school. According to Fielding (2006b),

> Involving students in making decisions about school reforms that directly affect their learning happens in a variety of ways, from the familiar engagement with social and interpersonal matters ... to a burgeoning range of ways in which professional perceptions about the suitability and performance of staff are significantly informed by student perspectives and judgements (p 299).

Included in this continuum are approaches which he warns may tend ‘towards an exploitative use of young people largely for purposes of perpetual performance
and occasional ostentation’ (p 300). Thomson and Gunter (2007: 23) concur with this view and say that at best, the ‘virtual absence’ of student voice from school leadership is compensated for ‘by children being asked to respond to and hence legitimise adult practice and plans’.

Three broad categories of student participation in the governance of schools are referred to by Thomson and Gunter (2006a; 2007): Students-as-Respondents, Students-as-Consultants and Students-as-Researchers. In the first of these students are simply a source of data, which may or may not serve to inform school policy and practice. As consultants, students play the role of expert advisers, providing a perspective available only to them in their unique position as consumers of education. A less common approach involves students doing research about their school (Fielding and Bragg, 2003; McGregor, n.d. cited in Thomson and Gunter, 2007). When engaged as researchers, students are positioned as planners and leaders of evidence-based school reform. Promoting the importance of students as researchers, and co-researchers, makes them aware that they are keepers of information that adults need but cannot access unless students are included in discussions about their daily lives in school, which positions them as powerful individuals within the school community. Through such involvement the individual and collective knowledge of students is valorised and made essential to the running of the school.

UNCRC (1989) as an influence for collecting and understanding students’ perspectives is fraught with problems including legitimacy—who they represent and what gives them the authority to speak on behalf of others—and language—
how they put across their ideas and what meaning is read into what they say. Nevertheless, there is still a strong case for including students in decisions about school ICT. Their claims that the ways in which ICTs are currently used in teaching does not include them (Davies, 2011b) should be of great concern to educators everywhere. Arguably, the manner in which students use ICTs outside school is impossible to replicate in classrooms structured to support formal learning; yet, the ubiquity, flexibility, adaptability and portability of ICTs place students in a position to create learning experiences that are highly personalised and provide them with the knowledge required for designing similar learning opportunities for others. Since this knowledge is often based on personal resources, such as their motivation and existing understanding, it is essential that input from students be given serious consideration. The challenge therefore becomes constructing spaces where forms of leadership that are inclusive of the knowledge and aspirations of young people, regardless of whether they are in state or private education, could be exercised.

Summary

This chapter has sought to illuminate issues relating to students’ involvement in ICT decision-making in school, as seen through the literatures. In addressing how leadership on ICT has developed in school, and the role of students—research question 1—I began by elaborating current issues surrounding school ICT use and then discussed the evolution of educational technology since the 1970s. Throughout this period, and in the decades that ensued, students’ opinions on the impact ICTs had on their learning were not taken into consideration. Instead, the emphasis lay in technology infrastructure. However, outside school students are exposed to more modern ICTs and they generate contexts that
enable them to explore and master these digital technologies. Indeed, private schools spend on their students almost double the amount of money annually—‘£1359 in 2007’ (Green et al., 2008: 387)—and provide more resources per capita (Graddy and Stevens, 2005) compared to state schools. But this argument is about the ways in which school ICTs are used collectively. Wright (1999) argues that ‘most independent schools offer a similar range of courses to state schools and enter students for the same public examinations’ (p 2), and Green et al. (2008) suggest that private and state schools draw from the same pool of teachers. It is therefore likely that the practices in both of these educational sectors are very similar despite the huge differences in the kinds of students they attract. The introduction of the UNCRC (1989) has challenged the situation further by giving students the right to be included in decisions about their own learning. However, much remains the same because of the variety of interpretations given to the Convention. Different possibilities of student participation in school ICT decision-making are discussed and used to generate reasons why it is important for the student voice/participation debate to be concerned about school ICT. This account sets the arena for discussions on where and how knowledge about teaching and learning with ICT is generated—research question 2. In the next chapter I examine other factors relating to schools, including democracy, leadership and power and how these too affect contributions students might make to school change.
CHAPTER 3

Student participation in school policymaking

Introduction

In the previous chapter I used research literatures on students’ rights and learner-generated context in arguments to support their involvement in leading ICT for learning in school. This chapter introduces literatures relating to issues of democracy, educational leadership, power and policymaking in education—since they too affect the ways in which student leadership is perceived and received—with a view to exploring types of leadership with an imperative of including students in school policymaking. I scrutinize the student participation literatures to uncover the types of student involvement that really count towards school decision-making. The intent is to understand how school leadership can operate to allow students to play an influential role, which is inclusive of my first research question—how does leadership in ICT operate in the school, and what role do students play?

The lack of research about UK independent schools is significant because even though very few students attend private schools, the influence of adults who have been through British private education is considerable (Green et al., 2008). The sole study found on leadership in independent schools concentrates on the styles of women leaders in the primary sector, whereas my study concerns senior/high school students. Therefore the literatures examined focus on research done in the
state sector; nevertheless, many aspects of this research are pertinent to private school education.

**Exploring democracy in schools**

The concept of democracy is widely seen as the most legitimate form of government in terms of ethics and practice (Diamond, 1989). A democratic government is supposed to vest in its citizens, direct or indirect rule by the majority. Two prevalent views of democracy are: the representative view, which is about enacting or choosing people who will represent the views of others—nowadays modelled on a modern market—and the participatory view, which emphasizes democracy as a moral ideal. However, the fragility of democracy is well known in the western world and beyond (Fielding, 2004; Osler and Starkey, 2006). Though fraught with ambiguity (Apple, 2008), the word democracy evokes emotional responses and this adds to its popularity. Over the past couple of decades there has been a global interest in developing a democratic culture of participation, collaboration and cohesiveness in schools, and for the use of education in cultivating a more democratic society.

It has been argued that there are distinctions between state and private schools in the US and in England, especially in terms of how they are governed and controlled (Apple, 2007; Ball, 1997). Claims are that governments rely on democratic control while private sector activities are about commercial gains, structured by markets. But part of my argument in this thesis is that students’ experiences are more dependent on where they are located within the power structure of their institution than on its organization, and therefore the daily experiences of students within the state and private schools can be quite similar.
The educational literature on democratic schooling tends to be of two distinct types. First, there are functional accounts about improving systems of participation, such as Bottery’s (1992) discussions on the ethics of participation. Second are the more socially critical accounts, such as the work of Smyth (2006a; 2011) that are more about changing power structures, and Davies (2008a) who argues for ‘interruptive democracy’ in education, which is about developing a form of democracy in schools that encourages difference of opinions within the system. These scholars see democracy as more than just about a process; instead they view it as being about particular values instantiated in practice. Apple and Beane (2007: 7) also take a critical stance, and in doing so they deal with functional matters. For example, in their discussions on the foundations for a democratic way of life and how these might be enacted in schools, they claim there is a need for:

- Concern for the dignity and rights of individuals and minorities.
- Concern for the welfare of others and “the common good”.
- Faith in the individual and collective capacity of people to create possibilities for resolving problems.
- The use of critical reflection and analysis to evaluate ideas, problems, and policies.
- An understanding that democracy is not so much an “ideal” to be pursued as an “idealized” set of values that we must live and that must guide our life as a people.
- The organization of social institutions to promote and extend the democratic way of life.

Schools as democracies and schooling for democracy (Dewey, 1916; Glickman, 1998) challenge the traditional top-down structure of schools, and advocate approaches to governing that give those who are most affected by policies and practices within the organization, such as teachers and students, the opportunity to participate in the running of their institutions. Eloquenty put by Fielding (2009: 498), this ‘concerns the nurturing of a vibrant public realm within
schools, that is to say, public space where staff and students can reflect on and make meaning of their work together and develop shared commitments to further developing the ideals and practices of life and learning to which the school aspires’.

Democracy in schools takes on different forms. Citizenship, inclusion, teacher voice and student voice are just some of the terms used to refer to ways of forging new relationships within the demanding settings of schools in order to empower those involved to build and develop sustainable learning communities. Student voice projects specifically focus on working with young people to break down traditional assumptions about students, and to promote dialogic relationships between staff and students. Since the adoption of the UN Convention on the Rights of the Child (UNCRC, 1989) by the UK in 1990, initiatives in schools to promote participation of their students in school-based reforms have grown rapidly. Yet the literatures show that approaches to the enactment of this principle can differ greatly.

Democratic education in schools, both in the UK and abroad, continues to have high political stakes, but there is a tension between educational programmes promoting national unity and identity, and addressing diversity, and the multiple identities of students (Osler and Starkey, 2005). However, there is evidence that young people are socially engaged and politically aware although ‘their strategies for citizenship and relationships with formal politics may be quite different from those that are visible through a conventional lens’ (Harris et al., 2007: 22).
Democracy is important in schools, not only for teaching students about its principles but also for creating conditions which encourage multilateral discussions about changes in education for providing opportunities for self-reflection, and for giving focus to the common good balanced with individual dignity (Apple and Beane, 2007). There is evidence to show that schools that allow democratic participation by students, where a culture of harmony exists between students and staff, are most likely to become effective learning environments (Lansdown, 2000). It is important to examine students’ contributions to discussions—not least, about using computers for teaching and learning, because their perspective as learners in the digital age is unique. Students can provide insights that teachers and administrators could use to gain better understanding of the specific practices through which learning with ICTs can be made effective (Davies, 2009a). Self-advocacy projects have the potential to provide avenues for student leaders to learn how to educate themselves about issues, how to organize their peers, how to communicate their ideas and put across their concerns confidently, how to negotiate solutions with those in authority, and the importance of appealing to decision-makers within schools. Courses about democracy provide students the opportunity to address issues of inequality and injustice, grapple with globalization and migration, discuss possibilities for civic and political engagement, and model forms of democratic participation in society (Osler and Starkey, 2006). The Internet and new media now make it possible for young people to exchange political views, regardless of where they live or what type of rule they are governed by. Concepts that resonate with democracy raise aspirations and hopes for a new kind of citizenship: one that operates for the good of all humanity.
John Dewey (1916), whose vision of democratic education has remained influential for over a century, wrote that any community ‘which makes provision for participation in its good of all its members on equal terms and which secures flexible readjustment of its institutions through interaction of the different forms of associated life is in so far democratic’ (p 99). He argued that in society, division of labour is reduced to a mechanical routine unless workers, like students, ‘see the technical, intellectual, and social relationships involved in what they do, and engage in their work because of the motivation furnished by the perceptions’ (p 85). He was convinced that in order to understand something one must be able to construct it from related facts and events; for him, it was not enough simply to tell students about these connections. As he grew older, Dewey became aware that using schools as sites for democratic change was problematic. Westbrook (1991) notes that he ‘openly acknowledged that schools are inextricably tied to prevailing structures of power and therefore extremely difficult to transform into agencies of democratic reform’ (p 509).

A century later educational researchers (e.g. Fielding, 2006b; 2009; 2011; Fielding and Moss, 2011; Levin, 2000; Smyth, 2006a; 2006b; 2011) have extended Dewey’s idea of progressive democratic schooling by arguing that it is time for schools to move away from old regimes to a different kind of educational leadership that encourages authentic forms of student participation. The need for school leaders to work with students in a non-hierarchical manner ‘to develop new kinds of partnerships with adults that rest on a more overt reciprocity and sense of shared purpose’ (Fielding, 2009: 505) is crucial to democratic arrangements in school that give students more than what Woods
(2005) refers to as ‘blurred-status’ (p 91). Fielding (2009) extends Woods (2005) idea of ‘free space’ (p 90)—where structure and power are minimised to allow relationships between students and staff to develop—by maintaining that these democratic public spaces ‘are important because they legitimize and enable exploratory, potentially creative forms of development for both students and staff’ (p 504). He adds that the development of multiple, vibrant, interpersonal spaces should be the responsibility of educational leaders committed to democratic education in schools, and that these reflect the ‘educational cartography of a school’ (p 504).

**A glimpse at educational leadership**

Smyth (2006a) contends that how to pursue forms of leadership that listen to and attend to students is the ‘most urgent issue of our times’ (p 279). The concept of leadership varies widely in its definition and measurement, and Lingard et al. (2003) argue that further conceptual and empirical work is needed to avoid us repeating the mistakes of the past. Illustrative of the theoretical disparity is that on the one hand Gunter (2001) focuses on power issues: ‘the process and product by which powerful groups are able to control and sustain their interests’ (p 8); whereas Spillane (2005) is concerned with the instrumentality of delivery through ‘interactions between leaders and followers’ (p 145). Nevertheless, it is clear that the central idea of leadership involves the exercise of influence over others. The terms school leadership, school administration and educational leadership are sometimes used interchangeably, depending on the context. All three are clearly linked, but whereas leadership is about steering institutions through influencing people’s attitudes, motivation and behaviour, administration is more closely related to the daily running of its operations (Bush and Glover,
2003). It is widely agreed that educational leadership focuses on improving educational outcomes (e.g. Hallinger, 2003; Leithwood and Jantzi, 1999) and as Gunter (2005) contends, there is need to anchor it with educational goals and values that are linked to teaching and learning ‘so the practice is educational’ (p 174).

Although direction and influence are core to educational leadership, they can be exercised in a variety of ways. These differences may depend on factors such as style or preferences, institutional demands, values, beliefs, cultural norms and expectations. Several different leadership models describe effective control in relation to these areas. So, for example, moral leadership models, arguing that values are a central part of leadership, suggest what role leaders’ values should play in their work and which values should dominate their decision-making (Begley, 1996; Hodgkinson, 1991). Constructivist models focus on what leaders might do within their communities of practice to help their colleagues make sense of, and advance, their work (Lambert, 2003; Lambert et al., 1995). Participative models emphasise the nature and importance of including members of the institution in decisions about the purpose and nature of their work (Johnston and Pickersgill, 1992). Missing from most definitions of school leadership are statements on how leadership extends to include the active participation of students. Not surprisingly, much of the research on school leadership retains an adult agenda—that is, the role of headteachers—and is ‘controlled by elites such as ministers and civil servants and their preferred advisers from universities, schools and consultancy businesses’ (Gunter, 2012: 345). As a result, students are hardly mentioned in these texts, and when they do
appear, they are positioned as ‘compliant recipients of effective headteacher practices’ (Gunter, 2011a: 125).

Regardless of the ways in which traditional forms of school leadership are enacted, the power differentials and structures which traditionally operate in both state and private schools give students little chance of gaining sufficient legitimacy to be included in leading school reform, unless the leadership in their school promotes equity, social justice and democracy as its moral purpose. The growing diversity of student populations in schools now demands that educational leaders pursue different approaches in order to be successful. One such approach involves building on the forms of social capital (Bourdieu, 1998) that students do possess rather than being restricted by those they do not possess. Such an approach is referred to variously as ‘emancipatory’ (Corson, 1996) ‘leadership for social justice’ (Larson and Murtadha, 2002) or ‘critical leadership’ (Foster, 1989). It is important to explore the types of leadership willing to listen to students’ voices, and be inclusive of their lived experiences in policy reforms. This is not about giving students control over what happens in school; instead the goal is to understand how leadership could be ‘inclusive of the aspirations of young people’ (Smyth, 2006a: 282).

According to Fullan (2005) democratic school leadership, in addition to being consistent with a democratic way of life, grants ‘greater empowerment at the school level’ (p 65). In this model of leadership, stakeholders are recognised as being most familiar with the needs and conditions for change; thus the ideas and opinions of these individuals are considered valuable.Democratic leadership
provides a collaborative approach to school leadership, which is anchored in stakeholder participation in decision-making. However, Bottery (1992) notes that some of the literatures on educational leadership view participation as a gift to be handed to or taken away from stakeholders as school leaders see fit. This is more likely to be the case in private institutions, which tend to take an elitist, hierarchical, bureaucratic approach, where leadership is attached to roles, position and structure. He argues that participation and democracy in school are much more than a just right but should be seen as ethical and an opportunity for personal development.

The pupils of a school need to have the education and experience to enable them to understand the workings of their community, and the society within which they will take a part, and the rights and responsibilities which result from those involvements (p 175).

He adds that democratic school leaders should want to involve staff and students in running of the school not only to improve results, ‘but to educate the school’s members in their rights and responsibilities as citizens’ (p 190).

In asking school leaders to find and nurture a shared sense of purpose based on educational aims, Smyth (2006a) poses a serious leadership challenge. But this is what is required if school leaders are to take students’ contributions seriously, and seek to help them ‘become persons not mere economic functionaries’ (Fielding, 1999: 72). Traditional approaches portray leadership as the property of an elite person, with an organizational label, whose goals are based on the needs of the organization (Foster, 1986). Foster (1989) in his examination of contemporary views of leadership argues that such elitist and leader centric approaches are devoid of two crucial aspects. First, ‘leadership is always context bound’ (p 29). It takes place within a social community through human
interactions and negotiations, as a process rather than being individual-led. Second, leadership is ‘not particularly voluntaristic, where given individuals can volunteer for leadership roles and, by virtue of their charisma, achieve them by convincing others of the rightness of their ideas’ (p 29). He offers instead a depiction of leadership that centres on change and involves critiques of the current situation in an attempt to provide a better future.

Leadership is and must be socially critical, it does not reside in an individual but in the relationship between individuals, and it is oriented toward social vision and change, not simply, or only, organizational goals (p 31).

This view of leadership as relational is not idiosyncratic to Foster’s (1989). Other scholars (including Fay, 1976; Gunter and Rayner, 2007) have argued convincingly for leadership as a transformative practice which changes the structure of communities, and emancipates and refines the human condition. Leadership that is based in a shared culture and involving a careful interplay between knowledge and action must—as Foster (1989) tells us—be critical, transformative, educative, and ethical (p 34).

Since this thesis is about the contributions that student leadership of ICT for learning can and does make to the knowledge, the practice and the school environment, it seems appropriate that I should explore possibilities for student participation in school leadership. I achieve this by using Fielding’s (2006a) approach, a discussion of which follows. He classifies leadership and management into four strands: impersonal, affective, high performance and person-centred, and discusses the relationships between these and student voice. His arguments are based on John Macmurray’s ideas of the self:
The self is one term in the relation between two selves. It cannot be prior to that relation and, equally, of course, the relation cannot be prior to it. ‘I’ exists only as a member of the ‘You and I’. The self only exists in the communion of selves. (Macmurray, 1933:137 as cited in Fielding, 2006a, p 350).

Fielding (2006b) defines two distinct but interconnected means of involvement with others: functional relations and personal relations. Functional relations are those which help us to achieve our work goals, such as associations with one’s co-workers; whereas personal relations, such as encounters with one’s family members or friends, are those that help us to become who we are. Their mutual dependence comes about because ‘the personal needs the functional to realize itself in action, so too the functional needs some element of the personal to achieve its purposes’ (2006a: 351). Extending these ideas further, he suggests that, ‘the functional should be expressive of the personal’ (2006b: 301). In other words, the end is intrinsically connected to the means, such that the functional ways in which students and school leaders work to achieve personal, communal and educational goals in school should be changed by the moral and interpersonal nature of those aims.

Table 3.1 is based on Fielding’s (2006b) four-fold typology of schools as impersonal organizations, affective communities, high performance learning organizations and person-centred learning communities. It considers different orientations of functional and personal relations between leadership and student voice, which are dependent on the type of school. In the sections that follow I discuss student participation in relation to these different kinds of schools.
Typology of schools | Impersonal organizations | Affective communities | High performance learning organizations | Person-centred learning communities
---|---|---|---|---
[Relationships between school leadership and student voice] | The functional marginalizes the personal | The personal marginalizes the functional | The personal is used for the sake of the functional | The functional is used for the sake of the personal
Organizational type | Mechanistic organization | Affective community | Learning organization | Learning community
Characteristic mode | Efficient | Restorative | Effective | Morally and instrumentally successful
Student voice | Restricted formal consultation making current arrangements more efficient | Ambient listening fostering closer understanding of those involved | Wide-ranging formal + informal consultation to make current arrangements even more effective | Wide-ranging formal + informal engagement to enhance the development of wise persons

Table 3.1: The interpersonal orientation of organizations (Fielding, 2006b: 303)

**Power and policymaking**

Another way of envisaging participation in school leadership is through Bottery’s (1992) conceptualizations of teacher participation in school decision-making. The first of these is pseudo-participation, in which feedback is sought but may not be used in the final decisions. It is similar to Fielding’s (2006b) level of student voice as viewed by impersonal organizations and affective communities (second and third columns in Table 3.1). In such settings operations tend to be quite mechanical. Student participation is thus limited to formal consultations or ambient listening to gain better understanding, in order to make
arrangements more efficient. Although the overall effect might be efficiency, the functional marginalizes the personal.

The second—partial participation—in which there is some equality in exchanges but limited influence in the final outcomes, parallels Fielding’s (2006b) level of student voice within high performance learning organizations (fourth column in Table 3.1). This type of school operates a learning ethos and student participation involves a wide range of formal and informal consultations to improve the daily running of the school. In this case the personal is used to improve the efficiency of the functional.

The third, full participation, in which there is equality in the decision-making as well as the final outcomes may be compared with Fielding’s (2006b) levels of student voice in person-centred learning communities (fifth column in Table 3.1). With full participation, the school employs a wide range of formal and informal student involvement that might benefit the both the school and its students. Again, the personal is used to improve the efficiency of the functional, but there is a moral element to it. Bottery (1992) goes further to contrast these ideas against three areas in which participation in school decision-making may occur: the implementation of school work, the design of physical/social environments, and policymaking (Schein, 1988 as cited in Bottery, 1992).

Thus, if participation is seen as a gift from school leaders then students, like teachers, are more likely to be involved in the implementation of adult-led initiatives than in the design of the environment in school or the development of
policies rather than in policymaking. Ultimately, as Bottery (1992) remarks, whether participation is endowed upon students or seen as their right is illustrative of the ‘the political and economic systems which govern the organization and its philosophy’ (p 165).

Policymaking within a democratic community is necessarily and legitimately a political process (Foster, 1986). If students are to become involved in school policymaking then they need to be given the opportunity to develop skills necessary for developing policies by drawing on available and emerging evidence and experience. Effective policy-learning, which according to Sanderson (2002) ‘involves a socially-conditioned discursive or augmentative process of development of cognitive schemes or frames which question the goals and assumptions of policies’, is bound to increase the effectiveness of resulting policies. Political learning is therefore intrinsic of policy-learning. Olsen and Peters (1996) believe that it is wrong ‘to impose norms, procedures, and criteria of relevance to one institutional sphere—science—on another institutional sphere with quite different characteristics—democratic politics’; but I would argue that political processes need also include a social-scientific dimension. Only through the provision of a pluralistic vision of community, in which power is exercised through open and informed decision-making by stakeholders with competing interests, can students grow in their understanding of how power affects policy.

Patterns of student participation

Traditionally students have not been involved in the development of school policies; instead their participation in school leadership ranges ‘from the familiar engagement with social and interpersonal matters … through more innovative,
often student-led developments’ (Fielding, 2006b: 299). This often includes planning school dances and serving as prefects, peer supporters and Student Council members. Authentic student participation, often referred to as student voice initiatives, denotes the variety of opportunities students have to participate actively in shaping their lives and those of their peers (Fielding, 2001b; Levin, 2000; Mitra, 2006). Various researchers (including Fielding, 2006a; 2006b; 2011; Lansdown, 2000; Mitra, 2005; Mitra and Gross, 2009a; Thomson and Holdsworth, 2003) have attempted to classify student participation initiatives but none, except Fielding (2006a; 2006b), discusses student participation in relation to school leadership. A more common way of thinking about student voice or student participation is by grouping them according to the roles that the students involved play. I now go on to discuss three modes of student participation by using the three descriptors provided by Lansdown (2000)—consultative processes, participative initiatives and promoting self-advocacy. For each type, I provide an example and link it to school leadership through Fielding’s typology shown above.

**Consultative processes**

Consultative processes aim to solicit students’ opinions to inform adult-led initiatives (Lansdown, 2000). Gathering data from students about their learning experiences and on ways to improve teaching and learning is often done through questionnaires, interviews and focus groups. While it is the most commonly used approach, students have no ownership of the data collected and are hardly ever involved in interpreting it. In fact, if they are mentioned at all in the reports that follow, it is often to celebrate the democratization of the data collection process. This is not to say that such initiatives are of no benefit to school reform efforts.
Indeed, many outside researchers (such as Furlong and Davies, 2011; Luckin et al., 2008; Mitsoni, 2006; Rudduck, 2001) involved in reforming schools have sought to examine students’ perspectives on learning, pedagogy and curriculum. However, the unique perspectives of students are often neglected in school development efforts (Davies, 2011b; Gunter and Thomson, 2007; Mitra, 2006). Instead, adults try to guess what would and would not work for young people. Yet research has shown that students are capable of articulating their needs, and that they are ‘observant, analytic, and on the whole their voices are constructive and not oppositional’ (Rudduck, 2001: 7).

In my second Doctoral research paper (Davies, 2009a), in which I gathered and interpreted students’ opinions of the access to and uses of ICT at Oaktree High School, students expressed a strong desire for respectful relationships with their teachers and a chance to be involved in decision-making about which digital technologies are used in the classroom, and how. However, it took a further incentive, the Acorn Project, to actually get students involved in bringing about the desired changes. Thus in my view, consultation, although effective at providing adequate information about students’ perspectives is potentially limiting because it does not include students’ interpretation of the data collected, nor are they automatically involved in acting on these findings. The analytic themes and conclusions drawn from the data tend to be preset by adult researchers. Therefore, consultative processes by themselves are insufficient in breaking down power differentials—a necessary part of democratic community building.
In the four-fold typology shown in Table 3.1 Fielding (2006b) links the mechanistic operation of consultation with schools that function as impersonal organizations or affective communities. He notes that in the former case, ‘the functional marginalizes the personal, which it sees as largely irrelevant and counter-productive of the core purpose of the school’, whereas the latter orientation ‘valorizes the personal at the expense of the functional’. Such consultative cases where there is a tendency for relationships between young people and senior leadership to be formal and traditional are sometimes opportunistic and emerging.

**Participative initiatives**

Student voice activities in which participants are made to understand and apply democratic processes in matters concerning themselves often take place in the form of adults working together with young people to share planning and decision-making endeavours. In such arrangements, adults tend to initiate the processes and take responsibility for the final decisions, but students share ownership. Students involved in such collaborative efforts tend to experience a feeling of empowerment and a sense of being valued by seeing themselves as more than mere sources of data (Fielding, 2004; Mitra, 2004).

In a research project into bullying in school (see Thomson and Gunter, 2008) in which students worked with two university-based researchers students were given the opportunity to design data collection instruments, conduct focus group discussions and analyse and interrogate data, thereby playing the role of researchers. Using students as co-researchers improves the ‘social position of young people in the power relations of the school’ (p 186) and generates
enthusiasm among the participants and their peers—who in this case were the subjects of their study. Fielding (2006b) comments that schools that encourage these types of student voice initiatives tend to operate as high-performance learning organizations, in which ‘the personal is used for the sake of the functional’ (p 302). Arguing in favour of the claim that ‘Performance has no room for caring’ (Ball, 2003: 224 in Fielding, 2006b: 304) he concludes that these schools capitalize on such collaborative initiatives: ‘It is clear to me that student voice operating within the high performance mode is largely an instrumental undertaking orientated towards increased measurable organizational performance’ (p 396).

Promoting self-advocacy

One of the explicit goals of student voice initiatives is to demonstrate student leadership in decision-making processes. In such projects, students are allowed to set the agenda and to go about fulfilling these goals themselves. In part, the aim is to increase the authority and legitimacy of student leadership groups within the school. Mitra and Gross (2009a) note that this form of student participation seldom occurs, and although it can be perceived as challenging and even threatening to teachers and senior leadership, student leadership is useful in helping to calm the turbulence occurring within adolescents in the school and in helping them to re-engage with their communities.

In a leadership project at Sierra High School facilitated by Mitra and Gross (2009a), a group of students worked on producing a video depicting the experiences of young people in their community. They wanted to capture and promote the many positive things going on in the lives of disadvantaged youths...
as a means of dispelling stereotypes. The group took ownership of both the idea and the implementation of the project, which after two years culminated with a video, entitled ‘Take a Look Around’ (p 533). Even though it was difficult to give up control, adult supervisors stepped back to allow teenagers to lead the project. Ultimately they discovered that, with respect, even troubled students can be empowered to rise to the challenge. This illustrates that such student leadership efforts can produce fresh opportunities for young people to demonstrate agency within their communities, which can be a source of the type of social capital (Bourdieu, 2000) that legitimizes their involvement in school decision-making.

Fielding (2006b) refers to schools that encourage and support student voice initiatives that promote self-advocacy as person-centred learning communities. In such organizations, he claims, ‘the functional is expressive of the personal’ (p 305). He adds that the characteristics of this person-centred leadership approach include a centrality of relationships between students and staff, and a need for common meaning ‘with the necessity of articulating a personal and a public narrative that helps us to understand and celebrate what it is we are trying to achieve, how we have done what we have done, and what is significant and worthwhile in this joint endeavour’ (p 306). With this democratic approach to leadership student voice is mutually explicit and engaging in its aims towards achieving educational imperatives, but is not constituted or controlled by them.

**Towards democratic policymaking**

Much of the contestation that surrounds student participation is best summed up by Fielding (2004) who asks whether student voice is best understood:
as part of an essentially neo-liberal project, as part of a resurgent
democratic engagement, as part of a Foucauldian furtherance of
‘governmentality’, a mixture of all or some of these, or something quite
different that needs to be named more eloquently and more convincingly
than other discourses and frameworks currently allow (p 198).

This contestability remains in the fore partly because ‘democracy ... is one of the
most contested words in the English language’ (Apple, 2008: 245). The
typologies in the student voice literature, in general, appear to be framed around
student participation focused on making schools more democratic, but the ideals
of citizenship, democracy and participation are now so firmly engrained in public
policy rhetoric that it is impossible to disentangle practice from policy.

Reflecting on the intentions of Dewey (1916), and on the writings of Fielding
(2009), the kinds of democratic structure that are capable of promoting
intergenerational learning and responsibility through the lived and shared
experiences of the whole school community can begin to emerge. According to
Woods and Gronn (2009) three elements central to ideas and values of
democracy are, ‘self-governance, protection from arbitrary power and legitimacy
grounded in consent’ (p 433). Leadership that is able to speak for and on behalf
of all members of the school community needs to be in touch with students’
perspectives, as well as those of teachers and other stakeholders within the
school community. Including students in school leadership decision-making
safeguards against a single group having dominance over other sections of the
community, in this case adults over students—even though they are not in the
minority. Democratic legitimacy is often linked to consent given in the form of
democratically held elections. Students who are elected to speak on behalf of
others learn that they are ‘in a strong position to influence what happens in their communities’ (Fielding, 2009: 503). If, as Perry (2009) comments, ‘education policy is democratic inasmuch as it supports equality of opportunity and outcome for all students’ (p 436) then policymakers’ intentions, their aspirations and their practice need to be inclusive of students.

**Summary**

In this chapter I examined theoretical perspectives of democratic school leadership, knowledge generation leading to effective policy generation in school, and the need for students to learn about the structures of power. These issues are clearly pertinent to understanding the role that students can and do play in facilitating changes to school ICT, which addresses my third research question. In providing further rationales for student involvement in decision-making about school ICT I discussed theorizations of educational leadership willing to include students in school policymaking. The chapter concludes that involving students in democratic policymaking is partly about the ways in which democracy is understood and practised within the school environment. It is also about leadership: how it operates and the role that students can and do play. Having laid this foundation of what is possible, and even what is ideal with regard to leadership in school, in the next chapter, I will discuss the site of my fieldwork, the stages of my Doctoral research and the Acorn Project.
CHAPTER 4

Researching student leadership of ICT:

introducing Oaktree High School

Introduction

Chapters 1–3 have provided an overview of my Doctoral Project, the impetus for the study, details of how the research is situated within the field and reviews of the related literatures. I now move on to describe the site and development of my research. The study centres on the Acorn Project and investigates the role that students can and do play in leading ICT for learning at Oaktree High School, but has its origins in my attempt to find ways of tackling students’ disengagement with ICTs provided by the school. Therefore, in this chapter I discuss my earlier work and provide details of the Acorn Project in which students use action research to devise policy recommendations on ICT for learning at the school. I discuss literature that the Project draws on, who was involved and what resulted from the Project.

Oaktree High School

Oaktree High School is the high school division of Oaktree School. It consists of approximately 500 students of international backgrounds aged 14–19 and whose families have high social, economic and cultural capital (Bourdieu, 2000). The 60 teachers at the school are also of international backgrounds. The administration at Oaktree High School consists of a principal, an assistant principal, an academic dean, an assistant academic dean, a college counsellor and a personal counsellor, all of whom are under the leadership of the head of school.
Core subjects within the curriculum at the school include English, mathematics, modern languages, science, social studies, physical education and life skills. Other subjects, including art, computer studies (ICT), drama and music, are electives; as such, students are not compelled to take ICT.

Oaktree, along with its sister schools, offers an American curriculum. Students may take the International Baccalaureate (IB) and Advance Placement (AP) examinations at the end of their high school career, but do not have access to GCSEs or A levels through the school. More distinctly, as with high schools in America, students at Oaktree are not required to take an external exam in order to gain a high school diploma. Instead, the school has a set programme of study, which, if completed successfully, will earn a student the diploma. The school also follows the American academic calendar, starting in late August and ending in early June.

In dealing with its high fee-paying clientele, Oaktree needs to demonstrate that it is worthy of their patronage by being accredited by the North Eastern Association of Schools and Colleges (NEASC). NEASC monitors and provides a consistent and uniform measure of excellence that all accredited schools must meet. It is one of the major players in the accreditation business, claiming to provide these services for ‘more than 2000 public and private institutions [Pre-Kindergarten through university] in the six state region and overseas’ (NEASC, 2011: unpaged), through self-reflection, peer review and best practice. Inspections at Oaktree take place every ten years, and there is an extensive interim self-study at the end of the first five. The school is also a member of the
National Association of Independent Schools (NAIS), which represents approximately 1,200 independent schools and associations in the United States and abroad, and acts as the international voice of independent pre-collegiate education. NAIS serves and strengthens its member schools and associations by articulating and promoting high standards of educational quality and ethical behaviour. These associations legitimize what Oaktree has to offer and, together with IB and AP results published on its website, justify its high tuition costs.

Oaktree students can take part in after-school activities including Model United Nations, Disaster Relief Fund-Raising, Amnesty International, Jazz Band, Games Development Club, and a variety of drama and sporting events.

Oaktree was founded in the late 1960s and is situated in a ‘wealthy suburban catchment area’ (Oaktree website). The 128 acre campus houses an early childhood village, separate buildings for its lower, middle and high schools, dormitory facilities, a cafeteria complex, a sports centre, six tennis courts, an Olympic-sized track, playing fields for soccer, rugby and baseball, and a six-hole golf course. On the Oaktree website are listed the school’s philosophy and objectives, which include:

- We implement a student-centred approach to instruction following an inquiry-based and interdisciplinary curriculum. The success of our community relies upon the teamwork, motivation, and collaboration of students, teachers, staff, and parents.
- We believe that our students must develop the skills and understanding that will enable them to become responsible, contributing citizens of the global community. Physical activity, a healthy diet, and well-informed decision-making are important.
- We support our philosophy through a developmental, student-centred approach to teaching … a constructivist approach to learning and understanding through the development of critical, and creative thinking skills.
This selection, meant to articulate how students at the school are positioned, is a small fraction of what is available to prospective clients of the school. The reality, however, is different. The Student Council in the school does not represent the voice of its student body, nor are students accorded ‘meaningful roles in the decision-making process … to promote an atmosphere of participation, responsibility, and ownership’ (NEASC, 2011: unpaged). Instead, its role is limited to organizing student dances and conducting bake sales. Student Council elections mirror little more than a popularity contest, where in the week leading up to it voters are enticed with free treats by the candidates: ice creams, pancakes and hot chocolate. The school does not even have a prefect system, which can sometimes provide students with some engagement in school outcomes (Fielding, 2006b).

Oaktree School is an interesting site for my research for the following reasons. First, few studies have examined how students in private institutions are positioned. The high socio-economic backgrounds of students at the school do not automatically translate into their voices being heard. Even though they may be seen from the outside as privileged (Ball et al., 2002; Reay et al., 2001a), these students face challenges similar to their counterparts at state schools; the power structure in the school centres on elite adults, which gives students little or no opportunity to participate in school leadership. Second, as a teacher at the school I wanted to understand better the changes in students’ attitudes that I began to observe in 2006, and I had access to these students.
Researching student leadership

My Doctoral research has developed through understanding, documenting and framing student leadership at Oaktree High School over the past five years, which I will now elaborate on. I begin by describing the antecedence to the Acorn Project.

Phase 1: Exploring

My thinking began with the first research paper I wrote in 2007, during my first year of Doctoral studies. At the time I was thinking about how best to get students at Oaktree to engage better with the ICTs provided by the school. I decided to review literature on school educational technology (ICT). This paper (Davies, 2008b) provided an examination aimed at understanding what this body of work had to say about school ICT leaders and leadership, their role in educational change, and how ICT leadership is changing as a result of 21st century technological advances. Using Google Scholar to identify key texts in the field (Anderson and Dexter, 2000; 2005; Ely, 1972; 1989; 1990; 2008; Kowch, 2005; Yee, 1998; 2000; 2001), I explored different frameworks of ICT leadership including one portraying school principals as ICT leaders. None of the existing models made any mention of the ICT leadership that students can and do perform in school. Students make much more use of ICTs than most staff, utilizing them in all aspects of their lives, and often stretching their use beyond the confines of assigned tasks, as reported in the Apple Classrooms of Tomorrow study (Dwyer, 1995).

For example, after completing a unit on spreadsheets, one high school teacher discovered a student creating a spreadsheet for compiling price quotes and bids from various companies. This task was not an assignment; she was ‘doing this exercise to help out her brother who was taking a college class on spreadsheets’ (Sandholtz et al., 1997: 99).
Few of the studies involved students directly; instead their views were made known through proxy informants such as teachers, principals and ICT coordinators. There were other gaps in the literature: first, ICT leadership is about the reorganization of teaching rather than the processes of teaching and learning; second, little research about school ICT is being done by those who actually work in the field of education.

The literature revealed that traditionally students were excluded from ICT leadership, but questions remain about how they feel about being excluded. At that time, I could see that students’ perspectives on school ICT were changing partly because school ICTs were becoming quite different from, and in some ways inferior to, the digital technologies they used outside school. Their connections with and uses of digital tools away from classes far surpassed the kinds of opportunities that school ICTs provided them. I wanted to find out what they thought about school ICTs and an opportunity soon presented itself.

**Phase 2: Documenting**

In 2008 I was asked to write a second paper based on empirical research. This research paper (Davies, 2009a) presented a small-scale qualitative study based on the perspectives of 40 students at the school. The question guiding the research was how do students perceive the access to ICTs and its use in school? I collected, described and analysed students’ views about the access to and the uses of school ICTs. Participants of the research recorded their experiences over one week in research diaries, held ‘concentric conversations’ (McCluskey, 2008: 451), and were interviewed in groups to generate the case study data. Also
developed within the paper regarding how the students’ position is advocated are:

1. What is known about student involvement in curriculum and school policymaking?

2. How might these students be involved in the development of technology policy?

The data collection took place over four weeks and involved seven groups of students. I met with each group once a week to work on the project. Table 4.1 shows how events in the study were organised.

<table>
<thead>
<tr>
<th>Week 1: 1–5 Sept. 2008</th>
<th>Initial presentation to provide students with rationale for study, hand out invitation and consent forms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2: 8–12 Sept. 2008</td>
<td>Presentation on <em>keeping a research diary</em>, collect consent forms, hand out blank diaries to participants.</td>
</tr>
<tr>
<td>Week 3: 15–19 Sept. 2008</td>
<td>Collect participant’s diaries, conduct group interviews with participants only.</td>
</tr>
<tr>
<td>Week 4: 22–26 Sept. 2008</td>
<td>Hold concentric conversations—participants only, do classes observations (of 3 classes mentioned in diaries).</td>
</tr>
<tr>
<td>After October break: 3–7 Nov. 2008</td>
<td>Provide participants with data transcripts for validation.</td>
</tr>
</tbody>
</table>

**Table 4.1: Schedule for case study data collection**

One of the challenges I faced early in the research was finding ways to elicit participants’ opinions about everyday experiences without jeopardising their positions as students within the school. Many of the participants were enrolled in classes I taught; they regarded me as teacher and referred to me as ‘Miss’. From the start I wanted to define their role in such a way that made them understand
that their contributions were vital. I provided them with background into the study, using arguments for the importance of student/pupil voice in education, and explained that their role was one of participant researcher; I did this through a presentation on the role of an ethnographer. During the presentation, I told them that researchers often select informants who have an understanding of the community being studied because it is impossible for the researchers themselves to become a part of that group. Thus the students began to see themselves as being in a privileged position, as keepers of information that I wanted and could get only if they agreed to allow me to enter their world vicariously. The knowledge that I could not become a student at their school in an attempt to understand how they felt about the use of ICT, and therefore had to rely on what they told me, empowered them, and I began to earn their trust and confidence.

A pilot study informed me that conducting interviews with an individual student ends up sounding like an oral exam, and gives students the idea that I am looking for the ‘correct answer’ to my questions. It also made clear that my approach to eliciting information from participants was not to be of an interrogatory manner but rather through informal discussions, in which students were allowed to lead. I therefore based my interviewing strategies for the main study on ‘Appreciative Inquiry’ (Cooperrider and Whitney, 2001)— a technique which aims to highlight and extend best practices within an organization. Following this method, groups were encouraged to begin with a search of the best of ‘what is’, then to envision ‘what might be’, and to dialogue about ‘what should be’.
The participant diaries were used to document how ICT was used in each of their classes. To protect the confidentiality of their teachers, who are also my colleagues, these students were asked not to include names but instead were to use one of—me, teacher and other—for reporting who was using the technology. They were also asked to record any school-related uses of technology (such as for homework) they experienced outside normal school hours. Space was provided in the diaries for them to reflect, at the end of each day, on their overall experience with ICT that day. One of the statements made during my initial presentation to participants that had the most impact in gaining students’ trust and appreciation for the research was that they have expertise that I do not. This meant that their experiences were unique to them and I was seeking to get a glimpse of this through the diaries.

The diary format made it possible to organize the data collected according to three different patterns of classroom use of ICT, in areas across the curriculum.

1. Providing information: teaching with ICT where someone standing in front of a class delivers information.

2. Creating products: teaching/learning in which students build understanding through hands-on classroom activities with ICT, usually following given directions.

3. Constructing knowledge: knowledge-building activities using ICT in which no specific directions are given, for example, students searching freely for information on the Internet.

The diary data were coded and the number of 40-minute class periods, per subject, and home uses, involving ICT usage in each of these three ways was
recorded. Instances in which the ICT use did not fit into one of these paradigms were not included. Data from the concentric conversations were correlated to look for emergent themes.

The interview data was transcribed and returned to participants for verification before being analysed. The findings revealed three main areas of students’ concern: their teachers’ lack of experience and training in teaching with ICT, the dominance of a single approach when using ICT in the classroom and no role in decision-making processes about which ICTs to use in school, and how to use them. I reported these findings (Davies, 2008c) to administrators at the school and then began to think of ways in which to include students in decisions about school ICT.

**Phase 3: Framing**

The Administration team at Oaktree School consists of ten school administrators: three from each division and the head of school. They meet once a week and had been responsible for coming up with up a five-year (2005–2010) strategic plan. Although done without consulting teachers or students, one of the goals contained in this manifesto involved developing and maintaining a culture of reflection and collaboration among the staff through encouraging teachers to research their own practice. I decided to take advantage of this initiative, and in the autumn of 2009 put forward a proposal to facilitate a student-led research project aimed at developing policy statements about ICT for learning, for recommendation to the school’s senior management team (SMT). My proposal was approved. Following discussions with the high school administrators, I provided details of the project plan in which I explained how it would be
embedded into the curriculum of one of the courses I taught. I also had to
demonstrate that the learning the students in that course would not be
compromised through their involvement in the project.

The Acorn Project involved 25 students enrolled in my computer applications
course. It took place during the 2009–2010 academic year. Since the course is an
elective, students choose to do it. However, some students enrol in the course
simply because there are no other options available to them during that time
period. I initially thought of working with the school’s Student Council but
decided that this was already an elite group of students and that having them
participate in the Project would only reinforce existing hierarchies among
students (Reay, 2006). After informing students in the course about my plans and
how they would be involved, I provided their parents with an overview of the
Acorn Project and sought their consent. Assent was also sought from the
students, and they were given the opportunity to switch to another elective
should they not wish to participate in the Project. I also presented my plans to the
staff prior to starting the Project because it would involve each of them either
directly or indirectly.

The Project’s overall aim was to involve students at the school in decision-
making about ICT for learning. My goal was to set up an emancipatory student
action research project, which ‘is constituted by and constitutive of the values
and principles of the democratic form of social life it seeks to foster and achieve’
(Carrington et al., 2009: 74). I wanted students and staff to work together in
addressing important questions about school ICT, and to ‘make meaning of their
work together’ (Fielding, 2009: 498). Somekh (2006: 28) contends, ‘action research ... uniquely enables and facilitates this process of knowledge transformation as the basis for powerful social action’, and as such it seemed a useful approach for the aims of this study. To learn more about this methodology I have relied on the latest works by thinkers in the field, whose texts include Philosophy, methodology and action research (Carr, 2006), Educational action research: a critical approach (Carr and Kemmis, 2009), Action research in educational research, methodology and measurement: an international handbook (Kemmis, 1988), Critical theory and participatory action research (Kemmis, 2008b), Building educational theory through action research (Elliott, 2009) and Action research: a methodology for change and development (Somekh, 2006). It was helpful to read actual studies that have made use of this methodology: Students’ participation in school change: action research on the ground (Thomson and Gunter, 2009) and IT and action sensemaking: making sense of new technology (Dymek, 2008).

Somekh’s (2006) eight methodological principles of action research were used to guide the Project: action research

- integrates research and action
- is conducted by a collaborative partnership of participants
- involves the development of knowledge and understanding of a unique kind
- starts from a vision of social transformation and aspirations for social justice for all
- involves a high level of reflexivity
- involves exploratory engagement with a wide range of existing knowledge
- engenders powerful learning for participants
- locates the inquiry in an understanding of broader historical, political and ideological contexts (pp 6–8)
Instead of simply being a linear process of producing knowledge for practical situations, action research requires a much deeper involvement in the construction of knowledge through a cyclical process. It has been argued that action research starts with an orientation to change with others (Reason, 2008) rather than a desire to change others. Within an action research project, communities of inquiry and action evolve and address questions and issues significant for those who participate as co-researchers. These communities engage in systematic cycles of action and reflection. In action phases, co-researchers test practices and gather evidence; in reflection stages, they make sense and plan future action.

According to (Reason, 2008: 4) ‘action research is only possible with, for and by persons and communities, ideally involving stakeholders both in question and sensemaking that informs the research, and in action, which is its focus’. Action research begins with everyday experience, evolves over time, and is concerned with living knowledge. The process makes differences between inquiry, knowledge and action in the world indistinct and unimportant; knowledge becomes what is learned working in the context of actions resulting in the transformation of our experiences in inquiry, both with self and with others. As Kemmis (2006) notes, this orientation of participation is about opening communicative spaces. Carr and Kemmis (2009) advocate a ‘political’ approach to educational action research claiming that it is intrinsically emancipatory because it is made up of the very democratic structure it seeks to create:
Emancipatory action research is a form of research that seeks to create the kind of communicative space within which practitioners can participate in making decisions, taking action and collaboratively inquiring into their own practices, their understandings of these practices, and the conditions under which they practice (p 79).

I expanded this definition to include students. I wanted my students to create a ‘communicative space’ that would involve them working with staff at the school to improve ICT for learning. The idea was that through research, these students would draw on local knowledge to generate data about existing school ICT problems, which they would discuss with staff to arrive at sustainable solutions.

The idea of developing students as researchers is not novel. Several scholars (including Fielding, 2009; Fielding and Bragg, 2003; Osler, 2010; Rudduck and McIntyre, 2007; Smyth, 2006b; Thomson and Gunter, 2007) have advocated authentic forms of student participation in school decision-making. Thomson and Gunter (2009: 413) argue, ‘school change does not occur simply by discussing a problem in order to arrive at an answer, as is assumed when there are consultations with a Student Council or the whole student body about priorities for change’. In addition, my previous study had shown me that students’ perspective as learners in the digital age is unique (Davies, 2009a).

**Setting up the Acorn Project**

Using Lewin’s (1946) original cyclical model, the students involved in the Acorn Project (henceforth referred to as student researchers or researchers) began with a process of reconnaissance to uncover key issues that eventually shaped the research. The Project did not start with a plan of all the stages through which the exploration would flow; instead it began with the researchers intensifying the focus of the study, and developed through stages in response to what the
consortium deemed essential on the basis of reflection and dialogue. However, it was necessary for me to draw up a tentative schedule of activity at the start of the Project. Although used originally for seeking access, it also helped me plan when certain lessons should be taught, when to arrange room bookings for project meetings, and when to provide information for staff and student participants. Letters were sent to parents of these students informing them about the Project and related after-school activities. Table 4.2 shows the schedule of activities.
<table>
<thead>
<tr>
<th>Date</th>
<th>Purpose/activity</th>
<th>Groups involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–7 October 2009</td>
<td>Students keep research diary for one week to document daily experiences with ICT for learning</td>
<td>Student researchers</td>
</tr>
<tr>
<td>15 October 2009</td>
<td>Meeting of the Acorn Project to discuss project aims and strategies for exploring ICT for learning</td>
<td>Acorn Project group</td>
</tr>
<tr>
<td>November 2009</td>
<td>Collect and analyse responses about learning with ICT through student survey given out on 26 November</td>
<td>Student researchers</td>
</tr>
<tr>
<td>8 December 2009</td>
<td>Meeting of the Acorn Project to review data collected and discuss strategies for next cycle</td>
<td>Acorn Project group</td>
</tr>
<tr>
<td>January 2010</td>
<td>Data collection and analysis of teachers’ experiences with ICT for learning (survey given to random staff sample)</td>
<td>Student researchers</td>
</tr>
<tr>
<td>4 February 2010</td>
<td>Meeting of the Acorn Project to discuss teacher survey results, identify key policy areas and determine next cycle</td>
<td>Acorn Project group</td>
</tr>
<tr>
<td>February–March 2010</td>
<td>Collect and analyse data about ICT practices at other independent schools</td>
<td>Student researchers</td>
</tr>
<tr>
<td>15 March 2010</td>
<td>Meeting of ICT Consortium to discuss survey results of ICT for learning at other schools</td>
<td>Acorn Project group</td>
</tr>
<tr>
<td>26 March 2010</td>
<td>Presentation of survey results at whole school assembly</td>
<td>Student researchers, wider school community</td>
</tr>
<tr>
<td>22 April 2010</td>
<td>Meeting of the Acorn Project to finalise ICT policy recommendations</td>
<td>Acorn Project group</td>
</tr>
<tr>
<td>21 May 2010</td>
<td>Student researchers meet with head of Central IT</td>
<td>Student researchers, Central IT team</td>
</tr>
</tbody>
</table>

Table 4.2: Schedule of activities in the Acorn Project
The curriculum of the computer applications course these students were enrolled in focuses on developing students’ competence in using applications of Microsoft Office—Word, Excel, Publisher and PowerPoint. I had to restructure it to include the Acorn Project. They used the applications for developing materials at various stages in the Project: Word to create questionnaires, Excel for data analysis, Publisher to create brochures and posters, and PowerPoint for their presentations. In our initial discussions, they agreed on action research because they liked the idea of planning, implementing and evaluating at different stages. Our discussions involved recognising that students were not alone in their concerns about school ICT. I convinced them that in order for them to have a strong voice, one to which school administrators were more likely to listen, they should include staff in the Project. The student researchers nominated 20 teachers and administrators they wished to collaborate with; 13 of these agreed to form a consortium and serve as their critical friends.

Each teacher at Oaktree is required to set an annual goal at the start of the school year. The administrators agreed to let teachers’ participation in the Project count as their annual goal for 2009–10. Table 4.3 provides a list of the participants; each has been assigned a pseudonym. The student researchers were organised into 3 groups, according to sections of the course, to work on different cycles of the Project. Seven Student Council representatives were invited to join the consortium, but after the first meeting they decided not to take part.
<table>
<thead>
<tr>
<th>Group 1 (3)</th>
<th>Group 2 (4)</th>
<th>Group 3 (2)</th>
<th>Teachers (subject taught)</th>
<th>Administrators (role)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary</td>
<td>Velma</td>
<td>Daryl</td>
<td>Mr Jones (chemistry)</td>
<td>Mrs Thomas (Asst. Academic Dean)</td>
</tr>
<tr>
<td>Jane</td>
<td>Brooks</td>
<td>Sam</td>
<td>Ms Cole (social studies)</td>
<td>Mr Boswell (Head of School)</td>
</tr>
<tr>
<td>Cecilia</td>
<td>Jean</td>
<td>Phil</td>
<td>Ms Henry (social studies)</td>
<td>Ms Cramer (Personal Counsellor)</td>
</tr>
<tr>
<td>Charles</td>
<td>James</td>
<td>Joyce</td>
<td>Mr Powers (environmental science)</td>
<td>Mr Johnson (ICT Co-ordinator)</td>
</tr>
<tr>
<td>Janice</td>
<td>Jack</td>
<td>Sue</td>
<td>Mr Taylor (ICT)</td>
<td>Mrs Nicol (Assistant Principal)</td>
</tr>
<tr>
<td>Marion</td>
<td>Colin</td>
<td>Will</td>
<td>Mr James (physics)</td>
<td>Ms Tyler (ICT Integrationist)</td>
</tr>
<tr>
<td>Jenny</td>
<td>Philip</td>
<td>Celine</td>
<td>Mrs Ball (statistics)</td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>Joey</td>
<td>Freddie</td>
<td>Mrs Cruse (social studies)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allie</td>
<td>Ms Norman (Spanish)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3: Participants in the Acorn Project, with student researchers listed in project groups

**Student action research cycles**

**Cycle 1: Reconnaissance**

This most important step in the Acorn Project made the student researchers understand the Project from their own viewpoint, and to commit to the work. Each kept a diary (Appendix I) for one week in which his or her daily experiences with ICT were recorded. Each day in the diary was divided into twelve sections. The first eight covered a normal school day, consisting of eight
periods. The researchers were asked to record the location where ICT was used (e.g. classroom, library, home), by whom (teacher, self, other), and to describe how it was used. They were not to include any names to avoid the fear of reprisals as a consequence of their comments. I provided the following descriptors, which they used to express their feelings about the way in which ICT was used on each occasion. Additional space was provided in the diary for reflection.

*Great:* the technology helped me to focus or learn

*Good:* the technology was helpful in getting my attention but could have been better

*Indifferent:* the technology was not really an improvement to the lesson

*Unnecessary:* the lesson could have been taught without the technology

*Disappointing:* the technology was disappointing and distracted from the lesson

The diary entries revealed that most of the student researchers had not previously thought about the ways in which ICT is used in their classes. One wrote, ‘This project really opened my eyes to how little we actually use ICT in school everyday’ (Jenny). Another said, ‘Before this [project] I didn’t realise how big a difference ICT makes on my learning’ (Daryl). There were some who began to get a sense of their democratic rights from the onset of the Project, like Velma who wrote, ‘I really like the idea that our views will be taken into consideration when the school buys new equipment because, as students, we are the ones who are affected and therefore we should have a say’ (Velma). The diaries also highlighted some of the current problems with teaching and learning with ICT, and an expressed desire for change.
I analysed the data and presented my findings to the student researchers the following week, asking them to confirm that I had correctly identified the following as the main problems they encountered with ICT for learning in school:

- slow network connection, which many students found disappointing because of the missed learning opportunities that result
- teachers’ lack of skill and background necessary for using ICT in the classroom
- the dominance of a single approach to using ICT in teaching—teacher provides information

Not surprisingly, these were some of the same concerns reported by participants of the 2008 case study (see Phase 2). Discussions which followed confirmed that the researchers believed that improvements in some or all of these areas would make their classes much more interesting, and that student learning would improve. They decided that as the next step they wanted to find out how their peers at the school felt about ICT for learning through a survey of the entire student body. They presented these ideas to the consortium where the following questions were addressed.

1. Why are we doing this project?
2. What information do we need?
3. How will we gather this information?
4. What benefits will developing ICT policy bring to our school?
This meeting took place on 15 October 2009. At the start, I thanked everyone for their participation and reminded them of the Project’s aims. Paper and pencils were provided and everyone was urged to make notes for the discussions that would follow. After the presentations, two student researchers who had been appointed to chair the discussions invited questions, comments and suggestions. There was genuine interest from the adults in the group, and an acceptance of what the researchers had to say:

- ICT has primacy in the lives of young people.
- There is a need for change in the way ICT is used in classrooms.
- Students want to collaborate with staff on improving school ICT use.

Adults in the group endorsed the data collection strategy proposed by the student researchers. Mr Powers, whose background is in environmental statistics, offered to help them prepare the surveys; and Mrs Ball, a statistician, volunteered to help them analyse the data. The school’s ICT Co-ordinator and the head of school, had asked to be invited to the meeting. Both expressed their unreserved interest in the Project. Mr Johnson recommended that the researchers also investigate ways of using portable digital devices, such as mobile phones, in the classroom. Mr Boswell requested they should prepare a final report, including the recommendations, for the school’s SMT. It was agreed that an all-school survey would be conducted within a month. It seemed in the spirit of the Project that Oaktree provide refreshments for the consortium meetings, as participants had stayed on after school voluntarily.
Cycle 2: Collecting students’ views

The all-student survey on ICT for learning took place on 26 November 2009. As the researchers preferred it to take place during an Advisory—a period during which tutorial groups meet—this required the approval of the school’s administration. In the weeks following the consortium meeting, Mr Powers conducted two class sessions for the researchers, during which he taught them about designing questionnaires and worked with them on drawing up questions for the student survey (Appendix J). The questions were based mainly on issues that had arisen out of their ICT experiences. Some of them related to ICT infrastructure; for example: *is the Internet speed in school fast enough for all your needs?* Others had to do with classroom ICT use: *how often does your teacher use ICT in teaching?* (a separate answer was required for the five main subjects in the curriculum: English, mathematics, language, science and social science). The first eight questions were multiple-choice. The last question, which solicited ways in which ICT for learning could be improved to suit students’ needs better, required a free-response answer. The completed questionnaires were sent to Mr Powers for him to check their validity and quality.

Over three quarters of the student body participated in the survey. The first three questions provided information about the demographics of these students. It revealed that Year 12 boys were least inclined to provide feedback. Subsequently, the researchers counted, sorted and collated the responses before entering the data into Excel worksheets, which they used to produce graphical representations. Mr Powers revisited the classes to provide them with lessons on
analysing survey data. All this information was then passed to Mrs Ball who checked the results before they were presented to the consortium.

At the next consortium meeting, on 8 December, staff members were impressed by how well the researchers had arranged the data into highly organised units of year groups, according to subject. Their presentation demonstrated a thorough understanding of what their peers had reported. They were able to respond to questions from staff interrogating the data, several of whom commented on their maturity and confidence, and on how they conducted the meeting. During the discussions that ensued, everyone agreed that the next step should involve exploring teachers’ experiences with ICT for learning.

**Cycle 3: Collecting teachers’ views**

The student researchers began work on a questionnaire to gather information from teachers at the school about ICT for learning soon after the meeting. Mr Powers provided further assistance, this time on how best to select a sample. The questions were similar to those in the student survey and were meant to verify the student data. There was an additional free-response question, which asked teachers to give their personal opinions on the uses of ICT in education. The six teachers who were members of the consortium were exempt from participating in the teacher survey, but some took part in a pilot of the questionnaire.

The researchers produced a brochure to provide teachers at the school with information about the project. They also created a participant information sheet (Appendix K) to accompany the teacher survey. The administration had agreed to pay for £75 worth of iTunes vouchers, which were offered in a prize raffle to
participants in the survey to encourage their involvement. There were three prizes of £25 each. A random sample of 40 teachers was selected to complete the questionnaire (Appendix L) at the start of the third week of January 2010. The researchers decided to hand them out individually to the teachers, but to protect their anonymity participants were asked to return completed questionnaires in a sealed envelope to a marked box in the staff lounge. It took almost two weeks and several reminders to get them back. In the end 37 questionnaires were returned: three of the teachers selected for participation found it inconvenient to comply, one of whom was away attending an interschool competition.

The time needed for the analysis of the teacher data was much shorter than previously; however, the student researchers were much more excited about it. They tried searching for correlations, such as a link between the amounts of ICT training a teacher had received and how often s/he used ICT for teaching. They presented these findings to the consortium on 4 February 2010. This was followed by much discussion about the problems teachers encounter with using ICT in the classroom. Problems with classroom ICT use were similar among staff. The researchers suggested that some of these difficulties could be eliminated if students were allowed to assist teachers with using ICT for learning. They argued that some tasks, such as creating interesting PowerPoint presentations, which teachers found difficult, came naturally to students, and as such student–teacher collaborations should be encouraged. The consortium began to draw up a list of key issues that should be included in the recommendations. They agreed that the researchers should investigate the ICT practices at other independent schools.
**Cycle 4: Understanding how other independent schools use ICT**

Having had sufficient training in designing the two previous questionnaires, the student researchers proceeded with creating an online survey (Appendix M) to find out the ICT practices at other independent schools. Copies were sent to administrators for their comments and approval. Two sister institutions and three other schools suggested by Mrs Cruse piloted the survey. A list of email addresses for 200 independent secondary schools worldwide was compiled from the website of the Council of International Schools—http://www.cois.org. An administrator at each school was sent an email inviting their participation. The researchers had originally intended to close access to the online survey after one week, but on realising that some schools were on break around that time it remained active for three weeks. Of the 55 schools that responded, three were primary schools whose data were discounted. The online software used automatically analysed the data. The researchers filtered the information to look at results from schools in Europe and in Asia separately. Based on these results, they compiled a list of best practices of the provision and uses of school ICT to compare with those at Oaktree. These results were presented at the next meeting on 15 March, and several more items were added to the recommendations.

**Disseminating the Acorn Project**

The student researchers gave a presentation about the Acorn Project to the whole school on 26 March 2010 (Appendix N). Prior to the assembly they prepared posters advertising the event and sent invitations to staff members, parents and the school’s SMT. From the stage in the centre of the Assembly Hall they presented the Project’s aims, discussed some of the data collected and shared some of their ideas on improvements that could be made, and why. Everyone
was invited to provide feedback via an email address designated to the Project. Eight policy recommendations aimed at improving ICT for learning were drawn up at the final meeting of the consortium on 22 April based on the data collected and the feedback received. These were included in a written report to the SMT. The head of Central IT, Mr Larkin, asked to meet with the student researchers, which provided them with another opportunity to negotiate what was in the best interest of students and teachers, regarding ICT for learning. They argued that students should have a say in the ICT decisions at the school because they can evaluate the difference it makes to their learning.
Recommendations

1. Remove Internet filters in the high school (at least, do a pilot). In keeping with the recommendations provided in the Byron Review, emphasis should be placed on equipping students with the confidence and skills to navigate the Internet safely.

2. Provide faster, more consistent, Internet connection and improve network so it is not so slow. This will enhance opportunities for student-led personalising of learning while at the same time successfully allow students and teachers to meet curricular and assessment requirements by accessing work via our new learning platform.

3. Provide access to online learning platform (already in progress) and to grades online, although there are some concerns over various issues.

4. There is a need for more computers/computer labs for students to be able to do school work when they are not in class, and for use during classes other than IT courses. Our suggestion in Appendix A (not included) recommends a change in the layout of computer labs LG10 and LG12 so that there is a ‘work area’ that is always available to students and teachers, for accessing computers and printers without disturbing classes in session.

5. There is a need to look at the processes that other international schools use to embed ICT for learning throughout the curriculum. The provision of educational technology support (and time) for teachers who need it is a good way to encourage our teachers to use technology in their teaching on a more regular basis. Ways in which to do this should be subject to further discussion at departmental and divisional level.

Outstanding issues

1. Further investigation is needed to determine ways in which students are using digital resources in the high school.

2. Further investigation is needed to determine ways in which information technology is used by individual departments throughout the curriculum and how best to provide IT support for these departments.

3. Guidance is needed on how to build on the skills and interests which learners have in digital technologies used outside school in order to develop aspects of their learning.

Table 4.4: The Acorn Project recommendations and outstanding issues

Findings of the Acorn Project

A final report (Appendix O) produced by the consortium was presented to the SMT in April 2010. It detailed the project, outlined their findings, and discussed the recommendations and policy implications. The recommendations (Table 4.4)
included three outstanding issues, indicating that the researchers did not see their work as complete; instead it needed to be ongoing.

**Reach and significance of the Acorn Project**

Immediately following their presentation, the researchers were contacted by the assistant principal, Mrs Nicol, asking them to represent students on the ICT Committee which makes decisions about high school computer purchases; students had never been represented on it previously. The researchers were asked to pilot the new online learning platform for the school. One of the researchers was invited to join a panel to interview candidates for the head and deputy head of school positions in June 2010. This was the first time in the history of the school that students were invited to interview prospective staff—a move that the head of school, Mr Boswell confirmed, was inspired by the Acorn Project.

In August 2010 students enrolled in my new computer applications classes were asked investigate students’ concerns about study halls—periods during the school day which students who are not scheduled for an academic class are assigned; the idea is that they should use this time to study. However, it had emerged that students were dissatisfied with the high noise levels in study hall areas, the furniture and ICTs available to them in these rooms, and the fact that they were not allowed into the library during these periods. The administration requested that my students undertake a study similar to the Acorn Project to come up with recommendations. The Study Hall Project ran for most of the 2010–11 academic year and included The Big Meeting—an assembly of the whole school during which staff and student representatives discussed study hall.
In August 2011 the personal counsellor at the school asked students in computer applications classes to conduct similar research to come up with recommendations on how to improve school communications with students. There had been many complaints from staff that students do not check their school email accounts and do not use the online learning platform to access their work. Two of Oaktree’s sister schools were included in this project, which is still ongoing. In this same year the Student Council embarked on a project aimed at improving the cafeteria food, using the same Acorn Project methodology.

Several changes have since been made to ICT provision at Oaktree. At the start of the 2011 academic year a technology fair, where teachers could be trained in how to use school ICTs, was held at the school. There has been a significant increase in the number of school laptops. The majority of desktop computers around the school were removed in August 2012; instead each teacher was provided with his or her own laptop that could be taken home. In 2013 each student in years 9 and 10 was given an iPad.

**Reflecting on the Acorn Project**

As part of my Doctoral Project I was required to reflect on the Acorn Project to understand fully my involvement in it. First, I identified my two distinct roles: facilitating the Project, and researching student leadership. The student researchers were engaged in action research while I just facilitated the Project. This separation of tasks is what Elliott (1988) advocates will prevent the student researchers’ role from being reduced to one of research assistants. In reality I was also a co-researcher, although my research involved gathering information on how to set up the action research project. The nature of the innovation that the
student researchers were engaged in is multi-layered. Their primary focus was on ICT for learning at their school; they had to decipher what this meant, in addition to gathering information about it. They also had to learn how to become researchers: to devise research questions, deal with ethical considerations in conducting research, and to negotiate with adults.

In wanting to investigate how they perceive ICT for learning, and to help them articulate what this meant, a few days after they returned their research diaries I asked them why it is important to use ICT in education. Here is a selection of their responses:

- ICT makes it possible for learning to involve everyone, including students, and be interactive
- ICT provides alternate and more authentic forms of representation
- ICT provides students with choices in how to construct knowledge
- ICT makes things visual, and more easily accessible
- ICT is interactive and makes it possible for students to participate in their own learning
- ICT lets you learn at your own speed
- ICT makes learning hands-on and mobile
- ICT is more dependable; you could lose your handwritten notes but not electronic ones
- ICT can make learning faster, and can make it easier to organise the things you learn
- ICT is green and efficient unlike using paper which is old-fashioned and wasteful

Not only was I impressed by the thoughtfulness of their responses, but I also became aware that opportunities for students to express their views about teaching and learning at Oaktree are uncommon. Allowing these students to make decisions and assume responsibilities totally transformed their attitude in the classes I taught them. They began to see themselves as responsible, reliable and important individuals, and this produced quite an improvement in the
performance of lower achieving students. However, the collaboration between students and staff, although energising and liberating, proved to be problematic. The students had constantly to move between the constructed realities of the consortium meeting and the classroom.

The head of school’s participation in the Acorn Project gave it legitimacy. School leaders can be ‘“anti-learning” and devise ways to shield themselves from appearing ignorant’ (Anderson and Herr, 2009: 157), and so I was fortunate that Mr Boswell was willing to risk siding with the Project. Undoubtedly, it is unlikely the Project would have been as successful without the presentation to the whole school in which the student researchers openly challenged the status quo. They also made it known then that students want to be involved in school decision-making, and have a right to do so. Levin (2000: 156) points out that student participation is embodied in one or more of five principles, which include ‘students are the producers of school outcomes, so their involvement is fundamental to all improvement’.

**Summary**

This chapter has discussed the impetus and context for my Doctoral Project by providing details of the Acorn Project—its aim, participants, schedule, outcomes, reach and significance. Starting with a literature search, which revealed that ICT leadership is more about the reorganization of teaching to include ICT than about pedagogic processes of teaching and learning with ICT, and moving on to a study about students’ access to and uses of ICT at Oaktree, I was able to demonstrate that students at the school were excluded from ICT leadership decisions. Participants in an initial study told me that the ways in which ICTs are
used in their classes neither engage them nor are they included in decisions about which ICTs should be used, and how. This partially answered my first research question and led me to initiate the Acorn Project. In the next chapter I will discuss researching the Project, which was set up as an embodiment of student leadership of school ICT. I elaborate the methodology and data collection techniques of my Doctoral research, which focused on understanding how and why student leadership of ICT for learning can and does contribute to changes in the knowledge, practice and environment at Oaktree High School.
CHAPTER 5

Researching student leadership of ICT:

methods and methodology

Introduction

Chapter 4 discussed how I have hitherto understood, documented and framed student participation in decision-making about ICT for learning at Oaktree High School. In this chapter I present methodological considerations and decisions taken in setting up the fieldwork in the light of the literature review and my research questions. The aim is in part to justify how the approach taken deepened my understanding of student leadership of ICT for learning, and to present my stance and role in the research, which might have affected the data and my interpretation of it (Mason, 2002). I discuss the considerations that guided the study, and provide an overview of the assumptions underpinning the fieldwork and the rationale for a qualitative approach. Highlighted are the considerations taken in developing connections between the epistemology, theoretical perspectives and the methodology most appropriate for addressing the issues encompassed by the research questions. The methodology for this investigation is case study, in which the case is student leadership of ICT for learning. The Acorn Project served as a concrete singularity about which data was generated and collected within the real-life context of the school, and through the perspectives of multiple participants. I elaborate on case study as a research strategy, identify the role of the researcher, detail the data collection techniques, discuss how the data was analysed, describe the approaches used to ensure
validation and reliability, present how I plan to proceed with my conceptualization, and outline ethical considerations taken into account during the study.

**A qualitative approach**

The methodological viewpoint of this enquiry is situated within a socially critical epistemology (Carr and Kemmis, 1986; Cohen et al., 2007; Kemmis, 2006; 2008a) whose primary values include emancipation, empowerment and social change. My work therefore dictates that I seek perspectives that encompass a richer understanding of the complexity of human life, and the multitude of forces that act upon the individual. As such, through this study I undertake a critique of the leadership culture of Oaktree High School. Assuming that democracy is necessarily participatory, I embrace Davies’s (2008a) idea of ‘interruptive’ democracy in education, which purports that it is insufficient simply to take part. Instead, as she suggests, schools should promote ‘positive conflict’ to question and challenge the status quo through action. It is therefore necessary that the present study intrude into the normal leadership practices at the school. This idea combined with my research questions led me to set up the Acorn Project through which I examined student leadership of ICT for learning at Oaktree High School.

The distinction between qualitative and quantitative research is a methodological issue. Denzin and Lincoln (2005) assert that qualitative research emphasises the process of discovering how social meaning is constructed, and stresses the relationship between the investigator and the topic studied. Conversely, quantitative research is based on the measurement and the analysis of causal relationships between variables. In other words, qualitative research provides an
interpretative approach for those concerned with understanding the meaning people give to the phenomena within their social setting. In this thesis I set out to make sense of the multiple perspectives on student leadership of ICT at Oaktree High School, in an attempt to gain deeper understanding of the social world in which actors within the school operate. The research is field-focused, takes place in a natural setting, and is conducted without manipulating the setting; it uses multiple methods that are interactive and humanistic, and involve detailed descriptions of human behaviour and opinions—there is allowance for the ‘multiple realities’ that individuals construct in their environment; it is emergent rather than tightly pre-figured, avoiding both a priori assumptions and conclusions. Research questions evolve as the study progresses providing flexibility of design. This allows for an understanding of and reaction to what is really happening. It is fundamentally interpretive and goes beyond numerical data—the use of expressive language and the presence of voice provide ‘flavour’ (Eisner, 1998; Marshall and Rossman, 2006; Savenye and Robinson, 2005; Wiersma and Jurs, 2005).

Qualitative research is a particularly appropriate rationale for current research in educational technology. Studies in the field originally focused on a narrow range of issues such as the sequencing of instruction, learner control and feedback, and the design of instructional systems. However, interest in qualitative and field-based methods have increased, and the assumptions, questions, methods and paradigms that formerly dominated research in the field are changing (Driscoll and Dick, 1999; Kozma, 2003; Savenye and Robinson, 2005).
In analysing special issues of *Educational Technology, Research and Development* in 1998 and 1999, Kozma (2003) found that educational technology research was beginning to focus on theoretical issues and challenges in education. Most of the projects reviewed involved complex situations that were naturally and intentionally confounded, which violated assumptions built into the traditional experimental design model. He comments that the ‘messy uncontrolled context of real-world educational technology research demands alternative research methodologies’ that take on challenging tasks relating to the scaling-up and implementation of ICTs (Kozma, 2003: 10).

Lewis (1999) addresses areas of need in researching educational technology. In identifying important questions in the field and how these might be addressed, he points to the contextual factors at the primary site where the subject is enacted: schools. He suggests new models of inquiry that are amenable to research of the important questions, which ‘will depend on the willingness of researchers to range beyond the traditional positivistic paradigm toward phenomenological and critical modes’ (Lewis, 1999: 12). He therefore encourages those doing educational technology research to employ paradigms that can best answer their research questions.

**Case study as a strategy**

A case study is an empirical inquiry that ‘investigates a contemporary phenomenon within its real-life context especially when the boundaries between the phenomenon and context are not clearly evident’ (Yin, 2008: 13). It is an examination of a specific event, organization or system that presents detailed data creating a picture of perceptions, use, attitudes, reactions and environments
(Wiersma and Jurs, 2005). Yin (2008) also suggests that case studies are the preferred strategy when how or why questions are being posed, when the investigator has little control over events, and when the focus is on contemporary events (Yin, 2008).

Taking into consideration the focus of my research, the nature of the research questions, and the understanding developed from the literature review and my preliminary work on student participation at the school, case study with qualitative methods is an appropriate research strategy to explore student leadership of ICT for learning. Robson (2002: 178) defines case study as ‘a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.’ This suggests that a case study approach is particularly appropriate in revealing the casual relationships between the phenomenon and the context in which it takes place. It is therefore a suitable methodology for exploring student leadership, which is about who is speaking, what about, who is listening (Fielding, 2001b), and why.

The case being examined is student leadership of ICT for learning. In the study, students and staff at Oaktree provide their perspectives on the case as qualitative data. However, case study is not tantamount to qualitative research (Simons, 2009). What defines case study is its singularity—the approach of studying a single phenomenon. My Doctoral research may be classified as an instrumental case study—‘where a case is chosen to explore an issue or research question on some other ground’—as opposed to being an intrinsic case study—‘where a case
is studied for the intrinsic interest in the case itself” (Simons, 2009: 21). The research questions guiding the study relate to broad and general questions about student participation in school leadership; however, I conduct my study through the lens of the particular: ICT for learning. The study is conducted at a single site and it is ‘theory-led’ (Simons, 2009: 21) because it explores student leadership of ICT for learning through the perspectives of student voice and student participation, concepts that have already been examined by other researchers including, Fielding (2009), Mitra and Gross (2009a), Rudduck and Fielding (2006), and Thomson and Gunter (2009).

Yin (2008) comments that case study is a useful strategy when the researcher has little or no control over the events, and Denscombe (2007: 13) suggests that it offers the researcher an opportunity to ‘explain why certain outcomes may happen’, over and above just finding out what those outcomes are. In the present study, I set out to construct a narrative of student leadership of ICT for learning at the school through the words and actions of the participants. Using a case study approach, I will be able to generate results that are understandable and experientially credible, which could conceivably help improve existing practice rather than simply to assess the value of student leadership of ICT for learning.

It was also important for me to be aware of the possible limitations of case study research. Denscombe (2007: 45–46), for example, suggests a number of possible disadvantages including, the difficulty to generalise, the lack of clear boundaries, difficulties with negotiating access, and effects resulting from sustained researcher presence. From the beginning I understood that the research was local
to Oaktree and I did not seek to generalise my findings. I had to seek permission from the school prior to starting my research, which involved providing clear boundaries on what was required in terms of time, resources and how I planned to manage these; this was a way of drawing transparent borders around the study. Being an employee of the school and having the student participants of the Acorn Project enrolled in my courses proved extremely helpful. I was able to locate the involvement of my students within the course curriculum and to demonstrate that their participation would not be detrimental to their learning. I was also able to outline the roles of participants in the study and mine, and to distinguish these from my normal responsibilities.

There were further warnings to be heeded. Yin (2008) remarks that case study has been stereotyped as the ‘weak sibling’ of other research approaches in the social sciences and criticised for ‘insufficient precision’; while Simons (2009) warns of the challenges that managing varied data sets can pose. I therefore have made every attempt to safeguard against this pitfall. The study was designed to have a clear, precise and unambiguous focus: student leadership of ICT for learning. I organised the data as it was collected into logically named folders on a computer in my home, which is backed-up regularly.

**The role of the researcher**

In qualitative research, the researcher becomes an instrument that engages in the situation and makes sense of it. Qualitative research is done in a natural setting and the researcher does not manipulate or intervene in the situation; instead his/her tasks are to observe, interview, record, describe, interpret and appraise the settings as they are. While the researcher must become a part of the study by
interacting closely with the subjects of the study, s/he must maintain openness about what is observed in order to avoid missing any important detail (Savenye and Robinson, 2005; Wiersma and Jurs, 2005). Therefore my role was to gather data that provides a meaningful explanation of the situation in a non-biased way.

Successful qualitative research depends greatly on the interpersonal skills of the researcher and, according to Marshall and Rossman (2006), includes the researcher’s ability to build trust, maintain good relations, respect norms of reciprocity, sensitively consider ethical issues, and maintain an awareness of the politics of the organization. As a teacher and middle-level manager at the school I am an insider, which made me aware of the political and professional culture of the institution. I aimed at working against protecting my own interests; controversies with colleagues and authorities are part of the political struggles through which age-old power structures, such as those existing within schools, are modified and transformed. In a later chapter, I address these complexities in discussions on the turbulence that ‘can influence the way that student voice is received at a school and its ability to achieve desired goals’ (Mitra and Gross, 2009a: 522). While being an employee provides me with a grasp of the institution’s norms, values, rituals and governances, I do not consider this understanding a liability but rather as a ‘way of providing individual insight into a situation, not a license for freedom’ (Eisner, 1998: 35). I tried to be transparent about the aims of the research, providing staff with an overview of my research before the Acorn Project began, and by giving participants plenty of necessary information as the study evolved. My motivation and ultimate aim for undertaking this qualitative research is to contribute to the improvement of
education, particularly the ways that educational technology can contribute to teaching and learning. My role is therefore pedagogic.

The role of the researcher in qualitative research also involves both inward and outward reflection as s/he attempts to describe and analyse all or part of a culture or community impartially (Stake, 1995). It was necessary for me to reflect on my role in the study systematically, and to be sensitive to how my personal biography was shaping the study. Cole and Gunter (2010) have discussed how Doctoral research ‘in and of itself it can also bring about changes in the lives of students and their families, introducing new complexities, new ways of thinking and of perceiving the world’ (p 5). In the midst of all these changes I was undergoing, I was also meant to be observing and recording the changes going on around me. One of the things I found helpful was maintaining and daily updating my research journal to record my observations along with ongoing reflection, analysis and thematic insights.

Of all my data collection methods discussed below, it was the interviews that brought me face-to-face with participants of the research. I knew all these people; they were either my students or my colleagues. I therefore could not assume that they were not sophisticated enough to know what was going on, nor could I distance myself from the research (Platt, 1981, p 75). BERA (2004) guidelines were followed closely to ensure participants were properly informed about the study, and of their rights, and that their consent to participate was obtained in writing. Reminders that no names should be mentioned during the interview were not always heeded, but I duly omitted these from the transcripts I
provided the interviewees. Asking colleagues about the ways in which they used ICT in their classes was odd. I had to make sure it did not appear as though I was on an investigation, commissioned by school administrators, to find out which teachers were not using interactive whiteboards for teaching. Staff participants knew that I would be reporting my findings to school administrators and some needed reassuring that they would not be named. Initially, I worried about stepping on the professional toes of my colleagues, knowing they were at liberty to withdraw their consent. For this and other reasons I made sure the interviews were semi-structured, allowing them to lead. I endeavoured to find something common in our backgrounds on which to anchor these interviews (Platt, 1981), and made it clear to them that my status at the school was not dependent on my research. The students were a little easier to deal with. Since the interviews came at the end of the school year, they did not feel their course grade depended on what they had to say. Also, by this time I had developed a good working relation with them, and they trusted that I sided with them in righting the inequities at the school regarding school ICT decisions.

Throughout my research I was constantly thinking about how to engage the participants—before the Acorn Project, during the project, and after the project. My identity at these different stages changed, depending on the task at hand, the people involved, my position on issues, etc. In addition to the insider/outsider binary in which I saw myself, there were times when I was aware that people at the school, including my students, saw me as either being on their side—an insider—or against them—an outsider. Teacher, friend, confidant, inquisitor; I had to be all of these things and at times, all at once. I was initially concerned
that the Acorn Project might not be taken seriously; that it would not be considered legitimate. So I was elated when Mr Boswell asked to be a part of the Acorn Project, but wondered if he would agree to take part in my Doctoral research. The student researchers were initially very cautious about reporting on the ICT practices in their classes; I found it necessary to regularly remind them to update their diaries and to discuss any problems they were encountering with doing so with me. Thomson and Gunter (2011) have argued that in such ‘risky and fluid settings’ it is not unusual for the researcher to experience these kinds of identify shifts. This ‘fluid researcher identity’ (p 28), which lasted throughout my study, and is still ongoing, is one of the marked changes that has resulted from my Doctoral studies.

Educational research involves scholarly work, which needs to be disseminated so that other researchers can evaluate its analysis and validated its conclusions. Having handled close to practice issues through a robust design of the research, I tested my findings through presentations to colleagues at EdD seminars at the University of Manchester; Doctoral conferences at the Universities of Aberdeen, Birmingham, London and Manchester (Davies, 2009b; 2009c; 2011a; 2011c); national and international conferences including BERA2012, EERA2012 and BELMAS2012 (Davies, 2012a; 2012b; 2012c); and through my publications in peer-reviewed journals (Davies, 2010a; 2011b).
The research plan

I began my fieldwork in September 2009 and completed collecting the data in June 2012. The first month was spent making arrangements for the Acorn Project to commence: introducing students to the idea, getting their consent, briefing teachers, organising the consortium, booking rooms, etc. The Acorn Project lasted eight months after which I began interviewing participants in my Doctoral Project, most of whom had taken part in the Acorn Project. Table 5.1 shows a schedule of activities for my research, organised according to our term dates.

<table>
<thead>
<tr>
<th>Term</th>
<th>My activity</th>
<th>Who is involved?</th>
<th>Connection to research</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2009</td>
<td>Prepare student researchers</td>
<td>Me with student researchers</td>
<td>Acorn Project</td>
<td>Prepare diaries, teach lessons on survey designs, analysing data, access and ethics</td>
</tr>
<tr>
<td>(Oct 2009, Jan 2010)</td>
<td>Arrange consortium meetings</td>
<td>Me with student researchers, Me with Oaktree staff (separate meetings)</td>
<td>Acorn Project</td>
<td>To discuss learning with ICT and plans for data collection through the Acorn Project</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>Facilitate Acorn Project data collection and data analysis</td>
<td>Student researchers, student body, staff (under my supervision)</td>
<td>Acorn Project</td>
<td>Student researchers conduct surveys and analyse data for Acorn Project</td>
</tr>
<tr>
<td>(Nov 2009–Mar 2010)</td>
<td>Attend Acorn Project meetings</td>
<td>Acorn Project group</td>
<td>Acorn Project + (Doctoral Project)</td>
<td>To discuss data and develop ICT policies (Unstructured observations)</td>
</tr>
<tr>
<td>(Feb, Mar, April 2010)</td>
<td>Attend Acorn Project presentation to faculty</td>
<td>Acorn Project group</td>
<td>Acorn Project + (Doctoral Project)</td>
<td>To present Acorn Project finding to staff (Unstructured observations)</td>
</tr>
<tr>
<td>Summer 2010</td>
<td>Case study data collection</td>
<td>Me with participants in the Acorn Project (separate meetings)</td>
<td>Doctoral Project</td>
<td>Round 1 interviews: about current ICT practices and process of the Acorn Project Interview with Mr Boswell</td>
</tr>
<tr>
<td>(May–June 2010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1: Doctoral research plan (continued on next page)
Details of the Acorn Project, which ran during from autumn 2009 to spring 2010, are provided in Chapter 4 (Table 4.2). The student researchers led the Project even though I set it up. I was involved in the planning and attended all Project meetings, during which I collected data for my Doctoral research through unstructured observations. My interpretations of what I observed provided useful framing for questions used in the first round of participant interviews that were conducted in May–June 2010. The second round of interviews was scheduled to take place in autumn 2010 but I decided that insufficient time has elapsed since

<table>
<thead>
<tr>
<th>Term</th>
<th>My activity</th>
<th>Who is involved?</th>
<th>Connection to research</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autumn 2010</strong> (Oct–Nov 2010)</td>
<td>Case study data collection</td>
<td>Me with participants in the Acorn Project (separate meetings)</td>
<td>Doctoral Project</td>
<td>Round 2 student interviews: about the consequences of the Acorn Project</td>
</tr>
<tr>
<td><strong>Spring 2011</strong> (Mar–June 2011)</td>
<td>Case study data collection</td>
<td>Me with participants in the Acorn Project (separate meetings)</td>
<td>Doctoral Project</td>
<td>Rounds 2 + 3 (combined) staff interviews: about the consequences of and the reach and significance of Acorn Project, and further consequences of involving students in decision-making</td>
</tr>
<tr>
<td><strong>Autumn 2011</strong> (Sept–Nov 2011)</td>
<td>Present initial findings to Oaktree staff and ensuing interviews</td>
<td>Me with subset of Oaktree staff</td>
<td>Doctoral Project</td>
<td>To present initial findings of Doctoral research about student leadership of ICT for learning to Oaktree staff</td>
</tr>
<tr>
<td><strong>Spring 2012</strong> (Mar 2012)</td>
<td>Case study data collection</td>
<td>Me with new head of school</td>
<td>Doctoral Project</td>
<td>Interview with Mr Archer</td>
</tr>
</tbody>
</table>
the end of the Project to question participants about its consequences. I was also planning a new student-led project, based on the Acorn Project methodology, and so thought it best to wait until the spring before conducting the Round 2 interviews. Questions for rounds 2 and 3 staff interviews were conflated into a single set. These interviews were conducted in spring 2011 instead.

Other developments to my Doctoral Project took place when I learned that the head of school, Mr Boswell, was to retire in June 2011. I thought it might be significant to find out the new head’s perspective on student participation in ICT leadership, once s/he took office in autumn 2011. Additionally, two veteran staff—Mr Palmer and Mrs Catlin—had shown some interest in my research. Even though neither had taken part in the Acorn Project I felt that they could provide useful information about the development of student voice at the school, and so I wanted to interview them. I had to request permission in writing from the UREC committee at Manchester to make these minor changes to my research plan before the interviews could go ahead. My request was approved. Interview schedules are given in the discussion that follows; the focus of each round of interviews is also provided.

**Data collection**

Data are the ‘rough materials researchers collect from the world they are studying; they are the particulars that form the basis of analysis’ (Bogdan and Biklen, 1998: 106). The data collected for this study derive from several sources. I took a mixed methods approach, which ‘offers enormous potential for generating new ways of understanding the complexities and contexts of social experience, and for enhancing our capacities for social explanation and
generalization’ (Mason, 2006: 10). All the data were filtered through me, and hence were influenced by my experience and perceptions; as such, the analysis is interpretative. Three data sources were used: participant interviews, school documents—including a video recording of student presentation of Acorn Project—and field notes. Table 5.2 details the constituents of these sources, why they were used, and how. Next, I will discuss the rationale for and details of the data collection process. This discussion is followed by details on coding the data.

<table>
<thead>
<tr>
<th>Data sources</th>
<th>What?</th>
<th>Why?</th>
<th>How?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>Three rounds of interviews with student researchers, two rounds with each staff participants of Acorn Project, interview with current head of school, interview with the new head, interviews with veteran staff</td>
<td>To gain access to participants’ perspectives on student voice, student participation, student leadership</td>
<td>Semi-structured schedule, each interview lasting around 30 minutes</td>
</tr>
<tr>
<td>Documents</td>
<td>Emails, school bulletins, displayed notices, policy documents, ISI reports, school website, web publications, yearbooks</td>
<td>To gain insight into the school’s context on student participation, and the Acorn Project</td>
<td>Detailed reading of documents</td>
</tr>
<tr>
<td>Video recording</td>
<td>Student researchers presentation of Acorn Project to the whole school, head of school’s remarks</td>
<td>To capture reactions of presenters and audience</td>
<td>Critical analysis of recording by watching it repeatedly</td>
</tr>
<tr>
<td>Research notes</td>
<td>Observations made during consortium meetings, in class, outside class, during staff meetings. My reflections and perceptions relating to the research</td>
<td>To observe reactions and gestures, interactions, and to keep track of after-effects and after thoughts. To gain insights into participants’ accounts. To record my impressions and reflections</td>
<td>Recorded observations, notes, memos and reflection, reminders in diary format (non-systematic schedule)</td>
</tr>
</tbody>
</table>

Table 5.2: Data sources and associated rationales
Interviews

Interviewing, the key method of my data collection, was used to gather participants’ perspectives on student leadership of ICT for learning. Semi-structured, in-depth interviews were conducted separately with students and staff participants. In-depth interviewing is the dominant strategy for data collection in qualitative research and can be described as a purposeful, guided conversation between two people with the goal of gathering descriptive data in the subject’s own words (Bogdan and Biklen, 1998; Marshall and Rossman, 2006; Yin, 2008). The expectation when interviewing in qualitative research is that the conversation with the respondent will provide a great deal of information and the participant’s ‘perspective on the phenomenon of interest would unfold as the participant views it, not as the researcher views it’ (Marshall and Rossman, 2006:108). According to Bourdieu (1977b), all individuals assess situations based on their personal points of reference; these are authoritative and internally persuasive.

The reasons for choosing in-depth interviewing as my main data collection strategy are that it is targeted and focuses directly on the topic, it is a useful way to get large amounts of contextual data quickly, it allows for immediate follow up and clarification, and the data are collected in a natural setting. This facilitated a discovery of the nuances in the culture of the school (Fielding, 2006a; Marshall and Rossman, 2006). The interview data allowed me to develop detailed descriptions of events, processes and actions that contributed to understanding how student leadership is constructed and understood by the participants of the study. Interviews for each participant group—student, staff and veteran
teacher—were guided by the same sets of main questions; interviews with the former and present heads of school were different because of their role as school leaders. The interview schedules shown in Appendices A–D guided the direction of the sessions and provided a basis for continuity in collecting the data and triangulation in analysing the data.

The interviews were carried out in the form of conversations which allowed for ‘a more equitable relationship between interviewer and interviewee and create[d] opportunity for active dialogue, co-constructed meanings and collaborative learning’ (Simons, 2009: 44). This more interactive interviewing style made the atmosphere informal and friendly, and put participants at ease, encouraging them to divulge their views with openness. I was thus able to gather multiple perspectives on the case at the core of my investigation. Each interview was recorded and a transcript returned to the participant(s) for verification.

*Staff interviews*

Eleven staff (see Table 5.3) were interviewed individually; eight of them had participated in the Acorn Project.
<table>
<thead>
<tr>
<th>Teacher: subject taught</th>
<th>Interview date(s)</th>
<th>Administrator: role</th>
<th>Interview date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Acorn Project participant)</td>
<td></td>
<td>(Acorn Project participant)</td>
<td></td>
</tr>
<tr>
<td>Mrs Ball: Statistics</td>
<td>June 2010 March 2011</td>
<td>Mr Johnson: ICT co-ordinator</td>
<td>June 2010 March 2011</td>
</tr>
<tr>
<td>(Acorn Project participant)</td>
<td></td>
<td>(Acorn Project participant)</td>
<td></td>
</tr>
<tr>
<td>Ms Cruse: Social Studies</td>
<td>June 2010 March 2011</td>
<td>Mrs Nicol: Assistant principal</td>
<td>June 2010 March 2011</td>
</tr>
<tr>
<td>(Acorn Project participant)</td>
<td></td>
<td>(Acorn Project participant)</td>
<td></td>
</tr>
<tr>
<td>Ms Norman: Spanish</td>
<td>June 2010 March 2011</td>
<td>Mr Boswell: former head of school (Acorn Project participant)</td>
<td>June 2010</td>
</tr>
<tr>
<td>(Acorn Project participant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr Palmer (veteran teacher—retired)</td>
<td>September 2011</td>
<td>Mrs Catlin: veteran administrator</td>
<td>September 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr Archer: new head of school</td>
<td>March 2012</td>
</tr>
</tbody>
</table>

**Table 5.3: Staff involved in one-to-one interviews**

The Acorn Project staff participants were interviewed in two rounds, except for Mr Powers who could only take part in the first round of interviews since he left the school in June 2010, and Mr Boswell, who was busy preparing for his retirement. Table 5.4 shows the focus of each round of staff interviews and how these relate to my research questions.
The first round of interviews focused on understanding participants’ views of ICT leadership at the school: whether or not they felt students were involved and their views on the Acorn Project. The interviews were semi-structured so I let participants lead me to things they found relevant. Round 2 interviews dealt with what had resulted from the Acorn Project for these adult participants, the students, and for the school, and what student leadership of ICT for learning could and could not change at the school, and why. In this round of questioning I
was able to bring up issues—such as power and knowledge—raised during the first round of interviews. Mr Palmer, a retired teacher who still works as a substitute teacher, was selected for interview because of the insights he could share, having worked at Oaktree for over 30 years. Mrs Catlin offered to be interviewed because she has been at the school for over 28 years. They were interviewed individually in September 2011 to gain perspectives on the historical development of student participation at the school. I wanted to understand Mr Boswell’s views on how knowledge about student voice at Oaktree is generated, documented and disseminated. His successor, Mr Archer, was also interviewed using similar questions; although he could not comment on Oaktree, per se, he was willing to share experiences he’d had at other schools. Transcripts were prepared and returned for verification as a means of validating the data.

Student interviews

Interviews with the student researchers were conducted in three groups (see Table 5.5) formed around the sections of the course. Their roles in the Project (see Table 4.3) were also defined according to these section groups because it made it easier for them to work together during class periods. A previous study (Davies, 2009a) had shown me that group interviews were a better way to solicit information from students because individual interviews seemed to them like some sort of oral exam in which they were expected to give the right answer.
The interviews were conducted in three rounds: Round 1 in May 2010, Round 2 in June 2011 and Round 3 in June 2012. Each group was asked the same set of questions. All the researchers took part in the first round of interviews. For the second and third rounds 3–6 volunteers from each group were interviewed. The focus of questioning in each round of interviews is shown in Table 5.6; these were similar to those for the staff interviews.

<table>
<thead>
<tr>
<th>Round</th>
<th>Focus of student questioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1:</td>
<td>To elicit students’ thinking about how ICT leadership operates in school (linked to research</td>
</tr>
<tr>
<td>May 2010</td>
<td>question 1)</td>
</tr>
<tr>
<td></td>
<td>To elicit students’ thinking about where knowledge about teaching and learning with ICT</td>
</tr>
<tr>
<td></td>
<td>originates (linked to research question 2)</td>
</tr>
<tr>
<td></td>
<td>To elicit students’ views about their involvement in the Acorn Project (linked to research</td>
</tr>
<tr>
<td></td>
<td>question 3)</td>
</tr>
<tr>
<td>Round 2:</td>
<td>To elicit students’ opinions about the consequences of their involvement in the Acorn Project</td>
</tr>
<tr>
<td>June 2011</td>
<td>(linked to research question 3)</td>
</tr>
<tr>
<td>Round 3:</td>
<td>To elicit participants’ views about the reach and significance of the Acorn Project and about</td>
</tr>
<tr>
<td>June 2012</td>
<td>the potential for student involvement in decision-making at the school (linked to research</td>
</tr>
<tr>
<td></td>
<td>question 3)</td>
</tr>
</tbody>
</table>

Table 5.6: Focus of each round of student questioning
During class discussions about the Acorn Project with these students, I noted their words, expressions and actions in my research journal. These observations contributed to the formation of questions used in the interviews. Data collected from each round of interviews were used in developing questions for subsequent interviews. Transcripts were prepared and returned for verification, as a means of validating the data.

**Documents**

Document analysis, also known as content analysis, allows the researcher to test theoretical issues to enhance understanding of the data. Denzil and Lincoln (2005) suggest that combining multiple methods, empirical materials, perspectives and observations in a single study adds rigor, breadth, and depth to any investigation. There are debates as to whether hidden meanings found in documents can be analysed, because their analysis usually involves interpretation. Robson (2002) suggests that researchers should be guided by the aims and research questions of the study in choosing the contents they wish to analyse. Consequently, archival data—the school’s five-year strategic plan, technology plans, the head of school’s emails and those from colleagues about the Acorn Project, inspection reports, school bulletins, school newspapers and other publications, faculty goal setting and evaluation documents, organizational charts and press releases—were collected and perused for information regarding ICT leadership and the role of students in school decision-making. I gathered information from Oaktree’s website elaborating its philosophy, vision, mission, and uses of ICT, and analysed the video recording of the student researchers’ presentation to the whole school. These documents provided further insight into
wider perceptions of student participation in school leadership. Table 5.7 lists all the documents analysed as part of this study.

<table>
<thead>
<tr>
<th>Document name</th>
<th>Format</th>
<th>Rationale for selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emails</td>
<td>Electronic</td>
<td>Eleven emails sent to me about the Acorn Project were analysed. These included 2 emails from the head of school asking to join the consortium and emails from other colleagues sent immediately after the student presentation to the whole school</td>
</tr>
<tr>
<td>School philosophy statement</td>
<td>Web</td>
<td>Makes use of the terms ‘student-centred’ and ‘collaboration’, which are central to the research</td>
</tr>
<tr>
<td>Video recording of student researchers’ presentation of the Acorn Project</td>
<td>Electronic</td>
<td>Captures the voices, gestures and narratives of the student researchers about the Acorn Project. Captures spectator reactions to the presentation. Captures head of school’s feedback following the presentation</td>
</tr>
<tr>
<td>School’s five-year plan</td>
<td>Electronic</td>
<td>Contained sections labelled ‘Preparing Students for success and leadership’ and ‘enhance ICT for teaching and learning’</td>
</tr>
<tr>
<td>Curriculum booklet</td>
<td>Electronic</td>
<td>To see how far ICT integration is mentioned in the curriculum booklet</td>
</tr>
<tr>
<td>ISTE technology standards</td>
<td>Electronic</td>
<td>These are the ICT benchmarks used by the school</td>
</tr>
<tr>
<td>Student publications</td>
<td>Paper</td>
<td>Three articles written by student researchers for the school’s newspaper, 2010 yearbook and website</td>
</tr>
<tr>
<td>School publications about the Acorn Project</td>
<td>Electronic</td>
<td>Postings on school website and press releases concerning the Acorn Project</td>
</tr>
</tbody>
</table>

Table 5.7: Documents used in data analysis

Being an employee of the school, I had direct access to all these documents. The first stage of my data analysis involved deciding what to analyse, in what detail, and sampling considerations; the sample needed to be representative of the universe from which it is drawn (Cohen et al., 2007). I also had to take into
consideration who is telling, what is happening, where is this happening, when did it happen, and why. I analysed all of the emails about the Project and all three publications produced by the student researchers because these came directly from participants, and all those produced by the school about the Acorn Project. The philosophy and mission statements were relevant because they represent how the school portrays the position of students. Only sections of the five-year plan and curriculum booklet dealing with ICT and student leadership or participation were analysed.

Research notes

I attended all the meetings of the Acorn Project as an observer, and this proved a natural way of collecting data. Five consortium meetings were held in October 2009, December 2009, February 2010, March 2010 and April 2010 (Table 4.2). My observations were carried out to gain objective knowledge (Robson, 2002) on how the student participants’ attitudes and their relationships with staff developed and changed throughout the Project. I also observed the researchers as they worked on their project during my classes, during their presentation to the whole school and during their discussions with Mr Larkin. These observations were qualitative, interactive, unstructured and used flexible guidelines for data collection—listing topics of interest and providing space to record notes about new themes that were emerging. Anecdotal notes were made in my research journal. Cohen et al. (2007) argue that some problems may arise when researchers’ judgements are ‘affected by their close involvement in the group’ (p 158). However, the observations gave me the opportunity to become familiar with staff and students participants in a non-formal setting, and provided me with contexts that I could draw on during the interviews, or from which I was able to
understand comments made by participants. They also added to the rapport between us, thus making our conversations even more casual and easier to elicit in-depth information from them during interviews.

Observation is most suitable for getting a real life view and ‘lacks the artificiality which is common with other techniques’ (Robson, 2002: 216). I took strategies to minimise observer effect: having everyone sit in a circle, having the student researchers lead and assigning them specific roles in the Project. Being a member of the school community made it relatively easy for me to remain unobtrusive.

While I was not conducting systematic observation, I tried to be rigorous and consistent throughout the study, drawing up this list of reminders inside the back cover of my research journal. Data from these direct observations complemented some of the information provided by the participants during their interviews.

- Describe even obvious occurrences (who is leading the meeting, who is presenting, what is the agenda or sequence of events, etc.)
- Record concrete observations (interactions between staff and students)
- Put expressions in square brackets
- Note your impressions in detail
- Avoid generalizations and vague references

My reflections and perceptions throughout the study were noted in my journal. These consisted of observational notes intended to capture events or conversations that I witnessed outside the Acorn Project setting; methodological notes consisting of instructions, reminders, critiques of my strategies and methods and theoretical notes that described my attempts to understand and derive meaning from my experiences and interactions (Robson, 2002). I included notes about my complex personal responses to the events in which I was participating, even if only as observer. These notes were a constant reminder of
Lather’s (1991) acknowledgement that researchers ‘live in worlds full of paradox and uncertainties, where close inspection turns unities into multiplicities, clarities into ambiguities, univocal simplicities into polyvocal complexities’ (p xvi). At the same time, they reflected my attempts to ensure that I was as aware as possible of the effect of my own presence on the phenomena I was perceiving (Bourdieu, 1992).

I also made field notes to capture fully the essence of each interview, and to record feelings and perceptions of events related to my research. As I recorded conversations between staff and students participants I noted their gestures and expressions. I also documented activities at the school that appeared to have resulted from the Acorn Project. My notes were both descriptive—containing descriptions of physical settings and of the subjects and sequences of behaviour—and reflective, including personal feelings and accounts with participants. They helped me maintained awareness of my relationship to the setting and provided ideas and insights to help with my analysis. These notes were maintained throughout the research and afterwards; and in particular, immediately after interviews and meetings.

**Data analysis**

The analysis of data collected in a qualitative study is a complex process that requires both the organization and reduction of that data (Wiersma and Jurs, 2005). It consists of examining, categorizing or otherwise recombining the qualitative evidence in order to address the purpose of the study (Yin, 2008). Once the data had been collected the process of open coding began. Notes and headings were written against interview transcripts as I read through them. The
transcripts were read through again, and headings describing all aspects of the
content were related to the research questions. The data analysis did not proceed
in a linear manner. It was an ongoing search for general statements about
relationships between categories of data (Marshall and Rossman, 2006). To help
me keep track of this web of information, I produced a mind-map using
Inspiration© software, which contained the research questions as its main
symbols, with emerging themes radiating from each one. I went through
transcripts produced from each round of interviews to help me draw up questions
for subsequent rounds, so new information were linked to existing data in the
map.

The analytic approach used is based on the constant comparative method
developed by Glaser and Strauss (1967). There are four stages in this method:
first, comparing incidents applicable to each category by coding each incident in
the data into as many categories of analysis as possible; second, integrating the
categories and their properties; third, delimiting the theory; and fourth, writing
the theory (Glaser and Strauss, 1967). Bogdan and Biklin (1998) enumerate the
main points of the constant comparative method as a series of steps that take
place simultaneously.

My analysis began with organizing the data collected and then reading and
rereading the transcripts of each interview for patterns of key issues, recurrent
themes, or words. The next step was to begin the detailed analysis of the data
with a coding process. These categories were given descriptor phrases or codes.
This stage of the process consisted of taking the raw textual data, archival data
and field notes and grouping the related data into categories. The contents of the my research journal, school documents and the video recording were mainly analysed in a deductive manner, to test themes and hypotheses that were emerging from the interview data (Marshall and Rossman, 2006). There were five main categories of codes as shown in Table 5.8.

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Codes/themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1: (rounds 1 &amp; 2) School ICT leadership Students’ ICT leadership roles</td>
<td>Leadership practices: top-down Need for policies, training, authentic learning, access Decisions are made by elite adults Teachers do not have the final say Missed opportunities Students are not involved Practices differ from school’s philosophy</td>
</tr>
<tr>
<td>Question 2: (rounds 2 &amp; 3) ICT knowledge generation</td>
<td>Consultants and paid sources Training is not provided Students are knowledgeable Staff development</td>
</tr>
<tr>
<td>Question 3: (rounds 2 &amp; 3) + observations Students’ leadership contributions to ICT knowledge, practice + school environment</td>
<td>Acorn Project was empowering Students have potential to lead ICT Changes in location of computers</td>
</tr>
<tr>
<td>Hindrances to staff (rounds 1 &amp; 2)</td>
<td>Lack of knowledge Lack of time</td>
</tr>
<tr>
<td>Student strategies (rounds 2 &amp; 3) + observations</td>
<td>Presenting information Challenging Modeling change</td>
</tr>
</tbody>
</table>

*Table 5.8: Codes/themes listed according to main categories*
The categories were initially centred on my research questions, but two others—hindrances to staff and student strategies—emerged from the interview data, and data from my research journal confirmed them as distinct. I arrived at codes relating to each category by listening to the audio recordings of dialogues with or between participants and reading through the interview transcripts. I noted against each code examples of quotations that supported it. The codes were then grouped under higher-level codes or headings, thereby reducing their numbers, to provide a means of describing the phenomenon, and to increase understanding and to generate knowledge (Cohen et al., 2007).

Once these higher-level codes were produced for the interview data, linking them with supporting archival data and field notes expanded the sense-making process. Reflections, notes and insights were recorded in a different colour to distinguish them from the interview data. The codes were not pre-assigned but emerged from the data collected. However, codes that reflected the larger theoretical perspective as stated in my research questions served as a guide. Following the identification of the headings, the data were combed again to collect and regroup all incidents of reference to the headings along with the supporting participant quotes. Then the headings that emerged were grouped and regrouped to generate the themes that formed the basis of the major findings for analysis. It is this ongoing comparison of concepts with each other that is the basis of the constant comparative method (Glaser and Strauss, 1967). This process of abstraction—formulating a general description of the research topic through generating categories (Robson, 2002)—resulted in major themes that were compared across the participants and supported by diverse quotations and specific evidence.
Thinking with the data

As Mason (2002: 56) indicates, an interpretivist approach allows the researcher to ‘see people, and their interpretations, perceptions, meanings and understandings, as the primary data source’. In the first round of interviews I was interested in understanding how the participants constructed the ICT leadership structure and decision-making mechanisms at the school. One of the codes that emerged from these transcripts was ‘knowledge’. Several of the staff interviewed mentioned not having the necessary ICT skill and backgrounds, and not knowing how to work with students in new ways. For example, Ms Cramer admitted this by saying, ‘I know myself that the students are so much more knowledgeable about the latest technologies, I go to them and ask for help’. In addition, there were comments about not knowing how to request new ICTs for school use. When questioned to find out what she knew about how ICT decisions at the school were made, Mrs Ball replied:

To be honest, I don’t know that much about it. I am given the opportunity to have input, but it’s almost in passing. It’s certainly not a coordinated let’s sit down and talk about it approach: what we need short term/long term. So I would say it’s a bit patchwork, and I get the feeling someone else is making the decisions anyway.

Mr Powers summarized why he believed teachers are not invited to take part as follows:

I think that even if there were more opportunities for staff to participate in making decisions about ICT purchases, one big limitation is always going to be how familiar they are with what is available, and what you can actually do with ICTs. It’s just an observation that I’ve made and it may be a bit of a generalization. But I think that there are a significant number of teachers that don’t have basic knowledge about how to use the things [ICTs] we already have.
The student researchers also made reference to a lack of knowledge for informing ICT decisions at the school in the following ways:

- Before our project, students had never been consulted about school IT. So no one knows what ICTs we use at home or what we prefer for learning (Velma)
- I’ve never been asked what kind of machine [computer] I would like to use; no one asks us (Phil)
- I think they should ask the students who take computer courses like ours (Cecilia)

Knowledge was flagged up in other ways, such as during the student presentation of the Acorn Project to the whole school. While going over the video I noticed three different instances of this. First, at the start of their presentation students read aloud article 12 of UNCRC (1989), and used it to support their arguments for collaboration with Central IT about school ICT decisions. Second, some of the words and phrases they used implied the effort they had made to solicit information from others in order to generate knowledge, as opposed to making assumptions: ‘our class conducted a student-led initiative’, ‘we surveyed world-renown schools’, ‘we compared our school to other international schools and found some similarities’, ‘we looked at schools in Europe and Asia and noted the following best practices’, ‘the students also told us the Internet filters in school blocks just about everything’, ‘here’s some good things our teachers told us about the technology in the high school’, ‘we did this project because we would like the administration to hear the voices of students and teachers’. Third, in Mr Boswell’s remarks following the presentation he makes reference to knowledge, or rather the lack of it, when he admitted the school’s failure to include students in school leadership: ‘due to the practice and processes we have in the school, I don’t think we’re adept at using the powerful student voice that we have’.
I had also observed that students began using the word *evidence* regularly in class, quite early in the Project; the following entry in my research journal was made to capture this.

I have noticed that many of the students have begun using the word ‘evidence’ quite frequently. Today, I heard Jean say to Colin in discussing one school’s website they were looking at together, ‘We need that kind of evidence to show we know what we’re talking about’ (Field notes—30/11/2009).

These examples illustrate how knowledge emerged as a theme following the first round of participant interviews. Power and time constraints were also mentioned by several of the participants during these same interviews. I got a sense that all three issues were important, so in the second round of interviews I decided to question staff directly by asking: *What do you see as some of the stumbling blocks limiting student participation in decision-making at our school? (Prompt: Knowledge, Power, and Practicalities; anything else?)*. These three words became the main codes under the main heading—Hindrances. My observations of the student participants during project meetings were focused on capturing their attitudes and reactions while interacting with staff participants. Six codes were used in these observations: presenting, challenging, modelling, negotiating, seeking information and seeking status. In going through transcripts of the second round of interviews I was able to pick up instances in which staff participants had also observed similar student behaviours. When Mr Boswell said in his interview that it was as if the researchers were ‘seeking equal status’, I began to understand that this was a part of the strategies these students had used in leading the Acorn Project. Chapter 6 develops my findings, and Chapter 7 discusses the strategies in elaborating my conceptualisation of student leadership.
Validity and reliability

Validity, reliability, and generalizability in qualitative research do not carry the same connotation as in quantitative research. However, validating the accuracy and credibility of the findings is important and expected. Several strategies for data validation were used, including respondent validation and triangulation. The use of multiple sources of data and multiple methods of data collection enhanced the probability that interpretations are credible (Mason, 2002: 33). I established validity and reliability by using multiple sources of evidence and the creation of a case study database (Yin, 2008). Whereas triangulation is concerned more with method, respondent validation is concerned more with process. ‘Neither ensures validity though they do contribute to it’ (Simons, 2009: 129). In this study I used strategies that speak to the trustworthiness, authenticity and credibility of the research.

Reflexivity and appropriateness of my methods were also taken into account. Mason (2006: 20) advises that researchers need to think of a strategic way of integrating different methods ‘to provide views of the picture from specified angles’. The respondents I used to validate some of the data collected included stakeholders—students, teachers and administrators—each of whom had an interest, although possibly different from each other, in the Project. They therefore paid keen attention to ensure credibility, and that the school’s values were fairly represented.

Triangulation

One advantage of having over 30 participants in this study is the opportunity of a variety of sources of information. According to Yin (2008) any finding or
conclusion in a case study is likely to be more convincing and accurate if it is based on several different sources of information. The triangulation process employed in this case study gathered information for corroborating the same ideas by examining evidence from the different data sources, using it to build a coherent justification for the themes presented (Robson, 2002). Cohen et al. (2007) argue that triangulating by collecting information from a diverse range of individuals using a variety of methods reduces the risk that the conclusions will reflect systematic biases and allows a better assessment of the validity of the researcher’s claims.

Each staff participant served as a data source. Students were interviewed in groups, but their individual responses were recorded. Data collected from students was cross-referenced against those obtained from staff. A further data source of substantiating evidence was the archival data. In addition, my field notes provided valuable information used for cross-checking. The comparison of data gathered supported the triangulation process and enhanced internal validity. Efforts were made to avoid inaccuracy or incompleteness of the data (Robson, 2002) by audio-recording and transcribing the interviews; transcripts were forwarded to participants for validation.

**Conceptualising the study**

I employ ideas from Bourdieu’s (1977b) work to develop further analysis of student leadership. Using his theory of practice, I provide an intellectual explanation of how the student researchers’ social position within the Acorn Project group enabled them to act as institutional brokers, despite their compromised position within the school. I build on his conceptualisation of
fields, which he elaborates as structured systems of social positions within which struggles take place over resources, stakes, and access. Bourdieu (1992) regards individuals (or social groups) as ‘agents’, who are ‘socially constituted as active and acting in the field under consideration by the fact that they possess the necessary properties to be effective, to produce effects’ (Bourdieu and Wacquant, 1992: 107). Depending on their social position in the field, agents have both a different point of view about the field and a different access to resources in the field (Bourdieu, 1977b). As a result, they may be more or less likely to produce effects in the field under consideration. For this reason, the students’ social position is key in understanding how they were able to enact leadership within the Acorn Project field.

With his practical theory, Bourdieu (1977b) overcomes the impasse of dialectics—structure versus agency, objectivism versus subjectivism—by highlighting the interactions between mutually susceptible and constraining individuals (or groups) as a means of reconciling social structure and individual (or group) agency. He introduces the idea of the habitus, which he believes comprises perceptual structures and embodied dispositions that organize the way individuals see the world and act in it: ‘the cognitive structures which social agents implement in their practical knowledge of the social world are internalized, “embodied” social structures’ (Bourdieu, 1984: 468 as cited in Ball et al., 2002). Bourdieu (1977b) claims habitus is a property of social agents that comprises ‘structured structures predisposed to function as structuring structures, that is, as principles of the generation and structuring of practices’ (p 72). In Chapter 7 I discuss the strategies used by the student leaders in structuring
structures that exist within the school field, and how this helped promote their leadership practices and their recognition as decision-makers.

**Ethical considerations**

Educational qualitative research makes use of a ‘human participant from whom or about whom the data are collected’ (Wiersma and Jurs, 2005: 418) and therefore ethical and legal considerations come into play. There is a responsibility to respect the rights, needs, values and desires of the participants (BERA, 2004). This research was designed to minimize and anticipate any risk to subjects, make use of voluntary participation, and assure the anonymity of participants and the confidentiality of the information they provide. First, I had to obtain permission from administrators at Oaktree School for the research to go ahead. Next, I needed written permission from my university, through the UREC committee (Appendix E). In it I had to provide details of the project, the participants, the risks involved, safeguards, discuss data protection and confidentiality issues, reporting arrangements and conflict of interest, include draft participant information letters and consent/assent forms. The University also required that I establish that Oaktree had approved the research and provide a research plan including evidence of pilot study (Appendix F). As my research developed it became necessary for me to make minor changes to my proposed research plan: for example, I wanted to interview the new head of school and two veteran staff at the school. In order to do this I had to apply to the head of the UREC committee for approval (Appendix G).

Ethics in research has to do with establishing a relationship with the participants that respects their dignity and integrity. Two important aspects of building the
trust of the people involved in my research project were letting them believe they were being treated fairly, and not compelling them to undertake anything that would make them feel uncomfortable. Seeking to ensure that no one felt coerced or obliged to participate in my research, I used an agent to solicit the participation of both staff and students (Appendix H). Care was taken to abide closely by BERA’s (2004) ethical guidelines for educational research by ensuring that the participants were provided with as much information as possible to help them reach an informed decision on whether or not to participate, and by making them aware of their right to withdraw at any time. In the case of the student researchers who were under 16, consent was also sought from their parents (see UREC form). I also provided participants with clear details about their participation, and told them how the data generated would be disseminated. They were accorded their rights to confidentiality and anonymity; pseudonyms have been used for the school and each participant in the research. All the raw data—interviews, documents and field notes—were stored securely in my home. I refrained from using school computers for any work on my research; instead, I took my laptop to the school whenever necessary.

Ethics are also inextricably connected with the political context of the case, and there were abstract principles that needed to be applied to ensure that I continued to gain access to participants, with the blessing of school administrators. It became necessary to think things through carefully in advance. Every effort was made to second-guess why the school would want to be involved in the research before I approached the head for permission. As a teacher it was easy for me to understand how the project would benefit students and staff at the school, but not
necessarily to see why school leaders would consider it beneficial, and I did not assume they would.

Summary

This chapter has provided justification for the methodology and research methods used in my Doctoral research. Details of the participants, research setting and issues associated with access were discussed to form a contextual foundation and reflexive viewpoint of the study. Moreover, a consideration of the philosophical grounding that informs the research methodology has been presented through an exploration of the epistemological stance adopted. In addition, this section has demonstrated concerns that governed processes associated with data collection, analysis, steps taken to ensure the validity and reliability of the data and ethical considerations embedded within the research. The following chapter is concerned with an analytical review of the data collected and themes that become apparent from the study. Attention will be given to answering the research questions, and to exploring of issues associated with student leadership that emerged from the data.
CHAPTER 6

Researching student leadership of ICT:

findings and discussions

Introduction

The previous chapter discussed the methodology, research design and data analysis methods used in my research. This chapter presents my findings. I will refer to participants by their aliases set up in the previous chapter. My Doctoral work centres on understanding student leadership of ICT for learning at Oaktree High School, and discusses it within the context of the literatures reviewed in Chapters 2 and 3. The following research questions are addressed:

1. How does leadership in ICT operate, and what role do students play?
2. Where and how is knowledge about teaching and learning with ICT generated?
3. How and why can student leadership of ICT for learning contribute to changes in knowledge, practice and the school environment?

Data were collected over 33 months starting in September 2009 through observations made while facilitating the Acorn Project, and subsequently; analysis of written and electronic documents at the school, including a video recording of the student presentation of the Acorn Project to the whole school; interviews with 38 participants, most of whom were involved in the Acorn Project—three rounds of interviews were conducted with the student researchers, and staff participants were interviewed in two rounds, an interview with the
outgoing head of school, Mr Boswell, an interview with the new head of school, Mr Archer, individual interviews with two veteran staff (one retired) following a presentation of my initial findings to staff. My field notes and reflections written in a research journal I have kept since the study began also contributed to the data. All of these forms of data collection are consistent with case study research. Each interview session was audiotaped, transcribed verbatim and returned to the participant(s) for verification. In order to retain their anonymity and confidentiality, each participant in the study has been assigned an alias. This chapter will present findings by directly addressing my research questions. Also discussed are the complexities of student participation, not often mentioned in the literature, which this research has illuminated. The accounts are based on descriptive data gathered from the words of the participants, my observations and the data analysis. In reporting on the data I consider the following three main categories of codes, which are aligned to my research questions:

*Question 1*: school ICT leadership, students’ ICT leadership roles, students’ strategies—knowledge generation, challenging status quo, seeking equal status, modelling change

*Question 2*: ICT knowledge generation, hindrances to staff—knowledge, power, practicalities

*Question 3*: students’ leadership contributions to ICT knowledge, practice and school environment

The data have been filtered through my own experience and understanding of ICT as a teacher, and head of computer studies at Oaktree. As often happens with such case studies the data revealed complexities not often discussed in the
student participation literature: hindrances to student leadership and strategies that the student participants used in enacting student leadership, which necessitate further discussion.

**How does ICT leadership operate, and what role do students play?**

A centralized IT department controls ICT operations at Oaktree. The department, under the direction of Mr Larkin, is responsible for the IT infrastructure at the school: installing and maintaining hardware and software. Mr Johnson, the IT Co-ordinator, acts as a liaison between staff and the department. Oaktree High School has an ICT committee made up of department heads, which collates the division’s ICT requests for the subsequent year. This list is passed on to Mr Johnson, who consolidates requests from all three divisions before discussing them with Mr Larkin who makes the final decision.

Discussions with participants about school ICT leadership were meant to solicit their views on how it operates in practice and who is involved. Perceptions on how ICT leadership at the school has developed were gathered by posing relevant questions during the first round of interviews. Mr Palmer and Mrs Catlin, due to the longevity of their employment, provided insights into the developmental history of student participation at Oaktree.

**Conceptions of ICT leadership**

One of the findings that emerged quite early in the data analysis was participants’ understanding of what ICT leadership at Oaktree involved. An overwhelming percentage of student and staff participants suggested that Mr Larkin, as head of Central IT, leads ICT because he controls the ICT budget and is ultimately
responsible for making decisions on school ICT purchases. This idea came over starkly in the following statement by the ICT co-ordinator.

There is currently no high school budget for IT; the budget is for K-12 [the 3 divisions of the school] so no division has a specific portion. He [Mr Larkin] alone decides how it is going to be spent (Mr Johnson).

Staff participants also suggested that Mr Larkin ultimately determines what ICTs are necessary for them to use, based on his budget: ‘It is what he [Mr Larkin] decides that ultimately gets bought’ (Ms Norman—emphasis has been added to reflect inflection in her tone of voice). The notion that ICT leadership is about controlling money and making decisions about ICT infrastructure, supports Capel’s (1992) suggestion that the role of these leaders is limited to maintaining computers and their peripherals. The student participants extended the idea that ICT leadership is about managing budgets to leadership in general. One student, commented that the Student Council is not a leadership group because ‘they don’t control a budget; that’s not what it’s about’ (Velma). There were also suggestions that other elite adults in the school—the principal, assistant principal and academic dean—may have some involvement in ICT decisions. Most of the participants did imply that ICT leadership should be about more than just money.

On questioning student participants about the ICT decision-making processes, one replied, ‘We should be asked because we are the ones who make the most use school ICT’ (Sam). As Gunter (2005) recommends, the practice should be about education, and should include those who are involved in teaching and learning at the school. Unfortunately these participants did not see themselves as being included in ICT leadership decisions, nor did they feel the ICT decisions made related to their needs.
There was a general feeling of negativity among the student participants about using school ICTs, which seemed to stem partly from the fact that they are not given a say in which ICTs should be purchased for the school. One student said with a shrug that she never used the computers in the library because ‘they are pretty old’ (Allie). At their meeting with Mr Larkin they argued that there were not enough computers at the school for student use. They felt that for the amount of money they pay in fees, students should have access to computers in all of their classes.

I think that school technology can be as simple as it needs to be. We don’t have to have the newest computers available on the market, but we all need to be able to access technology in the classroom; not just teachers (Phil).

It is clear that Mr Larkin’s vision of school ICT does not take into account the needs of the students Oaktree is meant to serve. Staff participants suggested likewise. Mrs Ball, in responding to a question on how school ICT purchases were made, commented:

To be honest, I don’t know that much about it. I am given the opportunity to have input, but it’s almost in passing. It’s certainly not a co-ordinated let’s sit down and talk about it approach—what we need short term/long term. So I would say it’s a bit patchwork, and I get the feeling someone else is making the decisions anyway (Mrs Ball).

The student participants were under the impression that teachers might be involved in the decision-making process about school ICT, but added, ‘they don’t have the final say’ (Cecilia). Leadership of ICT at Oaktree is seen by these participants to include neither students’ nor teachers’ views and as a result, and to a large extent, is seen as the process ‘by which powerful groups are able to control and sustain their interests’ (Gunter, 2001: 8), which can sometimes limit agency. Oaktree states the following as one of its goals in its five-year plan for
the period 2005–2010: ‘Academic programs will be adapted to ensure that student learning is enhanced by interactive teaching and learning’ (ACS Cobham Five Year Plan – IT Integration, Year 3). By 2010, when these interviews took place, this goal had certainly not been achieved, at least not from the perspective of these participants. What seems most unfortunate is that including students in ICT decision-making is no longer a choice because, as Mr Johnson made clear, ‘if we don’t involve them [students] we will be wasting our time, money, effort and energy’.

**Participants’ conceptions of leadership in practice**

Another conception about the ways in which ICT leadership is practiced at Oaktree is that school policies on ICT for learning do not exist. Mr Larkin is not an educator and has made no attempt to understand how the ICTs he provides for the school are used: ‘He [Mr Larkin] has never attended one of my classes; I have never seen him in the high school’ (Mr Powers). This may explain why he is not aware of the need for regular access and training for staff at the school in order to promote student learning with ICT. One way of addressing these concerns is through appropriate policies on learning with ICT. Mr Powers also said that he had observed that ‘there are a significant number of teachers who don't have basic knowledge about how to use the things [ICTs] we already have’, confirming the need for more interaction between ICT leaders and those who use the technology.

Mrs Ball commented in her interview that there is a disconnection between what Central IT provides in her classroom and what she actually needs: ‘Look at this [interactive] whiteboard. It’s in a poor location, so I do not use it. The graphing
software, which I would like to use, had never been provided’ (Mrs Ball). It is therefore not surprising that some of the ICTs in classrooms around the school remain unused or are used only seldom. She added that this is in part because the school does not provide systematic ICT training for teachers, and also because ICT integration into the school curriculum does not appear to be a priority. There appears to be little emphasis on providing teachers with the pedagogical and instructional knowledge required to use classroom ICTs effectively. Instead, teachers are left to develop these skills on their own, and very few do. The comments made by the participants directly support observations reported by student participants in an earlier study (Davies, 2009a) in which they opined that teachers lack the experience and skills necessary for teaching effectively with ICT, and go to show that leadership of ICT for learning at the school is non-existent, or at best problematic.

Some of the participants’ concerns raised serious questions about teachers’ capabilities for assuming ICT leadership roles in the classroom and within the school. Teachers who do not have the expertise to evaluate and use classroom ICTs have little chance of assuming control over which digital technologies are provided for effectively improving student learning. Preparation of teachers and students to assume these roles is one area in which the school is lacking. Ms Norman made the following remark concerning the newly introduced process for purchasing school ICT hardware and software whereby teachers are asked to make individual requests: ‘No one has introduced it [the ICT equipment] or told you about it, so there is no way of helping teachers make informed choices’. Most of the staff participants also commented that the ‘top-down approach’ to
ICT delivery has created a disjuncture between teachers’ ICT needs and what is actually provided for them to use in the classroom. Mrs Ball added that this hierarchical approach, together with ‘the fragmentation and the complete lack of co-ordination and training’, does not serve the interest of students.

**Participants’ conceptions of the role that students play**

The student researchers did not feel that their opinions were sought and argued overwhelmingly that their voices were not being heard: ‘Even if we are asked, our views do not actually count’ (Sam); ‘they don’t really care about what we have to say, even when we complain’ (Allie); ‘that computer has been broken for ages and no one has bothered to fix it, even though you made a report’ (Jack). The consensus was that students at the school play no role in decision-making about ICT for learning, but that they should. While the student researchers tended to see participation as a right, staff participants conceptualised student participation within a more functional context, although a clear rationale for this was never given. The former argued that they have a right to be involved ‘because ICT for learning impacts students more than anyone else’ (Joey). Several of the researchers made comparisons between how they are treated at home and the treatment they get at school when it comes to ICT decisions. They reported that prior to this project no one at the school had ever asked students for their opinions about ICT whereas at home, especially with these students who are from families of high economic capital (Bourdieu, 1992), their parents would seek their opinions if computer or related purchases had to be made. Brooks said, ‘My mum would not buy a computer without first asking me which one to buy’, while Jean reported:
Sometimes with holidays, our parents may want to visit a certain place and you may not have a choice. But often we are allowed to give our opinion and sometimes that can change where we end up going on holiday. Say you might suggest going to Spain for a week and your parents might think it is a good idea. Sometimes it will happen, and sometimes it won’t. But here, no one asks us. We are just dust in the wind (Jean).

They also remarked that several structural barriers at the school made it impossible for students to be involved in ICT decisions; for example, students cannot contract Central IT directly: ‘if the computer you had to use in a class was broken you can only tell the teacher; there is no way to call them [Central IT]’ (James). Another student commented on the disruptive effect this could have on their learning: ‘When the computers don’t work some teachers tell us we just wouldn’t use them that day, and sometimes that wastes time’ (Mary).

Throughout the interviews the researchers struggled with the apparent distinctions between the familiar structures of their home life, the structures at Oaktree—much of which is founded on the ‘ideology of immaturity’ (Grace, 1995)—and the school’s new ideals, which can be seen in parts of the recently revised philosophy statement:

> We implement a student-centred approach to instruction following an inquiry-based and interdisciplinary curriculum. The success of our community relies upon the teamwork, motivation, and collaboration of students, teachers, staff, and parents. (Taken from philosophy statement on the school website).

Nevertheless, they agreed that relationships between themselves and the staff participants in the Acorn Project had shifted from the formal one-sided relations they typically have in classes to less formal relations in which they considered themselves of equal status with these teachers: ‘We felt respected; and we felt listened to’ (Phil). They considered these new associations to be a stronger and
more lasting because of the high levels of trust and respect involved, which made them more inclined to speak freely in discussion with these adults. These remarks support Easton’s (2008) suggestion that any sense of hierarchy causes the student’s trust, progress and willingness to listen to be based on the duties of fulfilling the higher power’s demands rather than on genuine respect and interest.

Staff participants saw student participation as important because of what students can and do contribute to improving ICT use in the classroom—assisting teachers, introducing them to new ICT skills and ideas, and providing them with feedback. Mrs Ball elaborated by saying, ‘we as teachers can never sit behind a desk like they do and experience what they go through in the classroom’. Some of the staff participants had ideas of practical ways in which students could assist teachers with ICT in the classroom, but others expressed concerns about their seriousness, judgement and maturity. Mr Johnson was of the opinion that students could help the school to understand better what ICT skills the staff need, because much of the ICT work teachers do is done to enhance students’ learning. This functional approach to student involvement was further exemplified by Mr Boswell who said that he felt decision-making was at its best when it is consultative and involved the opinions of all stakeholders at the school: parents, students, teachers, administrators etc. But as Mrs Nicol pointed out, many adults in the school feared ‘letting students have their say’.

All the staff participants acknowledged that the Project had provided significant understanding of how students can be involved in school decision-making, and that it demonstrated that students could take things seriously and contribute fully.
Their comments regarding the teamwork demonstrated by the student participants and presentations they did during the consortium meetings were all complimentary. Ms Cruse remarked that she was very impressed by their mature and intelligent approach. Following the student presentation to the whole school, I was sent several emails praising their work. One sent by the librarian included the following extract:

I found the presentation informative and think that the calibre of research was very good. I think that we can institute a lot of positive change at our school by continuing with this type of research culture, especially when the students are involved (Oaktree librarian).

This illustrates the need for and usefulness of student participation in school decision-making at Oaktree High School. However, the disjuncture on how this participation is viewed—student participants saw their involvement as a right they were entitled to as beneficiaries of what the school provides for teaching and learning, whereas staff tended to see student involvement as essential for the good running of the school—shows there is a need for dialogue on why students should be involved.

The questions regarding leadership of school ICT for learning enabled me to develop an understanding of participants’ perceptions of the status quo. It appears that the way in which ICT leadership at Oaktree is currently set up does not meet the pedagogical and pragmatic needs of either teachers or learners. As I have noted elsewhere, school ICT leadership centres on reorganizing how teachers teach, rather than the processes of teaching and learning (Davies, 2010a). This approach takes the focus away from what actually goes on in classrooms daily, and it is no wonder that there is an absence of efficient and consistent use of ICTs at the school.
My observation that student participants viewed their participation in school ICT leadership as an entitlement, while staff participants saw student involvement as necessary because of the practical contributions students could make, is relevant because it suggests that adults in the school may not recognise students as subjects of rights. Yet this pragmatic approach to student participation deviates from much of the student voice literature, which while giving full recognition to the positive impact students can and do have on school change, does not promote school improvement as the impetus for student participation. In fact, proponents of student voice (such as Bragg, 2007; Fielding, 2006b; Rudduck and Flutter, 2004) tend to be critical of approaches that seek to use students’ participation merely to improve the performance of schools and systems.

During the observations I conducted during the consortium meetings I noticed that as time progressed the student researchers became more confident in expressing their views. During the last two months of the Project I began to deduce that these were strategies (Bourdieu, 2000) for ensuring that they were taken seriously: the students dressed up for their presentations, spoke confidently and used scripts and notes. Although the camaraderie between staff and students grew as a result of their interactions, it was the feeling that they were listened to, and heard, that most encouraged the researchers to show initiative and to ‘take charge’ (Mrs Ball). Their conversations during the Project meetings became more of a dialogue in which either side was being challenged, and could express their ideas freely. This made me suspect that these students were not used to being heard, listened to, and acknowledged in their classes, and as a result had
grown used to not listening to their teachers in return and not necessarily believing what their teachers had to say.

This suspicion was supported by an oddity that arose during discussions with the students about collecting data from teachers during the third cycle of the Acorn Project. One student researcher questioned the honesty of teachers in responding to the survey. She asked, ‘How will we know they [teachers] are telling us the truth?’ (Cecilia). Although this provided an opportunity for me to discuss with them issues of ethics and morality in research, it also raised serious questions in my mind about the levels of trust that operate between students and their teachers; not least students’ confidence that their teachers are competent enough to use ICT in teaching. I later worked with them on designing the participant information sheet for teachers, which they used in the Acorn Project. The issue of trust in classrooms is not the subject of this thesis. The potential importance of relational trust in learning has been taken up by Smyth (2006b) who cites a considerable body of work showing that ‘what is fundamentally at stake when students agree to learn in schools … is the triumvirate of legitimacy, trust, and interest’ (p 289: emphasis added). However, it seems clear to me that trust is an essential ingredient if students are to assume leadership roles in schools, for two reasons. First, there is a need for them to feel trusted and accepted as legitimate leaders, and given roles which put them in positions of responsibility; second, is the need for them to trust the adults they are working with in these leadership roles.
Where and how is knowledge about teaching and learning with ICT generated?

The issue of knowledge generation about teaching and learning with ICT was examined using a series of questions during the second round of interviews. The aim was to explore if the Acorn Project had enhanced participants’ understandings of student involvement in knowledge production about what works and what does not, regarding school ICTs. Such understanding could provide information on how knowledge about teaching and learning with ICT at Oaktree is generated. Administrators were also scrutinized on their familiarity with existing student voice literature, and to understand what or who informs them about developments in ICT for learning.

All participants agreed that the Project had provided salient information on how to improve learning with ICT at the school, and that it was a model that could be applied to other issues needing investigation, such as improving school meals. One researcher suggested, ‘Let’s do a project like this about the cafeteria food’ (Joyce). The student researchers provided compelling evidence through their presentations to the consortium, and during the presentation to the whole school, demonstrating that their research done by surveying students and staff at the school, and by gathering information about other independent schools, had extended their understanding of school ICT use. One told me ‘We are the experts; they’ll listen to us because we have the evidence’ (Phil). The staff participants concurred. Mr Boswell said, ‘As I looked around the auditorium I could see how intently the other students were listening’. After the presentation Ms Nicol sent an email to say:
The thing that struck me during the presentation was not just how well the presentation went but how every single one of those students performed beautifully. Everyone on that stage was confident, well poised, and astute—I didn’t notice any nervousness. They knew the information well, and were completely prepared. And that was just so impressive. They all did so very well. (Mrs Nicol).

The consortium had drawn up a list of best practices, through which they painted a picture of what would be ideal at Oaktree with regard to learning with ICTs. One student researcher stressed, ‘We don’t have to have the newest computers available on the market but all students need to be able to access ICTs in the classroom’ (Phil). Other things they stated as necessary for effective teaching and learning with ICT included providing regular ICT training for teachers, faster uninterrupted network connection and the removal of obtrusive Internet filtering.

Six of the staff participants acknowledged that the Acorn Project provided a model for facilitating improvements in other student-related school matters, but only two stated that it actually gave them ideas on how to work with students. Several reiterated that the school provided very little ICT training. None of them except Ms Cruse had previously sought to take externally provided ICT courses as part of their professional development, even though the school provides funds to cover such activities. She was also the one who pointed out that the school does not emphasise knowledge about student leadership.

In all the years I’ve been here, no one has bothered to talk to us about the role of students, and we work with them in clubs and activities every day. It is up to us to organise these groups is such a way that the students involved can build leadership skills, and even when we do have students who excel at this they are not recognised (Ms Cruse).
During the interview with Mrs Catlin, she made the following remark, which implied that the school was somewhat complacent about students being positioned at the bottom of the power structure:

At this school I think students have their place, and it is not a bad place for them to be, and they are very comfortable where they are. But from a lot of what you said earlier, the structures that exist in the school—even the fact that the high school used to be spread out over the campus, and in a way each room or building needs to be manned by an adult—appear not to have encouraged students to move out of that sphere to assume more leading roles. In other words, it is as if we always buffer our students to keep them in a child-like state; and yet we wonder why they refuse to grow up (Mrs Catlin).

The school’s five-year plan was the only document of those I analysed, which made direct reference to student leadership. Through the interviews I was able to gather information about the myriad of leadership roles that students at Oaktree High School take on informally through activities such as organising the disaster relief fund, Namibia expedition group, peer supporters and student ambassadors. This made me suspect that their lived experiences were not being documented and celebrated by the school: the work students do fixing teachers’ computers in classes, their knowledge of how tasks could be performed more efficiently using computers, the ICT skills they demonstrated in doing class assignments. Mrs Nicol stated very clearly that students at the school are unofficial providers of knowledge about teaching and learning with ICT.

Because I know myself that the students are so much more knowledgeable about the latest technologies, I go to them and ask for help. So there’s no question that they have to be very much in the forefront when it comes to what we should be doing, and what should be happening with technology (Mrs Nicol).

In my interview with veteran teacher Mr Palmer, he told me that in the history of student participation at the school, the selection of Student Council members had
never been based on academic prowess. Instead, ‘Student Council elections are based on popularity’ (Mr. Palmer). Mrs Catlin argued that these roles are not really about student leadership.

Yes, one never knows the details of the selection process. … Another thing that comes to mind is this: the Student Council is responsible for cleaning up after the dances, they always have been—that’s a real leadership position [laughs] (Mrs Catlin).

The fact that student leadership at the school has developed very little since its institution over 30 years ago shows that it is of little significance to the aims and objectives of the school. Woods (2005) has argued that student leadership in many schools might not be what it ought to be: what might seem like true, democratic student voice might be highly influenced by professional control. He points out that most school councils, while supposedly being democratic organisms within a school’s organisational structure, are in fact designed and set up ‘for students, but not by students’ (Woods, 2005: 65). Mr Palmer pointed out that some student leadership activities might have been the recommendation of one of the school’s inspecting bodies:

I assume our Student Council started out because it was mandated from the top. Since we were an American curriculum school, and every high school in America has one, we had to have one. If instead we’d started out as an International School or a British School—I don’t know if they have student councils—we might not have had one. They have prefects and so on, but these are selected. That has never been part of this school (Mr Palmer).

He went on to mention that students who are academically strong were not given as much recognition as they should be given.

For example one of my daughters was valedictorian and she was not invited to give a speech at her graduation ceremony. I know another student [name omitted] who was salutatorian who didn’t speak at graduation either. In fact, nobody knows who the student speaker is until it is announced at graduation. It is not based on academic achievement (Mr Palmer).
Paradoxically, it can be suggested that Oakwood High School focuses more on keeping students happy and away from danger during school hours, than on ‘high standards of achievement and performance’, as the school’s website suggests. Mrs Catlin also commented strongly on this observation: ‘Yes, they [students] plunk themselves down on the black couches provided for them in Marble Hall. That’s their role, and no one tells them to get on with something more productive.’ It was also shocking to hear Mr Boswell, in his response to the student researchers’ presentation, openly admit that because of the ways in which power works at Oaktree they ‘are not adept at capturing the powerful voices of students’ (Mr Boswell). If the school’s administration does not make it a priority to seek out ways of involving students in school leadership, then it is unlikely that in its present culture students on their own will be able to permeate the glass ceiling of bureaucracy that operates at Oaktree.

**How and why can student leadership of ICT for learning contribute to changes in knowledge, practice and the school environment?**

In order to draw out participants’ conceptions of the extent to which student leadership of ICT for learning could contribute to changes in the knowledge, practice and environment at Oaktree, during the second round of interviews I asked staff participants to comment on the reach and significance of the Project almost a year after it had ended and the policy recommendations had been received by the school’s SMT. The student researchers were asked similar questions during their third round of group interviews.

Most of the staff responded with cautious optimism. The teachers were quick to note that changes in school ICTs were dependent on ‘how much they would cost’
Two of the three teachers interviewed added that there had been no change in the state of the Internet filters despite the recommendation that they be removed, but Ms Cruse felt that Internet access had improved slightly. She reported that she could now access many more sites than previously, although she still encounters some sites. The student researchers were unanimously gratified that they had been taken seriously. They said the fact that two of them had been invited to join the committee responsible for determining ICT purchases for the high school as student ICT reps, meant that students would now have some say in decisions about school ICT. Cook-Sather (2002) comments that schools are ‘authorizing’ voice when school leaders confront the power dynamics in a school where the assumption is that knowledge and position reside with the adults. By asking students to participate in discussions about school ICT provisions in effect legitimized the processes of the Acorn Project. One intervention these student ICT reps made was requesting that the all laptop carts housed in various departments throughout the school should be shared by placing them centrally in the school library where they could be borrowed by teachers for their classes, and by students. This suggestion was based on their observation that many laptops lay unused in some departments while other departments did not have enough to go around, an observation which suggests that the ICT needs per department had not been properly assessed prior to Central IT distributing the laptop carts. The system has been in effect since fall 2010. The student participants I interviewed in round 3 thought this suggestion had resulted in more effective uses of school laptops. Indeed, if schools want to benefit from the powerful feedback that students can provide, then school leaders will have to treat them with respect, include their ideas and take them seriously.
(Levin, 2000). The administrators interviewed felt the Acorn Project was a valiant move by the students towards being heard, and that it had set a direction they would like to see continue. The Big Meeting (see Chapter 4 for details) took place approximately six months after the Project ended, which to them suggested that Oaktree was becoming more democratic.

Another idea that evolved from the data was that the Acorn Project increased participants’ understanding of the school environment and how Oaktree works. Student participants wrote three articles related to the Project, which were published on the school website and in the school’s newspaper. Two reported on the Acorn Project and another discussed the importance of ICTs in teenagers’ lives. Staff participants added that the Project enabled the student researchers to develop several important skills—working together, taking responsibility and conducting research—all of which were transferrable skills; ones that are becoming more relevant in university applications. Arguably, the education provided by schools tends to focus more on academic rather than broader life-long skills. Giving students the opportunity to participate in mature projects, involving much responsibility and working with staff on teaching, outside class time, is an excellent way for students to understand their role within the school community. Ms Cramer added that it was also about students increasing confidence in themselves: ‘I have observed several of the students who participated in the Acorn Project have gone on to assume leadership roles in clubs and activities. I guess the Project has given them the confidence to act in this way’ (Ms Cramer). Staff knowledge had also grown: Mrs Ball and Ms Cruse discussed ways in which they could go about including students in ICT decisions.
in their classes. It has now been agreed that ICT throughout the curriculum in the school would be beneficial to students and staff at the school and I have been asked to work with the IT Co-ordinator achieving this.

Undoubtedly, increases in the knowledge, practice and environment with regard to ICT for learning at Oaktree resulted from the Acorn Project. However, there is no guarantee that these will result in permanent changes to the status of students. Both Mrs Catlin and Mr Palmer confirmed that student participation at the school is dependent on the head’s interpretation of it. Mr Palmer described how the first Student Council came about, recounting that these student leaders were brought in to do things teachers did not want to do: to clean up after school dances and to sell snacks during break times. The head’s interpretation of participation may even go beyond just involving students. Mr Boswell, introduced many opportunities to include parents in school matters, but their involvement still remains purely social and there are still no parents serving on the school board. It remains to be seen how this will change now that he has retired. Mr Archer elaborated his vision of creating a community where intergenerational learning operates as lived democracy (Fielding, 2011), so there is a good possibility that students will be given the opportunity to participate more widely in school decision-making. Fielding (2001b: 134) has suggested a way of judging the potential of student participation for school change: by examining who is listening, how they are listening, and I would add why they are listening. These factors should be the benchmark by which Oaktree should assess its progress. If students are only brought in to fulfil adult-driven agendas then questions should
be raised as to why the voices of the students are heard only when they are asked to speak.

The Acorn Project also provided the student participants with a deeper understanding of their rights as citizens within the school community. During the round 3 interview several of them commented on the very positive effect their participation had had on them:

Yes, I feel I gained a lot from the [Acorn] project. And that’s something that is very hard especially for young people to understand because as a teenager you are so used to living in the moment and to just see things as they are, and you don’t think about the future very much. And so when you’re doing something that’s not particularly fun, you tend to concentrate more on the boringness of it than what is going to come out of it. But after completing this project I think we all feel that it was worth it. Looking back I feel the project has taught me that if you take time to do something well, then something positive will happen as a result (Will).

The Acorn Project demonstrated that given the right development and organisation student leadership of ICT for learning could have a great impact on ICT culture at the school. The focus should, however, be on the development of students themselves, and preparing them for the roles they will assume in the future.

The leadership approach taken by these students was of a socially critical type (Foster, 1989), providing them with an opportunity for their democratic and rational participation in changing structures within the school. Through ‘critical reflection and analysis’ (Foster, 1986: 183) they enhanced their agency and were able to interrupt and intervene in school affairs relating to ICT for learning; their negotiations with adults in the school enabled them to examine, demystify and transform structures; their presentations educated other in ways that encouraged
them to ‘begin to question aspects of their previous narratives, to grow and develop because of this questioning, and to begin to consider alternative ways of ordering their lives’ (Foster, 1989: 37); and their focus remained improving conditions for students and teachers at the school, which made it ethical. This way of enabling students to participate and exercise influence through researching aspects of school life is enthusiastically supported by Fielding (2004), who tells us:

In the student-as-researcher model the issues for investigation are identified by students who are trained in the skills and values of research and enquiry and supported in their work by teachers who have also been learners at the training events. Here students shape the subject, pace and pattern of the research. Student leadership is constitutive and distinctive of this approach. (p 307).

Through their participation in this way, the student researchers gained a sense of what their new roles might involve—generating new knowledge, challenging the status quo, seeking equal status and modelling organic change

**Complexities of student leadership**

Two emergent themes from the data illuminating the complexities of student leadership warrant further analysis:

*Strategies*: knowledge generation, challenging status quo, seeking equal status and modelling change

*Hindrances*: knowledge, power and practicalities

The four codes under the first category, strategies, were derived from notes in my journal made during my observations of consortium meetings and during the student presentation to the whole school. Several adult participants also highlighted similar observations during their interviews. The codes under the second category, hindrances, emerged during the first round of interviews with staff participants.
Strategies

Strategies had to do with moves the student researchers made to advance their cause. For Bourdieu (1992), strategy is not conscious, individual rational choice; rather it is appropriate actions taken without conscious reflection.

A particularly clear example of practical sense as a proleptic adjustment to the demands of the field is what is called, in the language of sports, a ‘feel for the game’ … Produced by experience of the game, and therefore of the objective structures within which it is played out, the ‘feel for the game’ is what gives the game a subjective sense – a meaning and raison d’être, but also a direction, an orientation, an impending outcome (p 66).

This conceptualization of strategies allows for actions to be ‘guided by constraints, as well as for improvisation, different levels of skill, and different choices to be made in particular situations’ (Lingard et al., 2003: 67). What follows is a discussion of how these strategies were developed by the researchers. In Chapter 7 I discuss how they used them to establish themselves as powerful people within the Project group.

Generating new knowledge

‘Evidence’ became a keyword, which the student researchers used throughout the Project. Although new to their normal vocabulary, most of them sensed that it was important to their work. Through their interactions with staff they learned that in order give merit to their claims it was necessary to provide these adults with supporting facts. Finding evidence became an incentive for searching for data on the Internet and for drawing up the survey questions. They realised the onus was on them to come up with convincing information the adults did not have access to, and to base their arguments on facts rather than emotions. As ‘digital natives’—students growing up in the information age—they naturally have many novel ideas about ICTs to share with staff participants who are considered ‘digital immigrants’ (Prensky, 2001). The researchers soon realised
that generating new knowledge was crucial to the success of their project: ‘they’ll listen to us because we have the evidence’ (Phil). Cook-Sather (2002) has argued for the authorizing of student voice through breaking down the structural barriers in order to make students realise that they too can be knowledge creators about school issues. The researchers worked to make their voices heard by developing a new discourse, one which finally became central to conversations within the consortium.

*Challenging the status quo*

Through the Project, the student researchers learned to ask salient questions in non-oppositional ways (Rudduck, 2001), questions regarding the ICT practices at Oaktree. During their meeting with Mr Larkin, one student asked him directly why the Internet restrictions imposed on high school students were exactly the same as those placed on middle school students even though the majority of high school students past the school-going age in England and Wales. They went on to challenge his response that this was necessary because middle school students often used computers in the high school by saying, ‘but we take different classes and so we need to be able to access different content on the Internet’ (Phil). As one student said about the Project: ‘We learned a lot of new things about how to collect evidence and how to ask questions’ (Velma). Several staff participants also commented on the fact that the students involved in the Project had raised important questions about ICT for learning at Oaktree which the school should now look into: ‘how does teachers’ ICT training relate to their use of classroom ICTs’ (Mary). Their presentation to the whole school was a direct challenge of the status quo. It raised indirect questions about who is responsible for ICT
leadership at the school and where the knowledge on which ICT decisions are made comes from.

*Seeking equal status*

Closer investigation of the video recording of their presentation revealed how familiar the student researchers had become with staff participants of the Project. Phil, the Project leader, in thanking consortium staff, asked each one to stand up and be recognised when his or her name was read out; in a friendly gesture to Mr Boswell, who was seated in the front row, he asks him to stand up. The cordial relationships he and other students had developed with these staff members was part of what students might learn from leadership activities (Thomson, 2012). It was a relationship in which each side—students and staff—showed deep respect for the other. Mr Boswell commented that by providing the evidence confidently as they had done, it was as if ‘they were seeking equal status’. His comment supported my observations during a consortium meeting where student participants had tried to convince the adults that students are capable of assisting teachers with ICT tasks, such as creating PowerPoint presentations to accompany their lessons. They were genuinely arguing for a stake in improving classroom ICT practices. These students were not demanding respect from the staff; they were simply asking to be trusted and to be treated as equals.

*Modelling organic change*

Ms Norman, in responding to why she felt the school had not taken the ICT policy recommendations seriously remarked, ‘because they didn’t pay for it’. The idea that information is not valuable unless it is bought is one that now fuels many educational changes, including educational consultants who go into schools to show their leaders how to run them. As a means of tackling
inequalities created by socioeconomic differences, and to promote social mobility, many schools in England are now being privatised through the academy schools programme in England (Woods et al., 2007). The privatization of publicly funded schools is well documented by scholars such as Ball (2009), Bottery (2000) and Gunter (2011b), all of whom agree that privatization, especially of public schools, erodes the very ethos of education: that it is a public good. They argue that these market-based reforms are built on the illusion that society can be held together solely by individual pursuits rather than common democratic purposes.

The idea that decision-making about school ICTs by sole individuals such as Mr Larkin will produce effective learning outcomes for students is similarly a fallacy. The researcher who remarked that students use ICTs more than anyone else in the school shared a similar belief with Mrs Ball, who commented on the fact that it is impossible for adults within the school to experience what is most beneficial to students during lessons. If the process of school decision-making can be opened up to include the new voices of students then the authentic expert knowledge they have could provide many opportunities for awareness-building about the institution, and the decisions would be based on authentic information and arrived at in democratic ways. The Acorn Project involved students investigating ICT problems about their school. They used an approach that solicited the opinions of stakeholders, in a democratic way; they were not complacent about how things were, or compliant with school regulations. The researchers did not misrecognise their ‘objective truth’ (Bourdieu, 1992: 140);
instead they raised serious questions about structures and processes at Oaktree, and suggested viable alternatives.

This foregoing discussion is not to suggest that student participation is free of tensions and misunderstandings. Far too little is said in the literature about obstacles that could get in the way of fostering student participation, which can discourage or even prevent students from becoming more involved in school decision-making. Staff participants revealed some of these, which I will now discuss.

**Hindrances**

Despite being mandated by the UNCRC (1989), including students in decisions about school or classroom leadership does not appear to be the natural way in which adults at Oaktree operate. Therefore it is worth examining the things that hinder teachers from adopting or even practicing student inclusion in decision-making. Three concerns—knowledge, power and practicalities—emerged from data obtained from the first round of interviews with staff participants.

**Knowledge**

Almost all the adult participants in the Acorn Project, and the new head of school, Mr Archer, admitted knowing very little about student voice or student participation. Surprisingly, most of them were unfamiliar with article 12 of the UN Convention on the Rights of the Child (UNCRC, 1989). Ms Norman, said she had read about the Convention, but had not ‘thought about it within the context of teaching’; while Ms Cruse who discussed it in her social studies classes said she ‘did not see it as something she could use in her daily work with students’.
A majority of the student participants reported that they had learned about the Convention in social studies classes but didn’t know what it all meant because ‘the language [used in the articles] is quite confusing’ (Colin). This illustrates that knowing about the articles of the Convention does not imply that students and teachers understand how it relates to their daily life in school, nor does this guarantee that students know how to act to assert these rights. This can partly be blamed on the fact that the focus in school curricula tends to be on content rather than reusable skills, and little attention is given to providing students with lifelong skills. Hargreaves and Fink (2003) extend this idea by arguing:

In the face of the traditional grammar of schooling, and those whose interests its abstract academic orientation repeatedly serve, the vast majority of educational change that deepens learning, and allows everyone to benefit, neither spreads nor lasts (p 436).

Instead, emphasis is placed on school improvements and statistical appearance that make school leaders ‘look good’ when faced with school inspections. Mr Boswell’s admission that the school is ‘not adept in capturing the powerful voice of students’, raises questions about his knowledge of, and indeed interest in, student participation. The extent to which school leaders are prepared to go to ensure that students’ voices are heard seems rather limited, partly because it is assumed that student participation often has little or no impact on how well a school is performing. In addition, as Anderson and Herr (2009: 157) note, school leaders tend to be ‘anti-learning’ and devise ways to shield themselves from appearing ignorant; thus they find it easier to acquire and use the latest buzz words rather than spend time gaining a deeper understanding of issues such as student voice and how it relates to their school.
Mrs Nicol, in responding to my question about obstacles that stand in the way of student leadership told me, ‘Many of these things need to be built into our skills training in the school, and I don’t know how to do it’. In the time since the end of the Acorn Project, I have not been aware of any effort on her part to investigate how this might be done, nor have there been initiatives at the school to encourage authentic student participation apart from those which I have already mentioned. One of the first attempts by Oaktree to ‘capture the powerful student voice’ involved inviting the president of the Student Council to attend staff meetings during the 2011–2012 academic year. When asked to speak he stood up, read out a list of social activities they had planned for the term, and when he was through we all clapped and he was asked to leave. I later made the following note in my research journal.

If this is Oaktree High’s interpretation of student voice, then they have entirely missed the point I have tried to make over the past two years (Research notes: 26/09/2011).

With this announcement, Oaktree could now allege that its students are involved in staff meetings, even though they do not participate in any form of dialogue with staff present. Much more information on student participation is available today than previously, yet Oaktree does not have an officer charged with promoting students’ interests. On the other hand, the school has recently spent millions of pounds on rebranding, a new performing arts complex and the latest computer infrastructure, investments which have significantly increased the school’s market value.

Students who attend private schools, like their counterparts in state schools, have rights within the school environment. They need to feel in control of and
involved in school decisions. But there is also a need to foster and sustain avenues for them to participate in school leadership. It takes someone with knowledge on how to create such opportunities for students. If school leaders are content with their limited knowledge of student participation, and expect others to promote student voice within the school, then it is unlikely that the aspirations of Fielding (2004) and others who work in the field will ever be achieved.

Bragg (2007) has argued that the ‘competitive context increasingly imposed on schools’ (p 349) through league tables and parental choice, provide opportunities for student voice to be linked to the pragmatic goals of schools. It has been suggested that private schools in particular, with their full dependence on tuition and donations, stand to gain from capturing the powerful voices of their students and using this information to their market advantage (Dronkers and Robert, 2008), a conjecture that warrants further research.

*Power*

Gaventa and Cornwall (2008: 172) contend that power and knowledge are linked in very complex ways. They also suggest that action research provides effective ways of breaking down power inequalities, such as those that exist between students and teachers within the school setting. Inasmuch as the consortium meetings served to remedy these differences, the complexity and contingency of power relations at Oaktree School can prove a strong barrier to student participation. During the second interview with Ms Norman she agreed that the Acorn Project had helped promote an ethos of collegiality.

One of the things the project demonstrated is that students and teachers can talk about things outside of class, and on a level playing field. And this required listening on both sides (Ms Norman).
However, all of the participants shared the view that students at Oaktree were marginalised. Mr Johnson commented that ‘they haven’t got the power of the purse like their parents do’. Ms Cramer talked about the ‘huge divide’ between students and staff. All of these staff, like Ms Cruse, thought that by not including students in school decision-making, egos got in the way of students’ learning; instead it should be about ‘raising the quality of their education’ (Ms Cruse). The hierarchical structure at the school makes it impossible for the high school administrators to negotiate on behalf of teachers and students. Mrs Ball had observed the problems this posed when it came to requesting ICTs for her classroom.

[The administrators] definitely pay lip service to it; they’ll say yes, this is great. Then at the end of the meeting the head of IT says well, there are lots of things you don’t know about, so sorry. And that defeats the whole purpose of the discussion. I think that’s the biggest stumbling block (Mrs Ball).

Her statement made me realise how fortunate I was that the Acorn Project was allowed to go ahead. All the events constituting the Project—consortium meetings, surveys and the all-school assembly—had to be approved by school administrators before they could go ahead. Had the ‘right’ administrator not been approached and at the ‘right’ time, some of the project’s events would not have been allowed to go ahead. It is possible that the school leaders’ lack of knowledge about student voice could result in them viewing proposed changes meant to improve the status of students with suspicion, for fear of unexpected outcomes. Very often students are expected to sit and listen, and as Mrs Nicol pointed out, many adults within schools are unwilling to let them have their say. Mrs Ball made a similar comment during her second interview, only this time about school administrators:
There is still a power struggle whereby administrators fear that by including other parties, namely teachers and students, they’ll lose some of their authority; and it is part of the culture of this school so I doubt it’ll ever change (Mrs Ball).

It is also possible that the Acorn Project would not have gone ahead. My proposal was rejected on its first submission and only succeeded after I reworded the project’s details. Mr Boswell later told me it wasn’t approved because, ‘we thought it would be about students telling teachers what to do’. If the recommendations on democratic school change suggested by Apple and Beane (2007) are to be accepted, then school leaders must invest time and money in ensuring those who work with young people within their schools do not see them as a threat.

*Practicalities*

Twenty teachers were initially invited to join the consortium but only 13 accepted. Three who did not take part wrote to apologise, stating that they simply did not have the time. Reflective learning, which involves internally examining and exploring an issue through experience to create clarity of meaning in terms of self, ‘is one of the first things that goes out of the window’ (Mr Powers) in courses where the aim is to deliver a syllabus for an external exam in a certain amount of time. Most of the other teachers shared this concern about the absence of time to experiment with ways of integrating ICT into the curriculum of the courses they teach. Anderson and Dexter (1999) have discussed the issue of time in teachers’ adoption of constructive approaches to ICT use in the classroom. The idea that given ‘rich professional development experiences and a professional culture that encourages reflection and trying new approaches will produce the learning, … support, training, and time to learn’ (p 15), is one that easily extends to working with students in other new ways. In planning the
Acorn Project I spent a long time researching how best to involve students while at the same time meeting my responsibility of delivering the planned curriculum. In the end I decided to embed the Project at the centre of the curriculum so that all the computer applications were connected to the Project.

In practice, knowledge, power and practicalities such as time can be obstacles to promoting student participation in schools. The hidden face of power can prevent certain issues that school leaders view with mistrust from being brought to the surface in the first place; so many students choose to remain silent even when they are allowed to speak. They may be empowered through knowledge about their rights, but not being allowed to act in ways that demonstrate claiming and protecting these rights does little to change their political status within the school community. Likewise, if teachers are not encouraged or given the time to explore new pedagogical ways of using classroom ICTs, very few will be inclined to adopt changes in this direction.

**Summary**

This chapter reports on findings from the research data. Most participants see the head of Central IT at Oaktree as solely responsible for ICT leadership because he controls the school ICT budget, although several participants suggested that some other school administrators might also be involved in ICT decision-making. They argued that leadership is more than just managing ICT purchases, and students want to be involved because ICTs play an important role in their learning. The students also suggested that teachers might be allowed input but are not responsible for the final decisions. While the student researchers saw their involvement as a right due them as the main consumers of school ICTs,
staff participants took a more functional view of student participation: students could help them achieve more effective use of ICTs in the classroom. What evolved from the interviews points to the fact that the meaning of student participation is at the discretion of the head of the school, which determines how and what decisions students are involved in, and its sustainability. It also emerged that the school’s approach to student leadership is not as democratic as its philosophy might suggest.

Unfortunately these interpretations can also provide space for obstacles that hinder student participation: knowledge, power, and practicalities such as time. When student voice is allowed to flourish it can provide those who participate in decision-making with new roles and responsibilities associated with their rights as citizens within the school community. These roles include generating information to expand existing ideas, challenging what exists in non-confrontational ways, seeking to become partners on equal terms, and demonstrating the need for change based on the needs of stakeholders. Thus if student leadership of ICT for learning is to develop at Oaktree, space and time need to be set aside for collaboration between staff and students, where issues including ‘(1) the presumption of agency; (2) communal contexts of identity formation; (3) the importance of enabling difference’ (Fielding, 2009) can be discussed.

The strategies these students developed and used throughout the Project were not taught but grew out of a ‘feel for the game’ (Bourdieu, 1992: 66). In the next chapter I examine how the collaborative space that was set up through the Acorn
Project worked in the interest of the students, so that they ultimately emerged as leaders of school ICT. I mobilize Bourdieu’s (1998) thinking tools of field, habitus, capital and strategy to explain why they were successful in shifting boundaries in the project group, but not within the school.
CHAPTER 7

‘Structuring structures’:

student leadership at Oaktree High School

Introduction

Little is known about the relationship between students and school leadership (Mitra and Gross, 2009a). Moreover, there is a considerable lack of research concerning the opinions of students in private schools. This thesis has focused on exploring student leadership of ICT at a private high school. In the present political climate in which the independent school is seen as a model for the state system (Gunter, 2011b), this study has resonance.

My research centres on a student-led action research project—The Acorn Project—which was set up to develop policy recommendations on ICT for learning at Oaktree High School. The students leading this project became the objects through which I studied student leadership as case study research. Thus my methodology is multi-layered: case study operates in its outer layer, and at its core is action research—the research approach used in the Acorn Project. Even though these two methodologies are interwoven each has distinct and different aims, and was conducted separately: as the researcher I conducted a case study, whereas the students conducted action research. In effect, I conducted a case study of an action research project. My data collection included listening to, analysing and identifying participants’ perspectives about student leadership, mainly of ICT for learning, through different contexts centred on my research
questions. Chapters 4 and 5 have described the Acorn Project and my methodological approach, and Chapter 6 discussed my findings. In order to move beyond description, in this chapter I mobilize Bourdieu’s (1998) thinking tools to ‘understand and to explain’ (Gray, 2009: 499) student leadership at Oaktree High School. My conceptualisation centres on student participation in a project which promoted self-advocacy (Lansdown, 2000). These participants provided a voice expressing how student leadership is understood and enacted that I am able to map into a coherent framework. The project revealed ‘a rich descriptive account of meanings and experiences of people in an identified social setting’ (Simons et al., 2003: 12), Oaktree High School. I was able to observe student leadership in action, which enhanced my own understanding of the phenomenon and enabled me to gain a holistic view of it. I will reveal how, through ‘structuring structures’ (Bourdieu, 1992: 53), the student researchers were able to shift boundaries, thereby establishing themselves as powerful people within the Project group.

**Action and reaction**

The Acorn Project ran for most of the 2009–10 academic year. It took two attempts before it was approved to go ahead. Nothing like it had ever been done at the school, and it is likely that the ‘structured structures’ (Bourdieu, 1977b: 72)—events from the past (or history) which influence present behaviours—did not allow this administrator to imagine the Project going ahead without contention by staff. Mr Boswell told me during his interview the reason my proposal was not approved the first time was because the panel thought it would be controversial. Even some of the teachers who agreed to participate in the Project were initially not clear about its goals. It is likely that they only decided to join the consortium because they were given the option to use this activity as
their annual teaching goal. Each invited staff member was sent a participant information sheet by the student researchers, but I still got queries about the Project before it started. Ms Norman asked me: ‘so what are the students going to be doing? Will we just have to supervise them [the student researchers]?’ She presumed that the duties of the staff participants would be similar to what was done during the student dances. Another participant was reported to have said prior to the first consortium meeting that he was going to be ‘sitting on his hands’; this individual initially viewed the Project with contention.

Bourdieu’s (1977b) theory of practice is based on his understanding of culture—how the structures of social phenomena determine, and are themselves perpetuated, by action. It is not a deterministic theory; instead he draws attention to the interplay between structure and agency. He attempts to develop a set of robust thinking tools built around the ideas of field, capital and habitus that is objective and generalizable, yet accounts for subjective thoughts and actions. Bourdieu’s (1998) concepts locate structure as being embodied and expressed through the actions people undertake, and their dispositions. In other words, structure is not static, it should be observed as constituting and dynamic. Throughout the Project the student researchers were ‘structuring structures’ (Bourdieu, 1977b) through the agency they showed. At the first consortium meeting they were able to outline clearly why the Project was important to them, who would be involved and how the first stage should proceed. The staff participants said they were impressed mainly because in their first presentation these researchers had already exceeded the expectations of the consortium staff.
To explain their strategies within the context of the Acorn Project, it is necessary to examine the school as a field. Bourdieu (1999) defines a field as a structured social space that contains people who dominate and people who are dominated. He writes:

Constant, permanent relationships of inequality operate inside this space, which at the same time becomes a space in which the various actors struggle for the transformation or preservation of the field. All the individuals in this universe bring to the competition all the (relative) power at their disposal. It is this power that defines their position in the field and, as a result, their strategies (pp 40–41).

The school field consists of various actors—students, teachers and administrators—and is the ‘locus of power relationships and of struggles aiming to transform or maintain them’ (Bourdieu, 1987: 141). Gunter and Thomson (2007) have argued that elite adults typically set the agenda in schools, which is ultimately designed to preserve their positions of power. The data in the present study show that students and teachers at Oaktree have hitherto had no say in decision-making about ICT for learning; instead they suggested that the head of Central IT, who controls the budget, is responsible for making the decisions about school ICT. The opinions of teachers, and certainly those of students, are not taken into account because the focus is on making the school look outstanding, by abiding with the ICT and other standards to which the school subscribes. Teachers are not involved; they are not even provided with the necessary training that would allow them to participate in ICT leadership decisions. Statements comprising the school’s philosophy are not of priority either; what matters is only that which is necessary for them to rate highly as an independent school, thereby increasing Oaktree’s market value.
Bourdieu (1999) views any social formation as consisting of a hierarchy of a number of relatively autonomous fields and subfields, each with its own logic of practice. His theory of practice deals with how to recognise the impact of structures and social facts on practice, while at the same time recognising the impact of practice on structures. Practice is what people do—the actions people take. Originally, the Acorn Project was framed in terms of the structures of the institution, and yet those structures and power relations were being affected simultaneously, and subsequently, by the actions of the student researchers. Through the Project, the doxa—the taken-for-granted assumptions and beliefs about students at Oaktree—were shaken to their core. The subsequent reactions of adult participants in the Project, and other adults within the school, demonstrated that they had never thought of students as being capable of making important contributions to teaching and learning.

Fields within a field

![Diagram of fields within a field]

Figure 7.1: The school as a field with its subfields
Considering students, teachers and administrators as subfields of the school field (Figure 7.1), makes it possible to envisage how agents within each of these specific subfields compete for control of the interests of the school field, using all the capital at their disposal. By staking a claim to a field position a person becomes situated within a particular socially constructed disposition. Individuals internalise the social structures that exist and this structures the way in which they see the world. This is what Bourdieu calls habitus; he notes that ‘the field structures the habitus’ (Bourdieu in Wacquant, 1989: 44). He argues that people’s actions can be explained not only by the structures that they are living in, as objective reality enforcing its inescapable will, but also by their habitus. Habitus may be seen in the practice, the technologies, the ways of standing and walking, the gestures and the very nature of individuals belonging to a particular field. It is embodied in them.

Among the actors at Oaktree High School the smallest group, administrators, ironically occupies the most dominant of the three subfields. The interests of this group lie in maintaining the reputation of the school, advertising its successes, attracting more students to the school and increasing its profits. They interact with teachers and students mainly through handing down policies and school regulations, setting school calendars, planning infrastructural changes; they are solely responsible for the look, feel and daily running of the school. The actions of the administrator field also defines the ethos of the school because the high fees result in a certain kind of student body—those from high socioeconomic backgrounds—and the policies result in teaching and learning happening in certain kinds of ways. For example, the absence of policy on ICT for learning at
Oaktree means that it is not a compulsory subject for students. There is an Administrator habitus, which includes having lunch as a group at the same table in a far corner of the cafeteria. Combined with this is a doxa (Bourdieu, 2000) of self-evident leadership, which sets them apart and makes them easy to be identified as school administrators.

The interests of administrators sometimes prompt those of teachers. In attempting to increase profits through increasing student enrolment, Oaktree remains non-selective; anyone who can afford its fees is welcome to join the school. As a result teachers struggle with large student numbers in their classes, many of whom are either ill prepared, or unable to speak coherent English because of their international backgrounds. Teachers therefore see it in their interests to ensure that their classrooms are not overcrowded, and that students who do not have the necessary preparation are not enrolled in their classes, moves which often put them at odds with school administrators. Teachers too have a habitus, and since some of them are also administrators, there are sometimes overlaps: habitus shared between two fields. Teachers and administrators work with students in classes, extracurricular activities and official school business. Both of these groups took part in the Acorn Project, which was led by students at the school.

Students soon learn their place within the power structures of the school. Participants of the Project revealed that students, like teachers, are not involved in school ICT decisions; they simply use what is provided. Their attitudes to school may be seen in terms of their individual life and family histories whereas
what Bourdieu (1977b) calls habitus develops and evolves through interactions with others within the field, and with the culture the individual is living or has lived in. Bourdieu (1977b) sees habitus as deriving from and being part of the whole person. So when students join the school, even though they may be from affluent backgrounds, the attitudes acquired in their family settings begin to be restructured through the social conditioning that occurs when they start to notice the ‘Do Not Enter’ signs on doors to the staffroom and teachers’ offices. They are not invited to staff meetings, even though much of the discussion at these meetings centres on them. They soon begin to understand that it is fine for them to organise bake sales and student dances, but that they have nothing to do with the day-to-day running of the school. All too soon, students become aware of the inequalities and power differences operating at Oaktree High. However, when it comes to ICTs they are conscious that they have certain capabilities that the school is unaware of—their appropriations, uses and connections made using ICTs outside school—and they want these to be taken into consideration. Their position within the power structure of the school, where they are expected to sit, listen and learn, gives them little chance of making their case. The Project became an opportunity for them to make a strong case about their ICT needs, and to be listened to.

The Acorn Project was a field in its own right. It was strategically positioned because it did not align itself with any of the existing fields. It included students, teachers and administrators and was about their shared experiences and concerns with school ICT. The practices of the different players within the field and their relations to each other, and to the structures of the field, contributed to the
makeup of the field. Thus the Project, and indeed any other field, can be seen as more than just a set of structures or rules.

**Structuring structures**

When I started this study I did not think the work of Pierre Bourdieu would be of significance. I approached the research from within an interpretative framework. I was primarily concerned with understanding the meanings student leadership had for participants involved in the Acorn Project, and adopted a 33 month longitudinal approach to collecting data through observations, interviews and document analysis. The data analysis was done mainly through repeatedly listening to the recordings of interviews, to decipher harmonies and dissonances between perceptions. By focusing on specific themes and the relevant literature, I began to develop a theoretically rich picture of how the student researchers understood student leadership in terms of their life histories.

It has been argued that children develop conceptual structures (schemata), which help them understand their experiences (Rumelhart, 1984). Thus, schemata structure what is known of the world people occupy, and help filter their experiences in the world allowing them to make sense of it. The student researchers developed their experiences of student leadership within the Acorn Project in a similar way, by drawing on how they are positioned within their homes. This repertoire of schemata contributed to the disposition that made up their shared habitus with staff members of the consortium within the Project field. Soon after its conception, the student researchers were using words and phrases outside their everyday vocabulary: evidence, beneficiaries and empirical research. Once they felt situated as leaders within this project group, they took
the initiative of finding out about ICT practices at other independent schools by looking for information in websites on the Internet. These students decided what questions they wanted to ask teachers and students in these schools, based on what they felt would increase their knowledge and understanding about the issues the consortium had decided were important. As they gained new experiences each person’s individual schemata was modified and developed to recognise the relevancies in their surrounding world. The life history of each individual shapes and is shaped by his or her doxa: experience through which ‘the natural and social world appears as self-evident’ (Bourdieu, 1977b: 156). So in choosing their actions the student researchers used their own dispositions, and as such, the decisions they made as leaders of the consortium were made within the context of the Project group.

As players within this field they had capital, which they used to achieve their aim of being recognised as leaders of ICT for learning. Their actions in using this capital and the availability of the capital itself were both constrained by the shared habitus: because schemata filter information, people’s actions are both limited and enabled by their understandings of their world (Rumelhart, 1984). They saw the knowledge they were generating from the data as an important process in the Project, because having adults listen to their results made them feel important. They even made efforts to improve. By the second consortium meeting they were able to answer challenging questions about the student survey data. The adult consortium members interrogated graphs produced by the researchers, but because they had really immersed themselves in the data analysis, they did not appear nervous or intimidated as they went over detailed
explanations carefully. They were in charge. While analysing the data collected from teachers, the researchers looked for areas of the presentation they were planning for that might be unclear to the audience. Efforts were made in advance to include details that would help the staff understand what the data meant. Their knowledge helped them to gain confidence in themselves, which manifested itself through the clear and detailed explanations they gave. Through the gathering of data and acquisition of knowledge—knowledge for action—the student researchers gained capital, which became symbolic when it was presented to the consortium who recognized it as ‘legitimate and powerful’ (Lingard and Christie, 2003: 324). Teachers in the consortium said they were impressed with the data the researchers collected and how well it was presented. Student researchers remarked that they felt important, and listened to. Through the interactions with adults in the consortium the researchers developed practices ‘related to different contexts, the dispositions within the habitus, and were structuring structures’ (Gunter, 2003: 345). The objective relations between students, teachers and administrators shifted within the consortium—the Project group—in the way that Reay (2004: 436) remarks, ‘when habitus encounters a field with which it is not familiar, the resulting disjunctures can generate change and transformation’. Their actions made them more powerful members within the project group. They developed a ‘feel for the game’ (Bourdieu, 1987: 64), ‘which can only be understood through their interactions with others’ (Gunter, 2003: 345).

One of the ways in which Bourdieu (1977b) uses the word capital is to represent the social products of a field. These may be materials: thoughts, actions, objects,
etc. Capital therefore helps us to look at social action as something quantifiable. However, it is not readily available on a wider basis: it depends on the field in question. The capital the student researchers gained within the Acorn Project group did not automatically transfer to capital they had within the school.

After the consortium had met for the last time the researchers were in class reflecting on the Project when suddenly Jean suggested, ‘Hey, why don’t we have an assembly where we can show the whole school what we found out?’ Everyone agrees! This was a new strategy acquired by experience, which is part of habitus; and they did not misrecognise the situation. They were aware that through their actions they had gained new ideas—capital—which becomes symbolic when presented and legitimised, thereby allowing them to shift their position towards becoming more powerful actors.

Having shifted the boundaries within the consortium, the student researchers were ready to take on the whole school to see if the boundaries there could be shifted also. They wanted to challenge the status quo by asking questions such as who makes decisions about school ICT and where this knowledge comes from. And through this gain symbolic capital within the school field, and similarly shift its boundaries. The actions, strategies and struggles of the student researchers were not just about material gain but also about the staking of symbolic capital (Gunter, 2003) to help them shift boundaries in order to reposition themselves as more powerful people within the school.
The desire to present their work to the whole school may also have been their way of resolving the tensions developed from the multiple identities the student researchers had experienced—‘a double perception of self’ (Bourdieu, 1999: 511)—first as powerful members of the consortium; second as students in the school, where they were expected to be seen but not heard. When they were asked to recommend teachers who could be invited to join the consortium their initial discussions centred on whether one teacher was ‘too hard’ or another was ‘easy’. The teachers who were part of the consortium also taught these students. Even though some of them really excelled as Project leaders, they may not have been performing at the same level in their classes: on the one hand they were excellent Project leaders, and on the other they arrived late for school, skipped classes and did not do their homework. This habitus ‘divided against itself’ (Reay, 2002: 223) continued to generate uncertainty in an ambiguous way throughout the project, and it is possible that the student researchers wanted to resolve it by showing everyone ‘how good they were’ (Ms Cramer).

**Reframing student leadership**

Student leadership should be something students do, not just something they read about or watch. Yet while that ‘doing’ clearly requires their active participation, forces or structures beyond their control predominantly dictate the terms on which it is performed. The rules that govern the leadership practices at Oaktree School are not, by and large, open to negotiation or change: habitus is fixed. The Acorn Project interrupted these practices though the enactment of leadership by its students. Their strategies included generating new knowledge, challenging the status quo, seeking equal status and modeling organic change. By asserting the power of agency these students were necessarily diminishing the power of
existing structures at the school. This relationship between agency and structure continues in the wake of the Project, and so in this new dispensation, it is worth reframing my research questions to examine instead what might be, having discussed what exists.

My first research question should now address *how leadership in ICT at the school might be developed to include students*. A doxa of beliefs about students at Oaktree have to a large extent been shattered by the Acorn Project. Many adults at the school now see students as mature enough and capable of providing useful information about school ICT change, and indeed other school reforms. Staff participants of the Project realised that students can do even more than this: they are actually able to ‘take charge’ of situations to provide evidence-based policy recommendations about ICT for learning. Students need to be allowed to develop plans to address problems at the school that involve them. As Mitra and Gross (2009a: 535) note, students can provide fresh new ways of examining problems that adults had previously ignored or misunderstood. The student researchers’ decision to involve staff in the Project demonstrated that they understood that school ICT problems were shared. It was their way of giving a public face to the issue in such a way that did not put them at odds with adults in the school. These students were able to forge new relationships with staff participants and to come up with pragmatic solutions. They demonstrated a professional approach in going about the tasks they set themselves. Similarly, the students who led the Study Hall Project (see Chapter 4), which took place about a year after the Acorn Project ended, decided to use Facebook for gathering data from students at the school. Despite the controversy at the time surrounding its
use, these students argued that the process of gathering data would be made much simpler since the majority of students at the school already have a Facebook account. They were able to assure those concerned that the social nature of the platform would not trivialise the process and asked me to monitor the online group page they created for this purpose. They developed strategies for encouraging much wider participation by their peers, which in turn helped them to meet their aims. These examples of positioning and repositioning by students are illustrative of them revealing the habitus to stake their capital in school leadership.

Two important issues should be addressed if students are to assume leadership roles in school. The first of these has to do with their rights as citizens within the school community. The Convention is very clear in its elaboration of children’s rights, but the literature suggests that in school the scope of these rights is limited by the head teacher as autocrat (Mitra, 2006). Oaktree claims to have students at its centre, not least to justify the high cost of tuition. Yet, the socioeconomic culture of the school does not have a direct impact on the organizational decision-making practices to provide democratic opportunities for students. The participants in this study see ICT leaders mainly as having a remit of budgetary control and being responsible for making decisions about school ICT. Teachers and students are not directly involved in these decisions. Student participants believe that since they are affected most by school ICTs they have a right to participate in decisions about which digital technologies are used in their classes, and how. Staff participants also believe students can play an important role in school ICTs, but in more functional ways: helping teachers become more
proficient users. These differences in opinions need resolving to provide a clear understanding of the rationale for student involvement, so as not to undermine their rights. Second, the training of students about and how to assume school leadership roles should be organised and addressed within the curriculum. The success of the Acorn Project was partly due to the fact that students had time to work on it during classes. Not only did this provide the advantage of group work but it also meant they could work under the guidance of a teacher. It was not an extra activity, and so did not compromise their schoolwork. Despite attempts to increase student participation, many attempts are clumsy and poorly designed (Fielding, 2004; Mitra and Gross, 2009a; Thomson and Holdsworth, 2003). If it is Oaktree’s intention to make teaching student-centred, then effort should be made to place student-led activities at the centre of its curriculum.

My second research question could now be restated to examine where and how knowledge about teaching and learning with ICT might be generated. Student-led activities, such as the Acorn Project, can be efficiently organised to provide school administrators with information about ICT for learning, and other school matters. One advantage that gaining knowledge through such initiatives provides is its authenticity. Smyth (2011) has argued for engaging students in authentic participation and inclusiveness around their own needs and concerns. If there is the possibility that school policies could provide convergence between the subfields contained inside the institution, then the importance of spaces where staff and students can participate in dialogue, and subsequent action, that help to frame the multitude of perspectives, judgments and suggestions individuals have pertaining to what is best for their community, cannot be overemphasised.
Much information about teaching and learning with ICT, and other knowledge relevant to schools such as student voice, is available through higher institutions of education. It is apparent that the majority of staff participants of this study were neither informed nor encouraged to seek information about ICT pedagogy and classroom use, or about student leadership. From his remarks, it is obvious that the head of school is aware that ‘capturing the powerful voices of students’ (Mr Boswell) is one area in which the school is lacking. Time and money need to be invested in training teachers and students to meet Oaktree’s objectives of student-centeredness. If instead of providing the staff with the necessary training to do this, millions of pounds are spent on rebranding and building a Sports Centre containing an Olympic-sized swimming pool, then they run the risk of student voice initiatives being ‘a tokenistic nod in the direction of consumerism’ (Rudduck and Fielding, 2006: 229).

In this reframing of student leadership it is possible to see structure and agency as interrelated and mutually interdependent: agency necessarily works through structure, and structure necessarily works though agency. Therefore it becomes essential to approach exploring how and why student leadership of ICT for learning can contribute to changes in knowledge, practice and the school environment with a willingness to name and confront organisational inequities at the school.
Summary

This chapter has used Bourdieu’s (1992) thinking tools—field, habitus, capital and strategy—to conceptualise student leadership in practice. It describes how the Acorn Project provided the student researchers with the opportunity to demonstrate that school ICT leadership is not just about making budget decisions—often under heavy financial constraints, and to argue for their participation in these decisions. Through their leadership these students were able to show that it is also about the gathering of data relating to the ICT needs of students and teachers who are the primary users of school technology. Bourdieu’s (1977b) work helps with understanding that the relationships developed between students and staff in the consortium were based on ‘relational power’ (Smyth, 2011: 68); the interplay between knowledge and action, through the strategic moves of the student researchers, helped them to shift their position within the Project group and to emerge as powerful people—the knowers. Even though student participation in school decision-making is fraught with complexities that often hinder attempts by those who seek to promote it, providing spaces where some of these issues may be resolved is itself a move in the right direction. Through the reconceptualization of student leadership presented in this chapter, my research demonstrates what with further scrutiny might be captured as a possible framework for authentic student participation.
CHAPTER 8

Conclusion

Introduction

This concluding chapter presents and discusses implications for policy and practice of the study’s findings and conceptualization presented in Chapters 6 and 7. After a brief review of the premises and aims of this research, and how it was conducted, I consider some possibilities for further research. I then discuss implications of the present study for students, teachers and administrators at Oaktree High. I go on to suggest that the findings, while not generalisable because they have emerged from a small-scale study, have wider relevance for policy, practice and researchers in related fields of student voice, student participation and student leadership.

A review of the study

The aim of the research reported in this thesis is to develop an understanding of how and why students might lead ICT for learning at Oaktree High School. Given existing work (e.g. Davies, 2009a; Fielding, 2009; Mitra, 2005; Smyth, 2006b; Thomson and Gunter, 2009) this study is premised on the assumption that involving students in decision-making about ICT for learning is bound to have a positive impact on the school, and on the students. The approach involved setting up a student-led project—the Acorn Project—in which students and staff at the school worked together to devise ICT policy statements for recommendation to the school’s senior management team. The students played the role of researchers while the staff members served as their critical friends, scrutinising
data collection techniques and the data they collected. Together, this consortium arrived at eight statements on how to improve teaching and learning with ICT. Using case study methodology I studied this group through observations, participant interviews and document analysis, as a means of comprehending student leadership in practice. My goal was to examine how and why student leadership could impact the ICT culture at Oaktree High School. In pursuance of this aim the following research questions were addressed:

1. How does leadership in ICT operate, and what role do students play?
2. Where and how is knowledge about teaching and learning with ICT generated?
3. How and why can student leadership of ICT for learning contribute to changes in knowledge, practice and the school environment?

The study began with an examination of literature on ICT for learning since the 1970s to understand the role of students in the development of school ICT. This search revealed that students have traditionally played no role in these decisions, and that ICT leadership was more about reorganizing teaching than about teaching and learning with ICTs. The case study of the Acorn Project also showed that, hitherto, students at Oaktree were not involved in decision-making about the very ICTs that were meant to help improve their learning. The student researchers highlighted the dissonance between approaches to their involvement in ICT decisions by their families and by the school, pointing out that at school ICT is primarily for their benefit and so they should be given a stake in which digital technologies are used, and how.
Student leadership of ICT for learning could allow students to participate in ways that demonstrate that leadership is not just about making financial decisions about school ICT hardware and software. Their informal experiences with ICTs could provide motivation and impetus for teachers to use ICTs in teaching, and provide examples of how they might be used.

The absence of school policies on ICT for learning at Oaktree offers teachers little motivation to use ICT to improve student learning; as a result teachers generally lack both experience and expertise, and therefore the capital necessary for them to challenge ICT leadership decisions. This has resulted in a top-down approach whereby decisions about school ICT are solely in the hands of elite individuals within the school. Some teachers are not even au fait with the ICTs provided and turn to students for support because the school does not provide regular ICT training for staff. In the silos of their classrooms they, and only they, decide whether or not to use the digital technologies provided by the school, and many are not aware of the impact a change in pedagogy towards an increase in uses of instructional technologies can have on students’ learning. Student leadership can extend to classroom situations to include providing teachers with examples and ideas of how ICT can be used for motivating students, to provide scaffolding for, and the reinforcement of, concepts being studied.

Through the analysis of the case study data a number of new understandings of student leadership of ICT for learning at Oaktree High School have emerged. First, students have a desire to be involved in school ICT decision-making. This confirms what researchers (such as Apple and Beane, 2007; Fielding, 2007;
Smyth, 2006b; Thomson, 2012) claim about student involvement in school leadership: the interests, backgrounds and aspirations of young people are marginalized unless they are engaged as co-creators of school policies and curriculum. In the search for ways to include students in aspects of school leadership, there is a need to be mindful of Smyth’s (2011) sobering advice: ‘unless we are very clear about what we name as “the problem”, we end up perpetuating huge injustice in the way we come up with what purport to be the “solutions”’ (p 57).

Second, staff have a desire to work with students on improving teaching and learning with ICT—and on the whole they believe that students, if properly prepared, can play an important role in leading school ICT. However, teachers at the school need to be trained to make the pedagogical shifts necessary for them to embrace classroom ICTs, and on how to use them effectively to improve student learning. Unless teachers can engage intellectually with classroom ICTs, a business management approach requiring them to use technology for teaching overemphasizes efficiency, standardization and effectiveness, which further degrades teaching and dishonours those who do it.

Third, there is a need for more dialogue between staff and student leaders at Oaktree to foster the type of collaboration that matches the school’s philosophy. Fielding (2011) has argued for more democratic spaces within schools where ‘radical collegiality’ between staff and students might be fostered. Such interactions allow ‘the powerful voices of students’ to function in ways that place students at the centre of their schooling experience by validating their personal
perspectives, and thus restoring a genuine sense of trust and care in the classroom.

**Impact of the study**

Through the Acorn Project I was able to tap into students’ motivations for assuming ICT leadership roles at Oaktree High School. Through their action research they were able to stake claims for recognition and distinction. The Project provided a model for a number of other projects at Oaktree that followed in its wake including the Study Hall Project (described in Chapter 4), the Communications Project and the Cafeteria Food Project. The Communications Project took place during the 2011–12 academic year and involved students researching the current ways in which Oaktree communicates with parents and students at the school to ascertain how effective these are, and to make recommendations for improvements. The Cafeteria Food Project started in August 2012 and is still ongoing. The Project’s aim is to determine students’ preferred lunch menus for recommendation to the head of catering.

The Acorn Project has also raised the status of students in that they are now seen as mature enough to sit on school committees. There are now two permanent places for students on the school’s ICT committee; students are now invited to sit on interview panels for prospective staff and to participate—albeit in a rather limited way—in staff meetings. There has also been an increase in the number of student-led school activities.

However, the increase in attention now being given to students’ views has not been without concern. Little has been done so far to help teachers improve their
skill and background in using school ICTs; there has been no follow-up to the technology fair, which took place in August 2011. Teachers are not consulted about the changes to school ICTs, and most have never received training in new ways of working with students. Fielding and Rudduck (2006) warn against the ‘glossy popularity of student voice’ (p 225) whereby important issues such as teachers’ receptiveness, time and space in the curriculum for these activities, are not given due consideration. If instead students are told that they will be provided with iPads before teachers are provided with a rationale for this change, or do not receive training on how to use these technologies in new ways in their classes, then chances are that such moves will only fuel further animosity between the teachers and students. In addition, the presence of the Student Council President at staff meetings simply raises suspicion when he is asked to leave immediately after reading out notices that could easily have been emailed to teachers.

There is also a risk that in attempts to include students in school improvements Oaktree is taking a tokenistic approach to student participation. There are at least three reasons why current advances could be viewed with scepticism. First, student voice projects remain individualistic, promoted by only a few members of staff. This leaves others, even those who for justifiable reasons don’t take part, discouraged and even alienated. Second, these projects are episodic, often centred on activities that promote the school as democratic. It is likely students could begin to see themselves as objects to be manipulated because there is an absence of personal and communal narratives. Third, student participation remains conservative because they do not involve fundamental rethinking of the
social and political systems within the school. Thus once the innovation is
completed everyone returns to the unarticulated, unexamined institutional
demands with which they struggle daily. Student participation in school
leadership can only flourish at Oaktree if teachers are made to see students
differently (Rudduck and Fielding, 2006).

Another issue worthy of a much deeper investigation is why so many staff at
Oaktree do not undertake student participation projects. In fact there are
suggestions that some view such projects with hostility. As Mitra and Gross
(2009) have noted, student voice projects can be viewed with suspicion by staff.
The hierarchical arrangement at the school is one many teachers take as a given.
As a result staff may not engage in such projects because their conceptualisation
of leadership is based on an elitist and leader-centric approach, which some may
be beneficiaries of, and so find the idea of leadership as a shared communal
process—as demonstrated by the student researchers—as threatening to existing
power structures. Another reason might be because, on the whole, Oaktree is
successful in the market place based on their current leadership style, and so
many may wonder if including students in leadership decisions threatens their
success.

Furthering the study

The findings of this small-scale study involving staff and students at a single
school could not be generalised. However, as Yin (2008: 10) purports, they are
generalisable ‘to theoretical propositions’. The study was never intended to
provide general answers about student leadership; instead it was an investigation
aimed at understanding of the phenomenon, within a particular setting.
Many teachers continue to view student participation with cynicism because student voice projects are often individualistic, episodic or conservative. These tendencies are just some of the complexities that remain to be unravelled. Strategies that can assist students with assuming school leadership roles, and what they learn through assuming these roles, also warrant further investigation. Further student voice initiatives at Oaktree could provide insights into these issues. It is important that they are resolved, or at least addressed, before attempting to design a framework, which could then be tested in the other divisions at Oaktree School, or at its sister schools. What I have developed in this study and thought carefully about using Bourdieu’s (2000) thinking tools, and the issues that have been raised through the research, is indicative of something that is broader than just this group of students in an elite private school in the south-east of England. The Acorn Project can be built on in investigating student involvement in the development of new school curricula that amalgamate ICT. If the independent school is to provide a model for the state system, further work at small private schools such as Oaktree could serve as pilot studies that could be tested in the much larger framework of state schools, before leading to policy recommendations.

**Implications for practice**

One major finding of this research is the disjuncture between the school’s rhetoric of student participation and the lived reality of its students. The school describes an ethos of collaboration and shared learning between staff and students in many areas including ICT for learning on its website. Yet, it was clear from the consortium that the development of ICT policy recommendations was something new at the school. The success of the Acorn Project meant that it
became a sought-after model, which other decision-making committees adopted. Furthermore, data from the staff interviews showed that activities in the school that involved collaboration with teachers about ICT for learning were infrequent. Therefore the findings suggest that there is a need for coherence between the aspirations of the school and the daily practices of staff and students.

This study also has implications for ways in which to introduce, train and support teachers in using ICT for learning. If teachers are expected to collaborate with students on how best to use digital technologies to enhance student learning then serious consideration should be given to the fact that teachers need to be trained on how to work with students collaboratively. In order for an implicit vision to become an explicit, shared vision it must be clearly articulated and understood by those involved in the decision-making process. Teachers should also be trained to assume positions of leadership of ICT for learning so they can contribute pedagogical perspectives on how classroom teaching using ICTs could work best.

A final implication for practice involves developing student leadership at the school to allow for more genuine student involvement in school decision-making. Asking the president of the Student Council to attend faculty meetings simply to report on social events being planned by students but not allowing him to participate in other aspects of the meeting, or asking students to interview prospective staff candidates but not involving them in deciding which candidate is selected, is not sufficient to develop their understanding of how school decisions are made and the politics behind such decisions. In addition to enabling
students to practise their democratic rights as citizens within the school community, student leadership could have additional lasting benefits. Arnot and Reay (2007) have expressed concern about the underdevelopment of pedagogies that allow and encourage dialogue between staff and students regarding school life. Such discussions are not usually considered academic and therefore given very little significance in the school setting. Thomson (2012) has written about the benefits of involving students in leadership activities. In one school that she reported on, the learning of student leadership teams had ‘strong connections with citizenship and the outcomes of the creative and experiential pedagogies that the school espoused’ (p 101). It is therefore in Oaktree’s interest to investigate what students learn through their involvement in existing leadership activities, and to capture the important relationships that develop between staff and their students through being engaged in discourses about decisions that affect the school and its community. Such moves could serve to increase the school’s market value through the elaboration of concrete benefits of students’ democratic participation and the value added to their educational experience.

It is also possible that present approaches to decision-making about ICT at Oaktree may not be addressing the right questions about students’ ICT needs. Only by including students themselves, can the school avoid making the mistakes of the past, mistakes brought about by guessing what students need rather than simply asking them what works and what doesn’t in terms of classroom ICT.
Implications for policy

There is currently a state of deep unease in public education in England, especially about the ICT curriculum, which Michael Gove has pronounced as boring for students. This research provides confirmation that students have little or no say in school ICT decisions, and that they are constrained in their ability to act on their rights as citizens within the school community. The previous New Labour government put into place high profile initiatives such as ECM (HM Treasury, 2003) as a means of adopting the UN Convention on the Rights of a Child, but it is less clear how students are to learn about these rights and how to enact them. ECM did not target private schools and they did not adopt it (Hartley, 2007); this is illustrated by the fact that many of these schools, including Oaktree, do not have a citizenship curriculum. Nevertheless, Ms Norman’s comment that she did not relate the Convention to her association with students suggests that it is not only students who need to be made aware of the implications of UNCRC but also teachers, and perhaps school leaders too. Rudduck and Fielding (2006) have argued that such inconsistencies need to be addressed by policymakers.

Government needs to reflect on the contradictions and inconsistencies in its presentation of student participation and voice: on the one hand, the virtues of consultation and participation are endorsed while on the other hand, systems are sustained which reflect the very different values (p 223).

This research provides evidence for government policymakers of the disjuncture between policy and practice that can occur when policies are arrived at and implemented without checks being put in place to ensure they work and are effective. Bourdieu’s (1992) thesis points out that policy makes a claim to the universal—the privilege of the state and the bureaucratic—whereas the
classroom is specific, conditional and distinctive, thus revealing a significant gap between policy and practice. On the basis of the findings of the case study research reported on in this thesis, which is based on a robust research design, changes are needed in the development and implementation of school ICT policies that are more inclusive of students.
REFERENCES


Mitsoni, F. (2006). “‘I get bored when we don’t have the opportunity to say our opinion’: learning about teaching from students.” *Educational Review*, 58(2), pp 159–170.


APPENDICES

Appendix A1

ROUND 1 (Student) INTERVIEW SCHEDULE

Aims: To elicit students’ thinking about how ICT leadership operates in school (linked to research questions 1). To elicit students’ thinking about where knowledge about teaching and learning with ICT originates (linked to research questions 2). To elicit students’ views about their involvement in the Student ICT Project (linked to research questions 3).

START OF INTERVIEW:

➢ Mention why interview needs to be recorded—check permission
➢ Provided reassurance of confidentiality
➢ Remind students not to use any names
➢ State aim of interview

MAIN INTERVIEW: Main Questions for **Round 1**

1. What are your views of how decisions about ICT purchases at this school are made?
2. Who is involved in making these decisions? Are students involved?
3. Who decides how ICT is used in the classroom?
4. How are such decisions generally made?
5. Can you request specific kinds of ICT equipment for use in your classes or around the school?
6. Is there anything else about the way ICT decisions are made that you wish to comment on?

END OF INTERVIEW:

➢ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
➢ Is there anything you would like to ask me?

THANK YOU!
Appendix A2

ROUND 2 (Student) INTERVIEW SCHEDULE

Aim: To elicit students’ opinions about their involvement in the Student ICT Project (linked to research questions 3).

START OF INTERVIEW:

➤ Mention why interview needs to be recorded—check permission
➤ Provided reassurance of confidentiality
➤ Remind students not to use any names
➤ State aim of interview

MAIN INTERVIEW: Main questions for Round 2

1. What are your views about your involvement in the Student ICT Project you participated in, which involved students making recommendations about how the use of IT for learning at your school can be improved?

2. Did you feel the process was fair and took into account multiple perspectives (all those involved in using technology at the school, rather than just a single group)?

3. Did you feel your opinion counted?

4. What are your views about the general atmosphere during the consortiums, which involved students and adults having discussions about ICT at the school?

5. In your opinion, did these interaction developed trust and promoted understanding between adults and students? If yes, how?

6. What are your views about the project on the whole? Was your participation meaningful? If yes, how? Where you seen as the leaders or the followers in making the decisions about the use of ICT for learning?

7. In your opinion, is there anything else that could be done to improve the project?

END OF INTERVIEW:

➤ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?

➤ Is there anything you would like to ask me?

THANK YOU!
Appendix A3

ROUND 3 (Student) INTERVIEW SCHEDULE

Aim: To elicit participants’ views about the reach and significance of the Student ICT Project and about the potential for student involvement in school decision-making (linked to research questions 3)

START OF INTERVIEW:

➢ Mention why interview needs to be recorded—check permission
➢ Provided reassurance of confidentiality
➢ Remind students not to use any names
➢ State aim of interview

MAIN INTERVIEW: Main questions for Round 3

1. Quite a lot of time and effort went into last year’s Student ICT Project, which resulted in several recommendations (on handout) being made for improving technology in the HS. In your views was this time well spent? Why, or why not?

2. Do you see this as a positive step for our school? Why, or why not?

3. Are you personally committed to seeing that these policies statement are adopted by the high school, or in the classroom? And if so, how?

4. Has this project added to your understanding of ways in which students can lead technology (or even other areas of learning) in the HS? And if so, how?

5. What do you see as some of the stumbling blocks limiting student participation in school decision-making at our school? (Power? Knowledge? Practicalities?)

END OF INTERVIEW:

➢ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
➢ Is there anything you would like to ask me?

THANK YOU!
Appendix B1

ROUND 1 (Staff) INTERVIEW SCHEDULE

**Aims:** To elicit participant’s thinking about how ICT leadership operates in school (linked to research questions 1). To elicit participant’s thinking about where knowledge about teaching and learning with ICT originates (linked to research questions 2). To elicit participant’s views about the involvement of students in the High School ICT Project (linked to research questions 3).

**START OF INTERVIEW:**
- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

**MAIN INTERVIEW:** Main questions for **Round 1**

1. What are your views about how ICT purchases at our school made?
2. Who is involved in making these decisions? Are students involved?
3. Who decides how ICT is used in the classroom?
4. How are such decisions generally made?
5. Can you request specific kinds of ICT equipment for your use?
6. How do you choose the kinds of ICT equipment you use?
7. Is there anything else about the way ICT decisions are made that you wish to comment on?
8. What are your views about student being involved in developing ICT policies for our school?
9. Did you feel the process was fair and took into account multiple perspectives?
10. Did you feel students’ opinions counted?
11. How would you describe the general attitude about students participating in developing ICT policy statements?
12. What are your views about students participating in developing ICT policy statements?
13. Do you feel this interaction developed trust and respect, and promoted understanding between students and adults? If so, how?
14. In your opinion, is there anything else that could be done to improve the project?

15. Can you think of ways in which this project will influence student participation in other areas of school leadership?

END OF INTERVIEW:

➤ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?

➤ Is there anything you would like to ask me?

THANK YOU!
Appendix B2

ROUND 2 (Staff) INTERVIEW SCHEDULE

Aims: To elicit staff opinions about the reach and significance of the Student ICT Project (linked to research questions 3).
To elicit staff opinions about the perils and possibilities of student leadership of ICT for learning (linked to research questions 3).

START OF INTERVIEW:

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

MAIN INTERVIEW: Main questions for Round 2

1. Quite a lot of time and effort went into last year’s High School Technology Project which resulted in several recommendations (on handout) being made for improving technology in the HS. In your views was this time well spent? Why, or why not?

2. Do you see this as a positive step for our school? Why, or why not?

3. Are you personally committed to seeing that these policies statement are adopted by the high school, or in the classroom? And if so, how?

4. Has this project added to your understanding of ways in which students can lead technology (or even other areas of learning) in the HS? And if so, how?

5. What do you see as some of the stumbling blocks limiting student participation in school decision-making at our school? (Power? Knowledge? Practicalities?)

END OF INTERVIEW:

- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Appendix C

Veteran Staff INTERVIEW SCHEDULE

Aims: To gather information about the historical development of student participation at the school (linked to research questions 1). To elicit participants’ thinking about how knowledge and power influence decision-making at the school (linked to research questions 2).

START OF INTERVIEW:

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

MAIN INTERVIEW: Main questions

1. How long did you teach at Northern International School?
2. Could you please tell me what your views are on student participation in school leadership?
3. In your opinion, have students had a role in decision-making at this school? If yes, when did this start?
4. What has the nature and extent of their involvement been?
5. When was the first Student Council formed and what was their role at the time of their initiation?
6. Back then were there social events for students, such as there are now, which were primarily organised by students themselves?
7. Is this the area in which student council had the greatest input?
8. Was selection of students to the SC based on their academic performances?
9. If not, what did?
10. Can you tell me what your opinion is of how much influence students have had on leadership decisions? Looking back over the years, are there instances that you recall of school decisions made on students’ ideas or choices?
11. What would you say is most important when it comes to making school decisions?
12. What role do you think power and knowledge play?

END OF INTERVIEW:
➤ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?

➤ Is there anything you would like to ask me?

THANK YOU!
Appendix D

Head of School INTERVIEW SCHEDULE

**Aims:** To elicit participant’s thinking about how ICT leadership operates in school (linked to research questions 1).
To elicit participant’s thinking about where knowledge about teaching and learning with ICT originates (linked to research questions 2).
To elicit participant’s views about the involvement of students in school decision making (linked to research questions 3).

**START OF INTERVIEW:**

- Mention why interview needs to be recorded—check permission
- Provide reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

**MAIN QUESTIONS:**

1. To what extent do you think that placing students in decision-making roles about ICT in the HS is beneficial to (a) students, (b) teachers, and (c) the school?

2. Would you go as far as involving students in developing school ICT policies?

3. In your opinion, is this an obligation that schools have, or should have?

4. What about decision-making about other school matters? Do you see students as capable of participating in leadership/decision-making at other levels in the school? For instance, students were involved in interviewing you and other candidates for your current post. What are your views on this?

5. Do you feel there is need for ‘public space[s] where staff and students can reflect on and make meaning of their work together and develop shared commitments to further developing the ideals and practices of life and learning to which the school aspires’ (Fielding, 2009), I’m thinking more with regard to ICT but you are welcome to comment in general? **[Is this your idea behind the all-school meetings with teachers?]**

6. To what extent do you feel this will help with developing trust and respect, and to promote understanding between students and adults, and
perhaps even impact on the knowledge, practice and environment with regard to ICT in the school?

[Discuss Fielding’s typology shown below]

<table>
<thead>
<tr>
<th>Patterns of partnership: How adults listen to and learn with students in school</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. <strong>Intergenerational learning as lived democracy</strong></td>
</tr>
<tr>
<td>shared commitment to / responsibility for the common good</td>
</tr>
<tr>
<td>5. <strong>Students as joint authors</strong></td>
</tr>
<tr>
<td>students and staff decide a joint course of action together</td>
</tr>
<tr>
<td>4. <strong>Students as knowledge creators</strong></td>
</tr>
<tr>
<td>students take lead roles with active staff support</td>
</tr>
<tr>
<td>3. <strong>Students as co-enquirers</strong></td>
</tr>
<tr>
<td>staff take a lead role with high-profile, active student support</td>
</tr>
<tr>
<td>2. <strong>Students as active respondents</strong></td>
</tr>
<tr>
<td>staff invite student dialogue and discussion to deepen learning / professional decisions</td>
</tr>
<tr>
<td>1. <strong>Students as data source</strong></td>
</tr>
<tr>
<td>staff utilise information about student progress and well-being</td>
</tr>
</tbody>
</table>

7. As head of school what level of interaction do you feel currently exists between students and staff here at ACS Cobham?

8. (Additional question for new head) What level of interaction would like to see us achieve during your time as Head of School?

**END OF INTERVIEW:**

➢ Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?

➢ Is there anything you would like to ask me?

**THANK YOU!**
Appendix E

University of Manchester UREC form

UNIVERSITY OF MANCHESTER
COMMITTEE ON THE ETHICS OF RESEARCH
ON HUMAN BEINGS

Application form for approval of a research project

The Chief Investigator(s) should complete this form, after reading the guidance notes.

1. Title of the research

Full title: Student Leadership of ICT for Learning in a High School

2. a. Chief Investigator (student)

Title: Miss
Forename/Initials: Patricia Marybelle
Surname: Davies
Post: Postgraduate student
Qualifications: Doctoral student
School/Unit: School of Education
E-mail: Patricia.Davies@postgrad.manchester.ac.uk

Telephone: 01483 452 463

b. Investigator (Supervisor)

Title: Professor
Forename/Initials: Helen
Surname: Gunter
Post: Professor of Educational Policy, Leadership and Management
Qualifications: Supervisor
School/Unit: School of Education
E-mail: Helen.Gunter@manchester.ac.uk
Telephone: 0161 275 3449

3. Details of Project

3.1 Proposed study dates and duration

Start date: April 2010 (fieldwork starts)
End date: April 2011 (fieldwork completed; thesis due to be submitted by 30/09/12)
3.2 Is this a student project?

Yes

If so, what degree is it for?

Doctorate in Education, part-time (6 years)

3.3. What is the principal research question/objective? (Must be in language comprehensible to a lay person.)

The research focuses on understanding the role of students in leading learning with ICT. Not just what role do they play but also what is possible. In other words, examining whether indeed student voice is all it claims to be. The main research question is to what extent can student leadership of ICT for learning contribute to changes in knowledge, practice and environment in a case study school?

I will explore this question through a student-led action research project—the High School ICT (Technology) Project—currently taking place at the case study school. Students conducting this project are volunteers from three sections of the computer applications course I teach. During autumn 2009 and early spring 2010 terms, they designed and conducted teacher-focused and student-focused surveys to gather evidence that will provide information about the current ICT experiences of both teachers and students at the school. They also researched ICT practices at other schools similar to the case study school. The student-researcher meet regularly with the High School Technology Consortium—a group consisting of administrators, teachers and student council representatives—to reflect on their strategies, and on the data they have collected. The consortium serves as critical friends to the student-researchers, and will guide them as they go about developing the ICT policy statements for recommendation to the school’s Senior Management Team. The aim of the doctoral fieldwork is to investigate this project to see to what extent the ICT pedagogy and learning environment is influenced by the project.

3.4. What is the scientific justification for the research? What is the background? Why is this an area of importance / has any similar research been done? (Must be in language comprehensible to a lay person.)

The impetus of this study is the observation that since the introduction of computers into classrooms over thirty years ago, the voices of those who are meant to be the main beneficiaries of ICT have more or less remained silent. While the body of research on student voice focusing mainly on the rights of students as espoused in the 1989 UN Convention on the
rights of the child has grown, the literatures indicate that little work has been done on the relationship between students, the curriculum and leadership. I plan to build on the arguments of John Smyth (2006), who suggests that it is time for schools to move away from old regimes to a different kind of educational leadership that encourages authentic forms of student participation in decisions about learning and the curriculum. He proposes learner-centred policy generation as a more inclusive, more democratic, way of generating school policies on learning. These arguments are similar to Rose Luckin’s (2008) development of a learner-generated context in educational technology, which she regards as a “more democratic learning economy ... where the balance between learner and teacher or mentor control is constantly changing” (p 461). Her arguments hinge on the fact that we are now faced with the situation in schools where many students know more than their teachers about digital learning tools. Therefore the doctoral research will examine what is taking place in a case study school, through examining documents and undertaking interviews with the key participants involved in making decisions about policy regarding the pedagogic use and potential use of ICT.

3.5. How has the scientific quality of the research been assessed? (Tick as appropriate)

☐ Independent external review

☐ Review within a company

☐ Review within a multi-centre research group

✓ Internal review—Review Panel which took place on 10th February 2010

☐ None external to the investigator

☐ Other, e.g. methodological guidelines (give details below)

*If relevant, describe the review process and outcome. If the review has been undertaken but not seen by the researcher, give details of the body which has undertaken the review:*

3.6. Give a full summary of the purpose, design and methodology of the planned research, including a brief explanation of the theoretical framework that informs it. It should be clear exactly what will happen to the research participant, how many times and in what order. Describe any involvement of research participants, patient groups or communities in the design of the research.

*This section must be completed in language comprehensible to the layperson.*
The purpose of the research is to examine the role that students can, and do, play in leading learning with ICT in school. It will investigate to what extent student leadership of learning with ICT can impact the day-to-day academic life in school. Interest in student voice has increased over the last decade and existing research suggests that students have valuable things to say about teaching and learning. However, very little work has been done on the relationship between student participation in leadership (Mitra and Gross, 2009b). This research therefore seeks further understanding in this area by exploring student involvement in developing ICT policy statements and the consequences of their involvement.

Students conducting the High School ICT Project are volunteers from three sections of the computer applications course I teach. During autumn 2009 and early spring 2010 terms, they designed and conduct teacher-focused and student-focused surveys to gather information about the current ICT experiences of both teachers and students at the school. They also researched ICT practices at other schools similar to the case study school. The student-researcher meet regularly with the High School Technology Consortium—a group consisting of administrators, teachers and student council representatives—to reflect on their strategies, and on the data they have collected. The consortium serves as critical friends to the student-researchers and will guide them as they go about developing the ICT policy statements, for recommendation to the school’s Senior Management Team. The doctoral research seeks to map this process and examine the role of students in policymaking and classroom practice.

Three main questions will guide the research:

1. How has leadership in ICT developed in school?
   a. How does it operate in practice?
   b. What role do students play?
2. Where and how is knowledge about teaching and learning with ICT generated?
3. To what extent can student leadership of ICT for learning contribute to changes in knowledge, practice and environment in school?

Using the literatures, I plan to track the development of educational technology leadership since the 1980s to gain an understanding of the history of student participation in leading learning with ICT over the past thirty years. Using case study methodology, I will analyse and report on the process of involving students in ICT policymaking. I will also examine the consequences of this involvement. My data will primarily be collected through interviews with students, teachers and administrators participating in the High School ICT Project. There will be three rounds of interviews with each group: in Summer 2010, Autumn 2010 and Spring 2011 respectively. These rounds match with specific key points in the High School ICT Project where obtaining the views of participants will be linked to particular stages in their
In each round, 25 students will be interviewed in class groups, and so at each round of interviews there will be three group interviews will take place with 6, 7, and 12 students in each. This will be followed by individual interviews with 3 teachers, and finally 3 administrators will be interviewed individually. The data will be collected with these three types of respondents in the order listed: students, teachers and then administrators. There will also be analysis of documents, such as ICT policies and minutes of meetings, resulting from the Project in order to support and enable understanding of events and to clarify the interview data.

This research project is positioned within the theoretical perspective of Symbolic Interactionism and recognises the epistemology of Constructivism. Symbolic Interactionism is a theoretical framework that offers a particular view of the meaning of self, the nature of reality, the emergence and importance of society, the nature of symbols, the importance of human communication, and the future of humanity (Charon, 2000). In this view, meaningful reality is contingent upon human practices, being construed in and out of interaction between human beings and their world, and developed and transmitted through symbolic communication within social context. As individuals and groups we use symbols, especially language, to name, remember, categorise, perceive, think, deliberate, solve problem, negotiate, create new ideas and ultimately direct ourselves. Through symbolic communication we define our present according to a perspective or mental construction developed and altered in on-going social interactions. It is through definition and action that, given the right knowledge and tools, people can take control of themselves and their environment— defining, thinking, and controlling their choices into the future. It follows that we can only know what is going on if we understand what the actors themselves believe about their world. For this reason the research will focus on collecting, analysing and interpreting the various perspectives of participants at the case study school. Embedded in this theoretical framework is an epistemology of constructivism that assumes a pluralist and relativist view of the reality. In this view, student leadership of ICT for learning is viewed in terms of multiple, mental constructions held by individuals and groups.

3.6.1. Has the protocol submitted with this application been the subject of review by a statistician independent of the research team? (Select one of the following)

- ✔ No – justify below

The study is qualitative.

3.6.2. If relevant, specify the specific statistical experimental design, and why it was chosen?
Not applicable
3.6.3. How many participants will be recruited?

If there is more than one group, state how many participants will be recruited in each group. For international studies, say how many participants will be recruited in the UK and in total.

Students: 25

Staff: 6

3.6.4. How was the number of participants decided upon?

The students come from three classes at the case study school participating in the High School ICT Project. The staff are teachers and administrators also participating in the project.

If a formal sample size calculation was used, indicate how this was done, giving sufficient information to justify and reproduce the calculation.

3.6.5. Describe the methods of analysis (statistical or other appropriate methods, e.g. for qualitative research) by which the data will be evaluated to meet the study objectives.

As the case study researcher, I will analyse the process of involving students in policymaking through interviews of students, teachers and administrators participating in the High School ICT Project, and document analysis. Because I am researching my own practice, I feel it would be best to conduct these interviews in the form of conversations that will create the opportunity for collaborative learning, so that I, as well as the interviewees, can learn from the study. Data analysis will be guided by a systematic inductive approach.

First, the recorded interviews will be transcribed into a Word document and then coded. Themes, patterns, similarities, and differences, across data from all participants will be noted. Emphasis will be places on retaining the holistic nature of the data through intuitive and hermeneutic processes. The data will then be reduced through the use of qualitative data tables, and assembled into chapters, according to groups of participants—students, teachers and administrators. Finally, the main findings will be extracted from data chapters.

Written internal documents concerning the project, such as emails, will be searched to confirm accounts of events and to confirm the interview data regarding the attitudes and perceptions of the High School ICT Project participants. If policies result from the High School ICT Project then these will be examined to see if there are any revisions to the statements recommended, as such changes may reflect the values underlying the policies, and the culture of the school’s leadership. Similarly related external documents, such as press releases, may also provide a lens though which the culture of the institution can be viewed.
3.7. Where will the research take place?

The research will be conducted at ACS Cobham International School, Surrey, UK where I teach.

3.8. Names of other staff involved.

No one else is involved in the Doctoral research.

3.9. What do you consider to be the main ethical issues which may arise with the proposed study and what steps will be taken to address these?

The main ethical issues that may arise from this research are informed consent, the right to withdraw, confidentiality and anonymity. To address these, each participant will be provided with an information sheet containing complete details about the study, and clearly stating a participant has the right to withdraw at any time. No undue influence will be used to recruit participants. The research data will be securely stored, and pseudonyms will be used when reporting on the study.

3.9.1. Will any intervention or procedure, which would normally be considered a part of routine care, be withheld from the research participants?

No

*If yes, give details and justification*

4. Details of Subjects.

4.1. Total Number

31 students and staff

4.2 Sex and Age Range

Students: aged 15 - 19
Staff: aged 30 - 65

4.3 Type

Students: 25 (13 female, 12 male)
Staff: 6 (3 female, 3 male)
4.4. What are the principal inclusion criteria? *(Please justify)*

Students and staff are all participants in the High School ICT Project. The research is based upon the involvement of students in this Project.

4.5. What are the principal exclusion criteria? *(Please justify)*

Participation is voluntary and no one is excluded.

4.6. Will the participants be from any of the following groups? *(Tick as appropriate)*

- [✓] Children under 16
- [ ] Adults with learning difficulties
- [ ] Adults who are unconscious or very severely ill
- [ ] Adults who have a terminal illness
- [ ] Adults in emergency situations
- [ ] Adults with mental illness (particularly if detained under mental health legislation)
- [ ] Adults with dementia
- [ ] Prisoners
- [ ] Young offenders
- [ ] Adults in Scotland who are unable to consent for themselves
- [ ] Healthy volunteers
- [ ] Those who could be considered to have a particularly dependent relationship with the investigator, e.g. those in care homes, medical students.
- [ ] Other vulnerable groups

*Justify their inclusion*

The study involves student leadership in a high school, with students aged 15 to 19.

4.7. Will any research participants be recruited who are involved in existing research or have recently been involved in any research prior to recruitment?

- [✓] No

*If Yes, give details and justify their inclusion. If Not Known, what steps will you take to find out?*
4.8 How will potential participants in the study be (i) identified, (ii) approached and (iii) recruited?
Where research participants will be recruited via advertisement, please append a copy to this application

(i) Identification is through only involving Participants involved in the High School ICT Project.

(ii) Participants for the study will be recruited from students and staff taking part in the High School ICT Project which began in August 2009. Another teacher at the school who is not involved in the project, so as to avoid them feeling coerced into participating, will do the recruitment.

(iii) Students enrolled in the classes participating in the project will be approached, in person, by another teacher at the school who is not involved in the project so as to avoid students feeling coerced into participating. Staff participating in the project will also be approached by another teacher in the school so they do not feel obliged to take part due to our existing relationship.

(iv) A participant information sheet will be provided for each participant. In the case of students under 18, information will also be provided for their parents.

4.9 Will individual research participants receive reimbursement of expenses or any other incentives or benefits for taking part in this research?

✓ No

If yes, indicate how much and on what basis this has been decided

5 Details of risks

5.1 Drugs and other substances to be administered

Indicate status, eg full product licence, CTC, CTX. Attach: evidence of status of any unlicensed product; and Martindales Pharmacopoeia details for licensed products

<table>
<thead>
<tr>
<th>DRUG</th>
<th>STATUS</th>
<th>DOSAGE/FREQUENCY/ROUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td></td>
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5.2 Procedures to be undertaken

Details of any invasive procedures, and any samples or measurements to be taken. Include any questionnaires, psychological tests etc. What is the experience of those administering the procedures?

Not applicable

5.3 Activities to be undertaken

Please list the activities to be undertaken by participants and the likely duration of each

Group/individual interviews lasting approximately 30 minutes.

5.4 What are the potential adverse effects, risks or hazards for research participants, including potential for pain, discomfort, distress, inconvenience or changes to lifestyle for research participants?

Inconvenience. I will try to ensure that I do not inconvenience the research participants by arranging to interview them at a time they find most convenient, and that the length of time required for the interview will not pose an undue burden on students or staff.

5.5 Will individual or group interviews/questionnaires discuss any topics or issues that might be sensitive, embarrassing or upsetting, or is it possible that criminal or other disclosures requiring action could take place during the study (e.g. during interviews/group discussions, or use of screening tests for drugs)?

While I do not plan to ask questions that will cause distress, if a participant does get distressed the interview will be stopped immediately, and only resumed when the issues causing them worry have been resolved.

*If yes, give details of procedures in place to deal with these issues:*

5.6 What is the expected total duration of participation in the study for each participant?

Three rounds of interviews will be conducted with each participant over a period of 12 months. Each interview will last approximately 30 minutes.
5.7 What is the potential benefit to research participants?

The research will enhance ICT policy and practice at the case study school, and provide insight for school leaders into involving students in policymaking in other areas. The benefits to students include their development of a positive sense of self and agency, enquiring minds, new skills, and new social competences and new relationships with adults in the school.

5.8 What is the potential for adverse effects, risks or hazards, pain, discomfort, distress, or inconvenience to the researchers themselves?

(If any)

As a professional doctorate student I am undertaking research in my own professional setting. I have so far been able to successfully combine research and my professional role, and so my workload has been manageable. Therefore I do not envisage the project causing me any inconvenience. I have ensured through my studies that my professional integrity in the School is maintained through ongoing open and regular discussions with the Principal, and with all those involved in the High School ICT Project. These issues have been dealt with in the research training sessions that I have attended as part of my doctoral studies, and students are encouraged to engage with their role as insider researcher as a central feature of the EdD. If any problem arises during the course of the research I will discuss this with my supervisor, and agree an appropriate course of action.

6. Safeguards

6.1 What precautions have been taken to minimise or mitigate the risks identified above?

The risks of inconvenience will be dealt with through careful planning and by negotiating involvement in interviews. I am fully trained in the processes of undertaking research in my own professional setting and I will work with my supervisor regarding any problems that arise to decide, if any, and what action should be taken.

6.2 Will informed consent be obtained from the research participants?

✓ Yes (see Appendices A & B)

If Yes, give details of who will take consent and how it will be done. Give details of the experience in taking consent and of any particular steps to provide information (in addition to a written information sheet) e.g. videos, interactive material.
Students interested in participating in the study will each be provided with a participant information sheet during class to read, so I can answer questions that may arise. When doing a previous ethnographic case study for my second research paper (RP2), it was necessary to spend several class sessions providing the student participants with the rationale for the study, and discussing their involvement. In this current case study, providing students with the necessary background will be much simpler because they have already received training about ethical success being a constituent of qualitative research. These students will then be asked to take two home copies of the participant information sheets and consent forms for their parents to sign and return one copy to me. Also, they will each be given a student assent form to take home and complete with their parents. This will be done three weeks prior to arranging the group interviews. From my previous experience doing RP2, it takes time for all the forms to be returned, and checked to ensure that they have been signed and dated correctly. Sufficient time also needs to be allowed for further discussions with parents; for example, in the case study for RP2, several parents who wanted to know if they could also take part in the study contacted me.

Staff who have been recruited for the study will each be provided with a participant information sheet and a consent form to read and sign, before arranging times for the interviews. From prior experience doing research for RP2, in working with students in classes taught by another colleague in the school I had to arrange times well in advance, when I could visit his classes and work with the students involved in that project.

If participants are to be recruited from any of the potentially vulnerable groups listed in Question 4.6, give details of extra steps taken to assure their protection. Describe any arrangements to be made for obtaining consent from a legal representative.

All the interviews involving students will take place in one of the classrooms during school hours. The interviews will be conducted with groups of students at a time. Questions will be directed at the group, as a whole, and the names of individual students will not be used during these sessions.

If consent is not to be obtained, please explain why not.

Where relevant the committee must have a copy of the information sheet and consent form.
6.3 Will a signed record of consent be obtained?

✓ Yes (see Appendix B)

If not, please explain why not.

6.4 How long will the participant have to decide whether to take part in the research?

Three weeks

6.5 What arrangements have been made for participants who might not adequately understand verbal explanations or written information given in English, or who have special communication needs? (e.g. translation, use of interpreters etc.)

✓ Not applicable: all texts given to the children have been designed to be of a level that they can understand.

6.6 What arrangements are in place to ensure participants receive any information that becomes available during the course of the research that may be relevant to their continued participation?

If any information pertinent to the study becomes available as the study progresses then participants will be informed immediately, and they will be reminded that their participation is voluntary and that they are free to withdraw at any time.

6.7 Will the research participants’ General Practitioner be informed that they are taking part in the study?

✓ Not applicable

6.8 Will permission be sought from the research participants to inform their GP before this is done?

✓ Not applicable

If No, explain why not

6.9 What arrangements have been made to provide indemnity and/or compensation in the event of a claim by, or on behalf of, participants for (a) negligent harm and (b) non-negligent harm?

I am seeking cover under the terms of University’s insurance arrangements for students conducting research.
7. Data Protection and Confidentiality

7.1 Will the research involve any of the following activities at any stage (including identification of potential research participants)? *(Tick as appropriate)*

- [ ] Examination of medical records by those outside the NHS, or within the NHS by those who would not normally have access
- [x] Electronic transfer by magnetic or optical media, e-mail or computer networks
- [ ] Sharing of data with other organisations
- [ ] Export of data outside the European Union
- [ ] Use of personal addresses, postcodes, faxes, e-mails or telephone numbers
- [x] Publication of direct quotations from respondents
- [ ] Publication of data that might allow identification of individuals
- [x] Use of audio/visual recording devices
- [x] Storage of personal data on any of the following:
  - [ ] Manual files including X-rays
  - [ ] NHS computers
  - [x] Home or other personal computers
  - [x] University computers
  - [ ] Private company computers
  - [x] Laptop computers

*Further details:*

7.2 What measures have been put in place to ensure confidentiality of personal data? Give details of whether any encryption or other anonymisation procedures have been used and at what stage?

The data will be securely stored and pseudonyms will be used as a means of breaking the link between data and identifiable individuals.

7.3 Where will the analysis of the data from the study take place and by whom will it be undertaken?

The analysis will take place in a private study area by the student researcher conducting the study. No one else will have access to the data.

7.4 Who will have control of and act as the custodian for the data generated by the study?

I will.
7.5 Who will have access to the data generated by the study?

I will. My supervisors will have access to the anonymised data.

7.6 For how long will data from the study be stored?

5 Years 6 Months (ie. 2 years after EdD degree has been received)

Give details of where they will be stored, who will have access and the custodial arrangements for the data:

The data will be stored in a locked drawer at my home accessed only by me.

8. Reporting Arrangements

8.1 Please confirm that any adverse event will be reported to the Committee

I confirm that any adverse event will be reported to my supervisor in the first instance who will then inform the committee.

8.2. How is it intended the results of the study will be reported and disseminated?

(Tick as appropriate)

☐ Peer reviewed scientific journals
☐ Internal report
☐ Conference presentation
✔ Thesis/dissertation
☐ Written feedback to research participants
✔ Presentation to participants or relevant community groups
☐ Other/none e.g. Cochrane Review, University Library

8.3 How will the results of research be made available to research participants and communities from which they are drawn?

A presentation will be made to the school, and a short written report provided for the school leadership team.

8.4 Has this or a similar application been previously considered by a Research Ethics Committee in the UK, the European Union or the European Economic Area?

✔ No
8.5 What arrangements are in place for monitoring and auditing the conduct of the research?

My supervisor will monitor the research

Will a data monitoring committee be convened?

✓ No

What are the criteria for electively stopping the trial or other research prematurely?

Any unforeseen harm that cannot be resolved.

9. Funding and Sponsorship

9.1 Has external funding for the research been secured?

✓ No

If Yes, give details of funding organisation(s) and amount secured and duration:

Organisation:
UK contact:
Amount (£):
Duration: Months

9.2 Has the external funder of the research agreed to act as sponsor as set out in the Research Governance Framework?

✓ Not Applicable

9.3 Has the employer of the Chief Investigator agreed to act as sponsor of the research?

✓ Yes

9.4 Sponsor (must be completed in all cases where the sponsor is not the University)

Name of organisation which will act as sponsor for the research:

The University through my supervisor is acting as my sponsor

10. Conflict of interest

10.1 Will individual researchers receive any personal payment over and above normal salary and reimbursement of expenses for undertaking this research?

✓ No
10.2 Will the host organisation or the researcher’s department(s) or institution(s) receive any payment of benefits in excess of the costs of undertaking the research?
✓ No

10.3 Does the Chief Investigator or any other investigator/collaborator have any direct personal involvement (e.g. financial, share-holding, personal relationship etc.) in the organisation sponsoring or funding the research that may give rise to a possible conflict of interest?
✓ No

11. Signatures of applicant(s)

Signed Date
P Daisie 11/03/2010

Signed Date
Helen Gunter 11/3/2010

Signed Date

12 Signature by or on behalf of the Head of School

The Committee expects each School to have a pre-screening process for all applications for an ethical opinion on research projects. The purpose of this pre-screening is to ensure that projects are scientifically sound, have been assessed to see if they need ethics approval and, if so, go to the relevant ethics committee. It is not to undertake ethical review itself, which must be undertaken by a formal research ethics committee.

The form must therefore be counter-signed by or on behalf of the Head of School to signify that this pre-screening process has been undertaken

I approve the submission of this application

Signed by or on behalf of the Head of School Date
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 2 Participant Information Sheet and Consent Form (for parents of student participants)

Your son/daughter has being invited to take part in the second of three phases of my research study, as part of my doctoral student project to fulfil the course requirements for the EdD in the School of Education, University of Manchester, supervised by Professor Helen Gunter. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you would like your son/daughter to take part.

Thank you for reading this.

Who will conduct the research?

Patricia M. Davies, School of Education, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

Title of the Research

Towards an Understanding of Student Leadership for Learning with ICT in a High School

What is the aim of the research?

The research aims to investigate to what extent student leadership of learning with ICT can contribute to changes in knowledge, practice and the learning environment in school.

Why has your son/daughter been chosen?
The involvement of your son/daughter has been sought solely to draw upon the knowledge and experience s/he has gained as a participant of the High School ICT Project, in order to address the current gaps in the literature on the relationship between students and leadership. S/he is one of 25 students, 3 teachers, and 3 administrators involved in the High School ICT Project, who has been invited to participate in this study.

What would my son/daughter be asked to do if s/he took part?

S/he will be interviewed as part of a class group in June 2010. The questions asked will mainly be about their involvement as students in the High School ICT Project.

What happens to the data collected?

I will use the information gathered from these interviews to gain an understanding of the role that students can play in leading learning with ICT in school.

How is confidentiality maintained?

The real names of participants will not be used at any point of the information collection, or the written case report. Instead, pseudonyms will be used in the written records. Your son/daughter will be given a transcript of each of the interviews to verify. The audio recordings will be stored securely as part of the case study record on a computer at my home accessed only by me.

What happens if I do not want my son/daughter to take part or if I change my mind?

It is up to you to decide whether or not you wish your son/daughter to take part. If you do decide to allow him/her to take part you will be given a copy of this information sheet to keep, and be asked to sign the consent section of the second copy and return it to me. If you decide to allow your child to take part you are still free to withdraw him/her at any time without giving a reason and without detriment to your child.

Will my son/daughter be paid for participating in the research?

No, s/he will not be paid for participating in the research; however, time will be provided during class for the interviews.

What is the duration of the research?

One ½ hour interview
Where will the research be conducted?

Computer Lab – LG12

Will the outcomes of the research be published?

The findings of the research will be included in my thesis. A summary of the findings will be reported to the school’s administrators.

Criminal Records Check (if applicable)

I have undergone a satisfactory criminal records check.

Contact for further information

Patricia M. Davies, Head of Computer Studies Dept. ACS Cobham International School, Cobham, Surrey KT11 1BL Telephone: 01932 867 251 Email: pdavies@acs-england.co.uk

What if something goes wrong?

If you want to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.

If you are happy to allow your son/daughter to participate please complete and sign the consent section below.

I confirm that I have read the above information on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

I agree to allow my son/daughter to take part in the above project.

Name of participant (your son/daughter):

______________________________

Name of person taking consent

______________________________ Date

______________________________

Signature
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 3 Participant Information Sheet and Consent Form (for parents of student participants)

Your son/daughter has been invited to take part in the final phase of my research study, as part of my doctoral student project to fulfil the course requirements for the EdD in the School of Education, University of Manchester, supervised by Professor Helen Gunter. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you would like your son/daughter to take part.

Thank you for reading this.

Who will conduct the research?

Patricia M. Davies, School of Education, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

Title of the Research

Towards an Understanding of Student Leadership for Learning with ICT in a High School

What is the aim of the research?

The research aims to investigate to what extent student leadership of learning with ICT can contribute to changes in knowledge, practice and the learning environment in school.

Why has your son/daughter been chosen?

The involvement of your son/daughter has been sought solely to draw upon the knowledge and experience s/he has gained as a participant of the High School
ICT Project, in order to address the current gaps in the literature on the relationship between students and leadership. S/he is one of 25 students 3 teachers, and 3 administrators involved in the High School ICT Project, who has been invited to participate in this study.

What would my son/daughter be asked to do if s/he took part?

S/he will be interviewed as part of a small group of student participants of the High School ICT Project in January 2011. The questions asked will mainly be about their involvement as students in the High School ICT Project, and about the consequences of this involvement.

What happens to the data collected?

I will use the information gathered from these interviews to gain an understanding of the role that students can play in leading learning with ICT in school.

How is confidentiality maintained?

The real names of participants will not be used at any point of the information collection, or the written case report. Instead, pseudonyms will be used in the written records. Your son/daughter will be given a transcript of each of the interviews to verify. The audio recordings will be stored securely as part of the case study record on a computer at my home accessed only by me.

What happens if I do not want my son/daughter to take part or if I change my mind?

It is up to you to decide whether or not you wish your son/daughter to take part. If you do decide to allow him/her to take part you will be given a copy of this information sheet to keep, and be asked to sign the consent section of the second copy and return it to me. If you decide to allow your child to take part you are still free to withdraw him/her at any time without giving a reason and without detriment to your child.

Will my son/daughter be paid for participating in the research?

No, s/he will not be paid for participating in the research; however, time will be provided during class for the interviews.

What is the duration of the research?

One ½ hour interview
Where will the research be conducted?

Computer Lab – LG12

Will the outcomes of the research be published?

The findings of the research will be included in my thesis. A summary of the findings will be reported to the school’s administrators.

Criminal Records Check (if applicable)

I have undergone a satisfactory criminal records check.

Contact for further information

Patricia M. Davies, Head of Computer Studies Dept. ACS Cobham International School, Cobham, Surrey KT11 1BL  Telephone: 01932 867 251  Email: pdavies@acs-england.co.uk

What if something goes wrong?

If you want to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.

If you are happy to allow your son/daughter to participate please complete and sign the consent section below.

I confirm that I have read the above information on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

I agree to allow my son/daughter to take part in the above project.

Name of participant (your son/daughter):

______________________________

______________________________

Name of person taking consent  Date

______________________________

Signature
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 1 (Staff) Participant Information Sheet

You are being invited to take part in the first of three phases of my research study, as part of my doctoral student project to fulfil the course requirements for the EdD in the School of Education, University of Manchester, supervised by Professor Helen Gunter. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Who will conduct the research?

Patricia M. Davies, School of Education, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

Title of the Research

Towards an Understanding of Student Leadership for Learning with ICT in a High School

What is the aim of the research?

The research aims to investigate to what extent student leadership of learning with ICT can contribute to changes in knowledge, practice and the learning environment in school.

Why have I been chosen?

Your involvement has been sought solely to draw upon the knowledge and experience you have gained as a participant of the High School ICT Project, in order to address the current gap in the literature on the relationship between students and leadership.
You are one of 25 students, 3 teachers, and 3 administrators involved in the High School ICT Project who have been invited to participate in this study.

What would I be asked to do if I took part?

You will be interviewed individually in May 2010. The questions asked will mainly be about your perspective of the involvement of students in the High School ICT Project.

What happens to the data collected?

I will use the information gathered from these interviews to gain an understanding of the role that students can play in leading learning with ICT in school.

How is confidentiality maintained?

Your real name will not be used at any point of the information collection, or the written case report. Instead, you and any other person or place names will be given pseudonyms that will be used in the written records. You will be given a transcript of each of the interviews to verify. The audio recordings will be stored securely as part of the case study record on a computer at my home accessed only by me.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself.

Will I be paid for participating in the research?

No, you will not be paid for participating in the research.

What is the duration of the research?

One ½ hour interviews

Where will the research be conducted?

Your office
Will the outcomes of the research be published?

The findings of the research will be included in my thesis. A summary of the findings will be reported to the school administrators.

Criminal Records Check (if applicable)

Not applicable

Contact for further information

Patricia M. Davies, Head of Computer Studies Dept. ACS Cobham International School, Cobham, Surrey KT11 1BL  Telephone: 01932 867 251  Email: pdavies@acs-england.co.uk

What if something goes wrong?

If you want to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 2 (Staff) Participant Information Sheet

You are being invited to take part in the second of three phases of my research study, as part of my doctoral student project to fulfil the course requirements for the EdD in the School of Education, University of Manchester, supervised by Professor Helen Gunter. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Who will conduct the research?

Patricia M. Davies, School of Education, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

Title of the Research

Towards an Understanding of Student Leadership for Learning with ICT in a High School

What is the aim of the research?

The research aims to investigate to what extent student leadership of learning with ICT can contribute to changes in knowledge, practice and the learning environment in school.

Why have I been chosen?

Your involvement has been sought solely to draw upon the knowledge and experience you have gained as a participant of the High School ICT Project, in order to address the current gap in the literature on the relationship between students and leadership.
You are one of 25 students, 3 teachers, and 3 administrators involved in the High School ICT Project who have been invited to participate in this study.

What would I be asked to do if I took part?

You will be interviewed individually in August 2010. The questions asked will mainly be about your perspective of the involvement of students in the High School ICT Project, and about the consequences of their involvement.

What happens to the data collected?

I will use the information gathered from these interviews to gain an understanding of the role that students can play in leading learning with ICT in school.

How is confidentiality maintained?

Your real name will not be used at any point of the information collection, or the written case report. Instead, you and any other person or place names will be given pseudonyms that will be used in the written records. You will be given a transcript of each of the interviews to verify. The audio recordings will be stored securely as part of the case study record on a computer at my home accessed only by me.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself.

Will I be paid for participating in the research?

No, you will not be paid for participating in the research.

What is the duration of the research?

One ½ hour interviews

Where will the research be conducted?

Your office
Will the outcomes of the research be published?

The findings of the research will be included in my thesis. A summary of the findings will be reported to the school administrators.

Criminal Records Check (if applicable)

Not applicable

Contact for further information

Patricia M. Davies, Head of Computer Studies Dept. ACS Cobham International School, Cobham, Surrey KT11 1BL  Telephone: 01932 867 251   Email: pdavies@acs-england.co.uk

What if something goes wrong?

If you want to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 3 (Staff) Participant Information Sheet

You are being invited to take part in the final phase of my research study, as part of my doctoral student project to fulfil the course requirements for the EdD in the School of Education, University of Manchester, supervised by Professor Helen Gunter. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Who will conduct the research?

Patricia M. Davies, School of Education, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

Title of the Research

Towards an Understanding of Student Leadership for Learning with ICT in a High School

What is the aim of the research?

The research aims to investigate to what extent student leadership of learning with ICT can contribute to changes in knowledge, practice and the learning environment in school.

Why have I been chosen?

Your involvement has been sought solely to draw upon the knowledge and experience you have gained as a participant of the High School ICT Project, in order to address the current gap in the literature on the relationship between students and leadership.
You are one of 6 students, 3 teachers, and 3 administrators involved in the High School ICT Project who have been invited to participate in this study.

What would I be asked to do if I took part?

You will be interviewed individually in March 2011. The questions asked will mainly be about your perspective of the involvement of students in the High School ICT Project, and about the consequences of this involvement.

What happens to the data collected?

I will use the information gathered from these interviews to gain an understanding of the role that students can play in leading learning with ICT in school.

How is confidentiality maintained?

Your real name will not be used at any point of the information collection, or the written case report. Instead, you and any other person or place names will be given pseudonyms that will be used in the written records. You will be given a transcript of each of the interviews to verify. The audio recordings will be stored securely as part of the case study record on a computer at my home accessed only by me.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself.

Will I be paid for participating in the research?

No, you will not be paid for participating in the research.

What is the duration of the research?

One ½ hour interviews

Where will the research be conducted?

Your office
Will the outcomes of the research be published?
The findings of the research will be included in my thesis. A summary of the findings will be reported to the school administrators.

Criminal Records Check (if applicable)

Not applicable

Contact for further information

Patricia M. Davies, Head of Computer Studies Dept. ACS Cobham International School, Cobham, Surrey KT11 1BL Telephone: 01932 867 251 Email: pdavies@acs-england.co.uk

What if something goes wrong?

If you want to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 1 Assent Form (for student participants)

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I/my parents have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project.

Name of participant ___________________________ Date ___________________________

__________________________________________
Signature

Name of person taking consent ___________________________ Date ___________________________

__________________________________________
Signature
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 2 Assent Form (for student participants)

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I/my parents have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project.

____________________________
Name of participant

____________________________   _________________________
Date                          Signature

____________________________
Name of person taking consent

____________________________   _________________________
Date                          Signature
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 3 Assent Form (for student participants)

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I/my parents have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project.

_________________________  __________________________
Name of participant        Date

_________________________
Signature

_________________________  __________________________
Name of person taking consent Date

_________________________
Signature
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 1 (Staff) CONSENT FORM

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project

Name of participant ___________________________ Date ___________________________

Signature ___________________________
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 2 (Staff) CONSENT FORM

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project.

__________________________  ________________
Name of participant              Date

__________________________
Signature

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Towards an Understanding of Student Leadership for Learning with ICT
in a High School

ROUND 3 (Staff) CONSENT FORM

If you are happy to participate please complete and sign the consent form below.

Please Initial Box

1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at anytime without giving a reason and without detriment to any treatment/service.

3. I understand that the interviews will be audio-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

I agree to take part in the above project.

_____________________________  ______________________________
Name of participant                  Date

_____________________________
Signature
APPENDIX C

Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 1 (Student) INTERVIEW SCHEDULE

**Aims:** To elicit students’ thinking about how ICT leadership operates in school (linked to research questions 1).
To elicit students’ thinking about where knowledge about teaching and learning with ICT originates (linked to research questions 2).
To elicit students’ views about their involvement in the High School ICT Project (linked to research questions 3).

START OF INTERVIEW:

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind students not to use any names
- State aim of interview

MAIN INTERVIEW: Main Questions for Round 1

1. What are your views of how decisions about ICT purchases at this school are made?
2. Who is involved in making these decisions? Are students involved?
3. Who decides how ICT is used in the classroom?
4. How are such decisions generally made?
5. Can you request specific kinds of ICT equipment for use in your classes or around the school?
6. Is there anything else about the way ICT decisions are made that you wish to comment on?

END OF INTERVIEW:

- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 2 (Student) INTERVIEW SCHEDULE

**Aim:** To elicit students’ opinions about their involvement in the High School ICT Project (linked to research questions 3).

**START OF INTERVIEW:**

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind students not to use any names
- State aim of interview

**MAIN INTERVIEW:** Main Questions for **Round 2**

1. What are your views about your involvement in developing ICT policies for your school?
2. Did you feel the process was fair and took into account multiple perspectives?
3. Did you feel your opinion counted?
4. What are your views about the general atmosphere during the consortiums, which involved students and adults having discussions about ICT at the school?
5. In your opinion, did these interaction developed trust and promoted understanding between adults and students? If yes, how?
6. What are your views about the project on the whole? Was your participation meaningful? If yes, how? Where you seen as the leaders or the followers in making the decisions about the use of ICT for learning?
7. In your opinion, is there anything else that could be done to improve the project?

**END OF INTERVIEW:**

- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Towards an Understanding of Student Leadership for Learning with ICT

in a High School

ROUND 3 (Student) INTERVIEW SCHEDULE

**Aims:** To discuss the consequences of student involvement in the High School ICT Project (linked to research questions 3).

**START OF INTERVIEW:**

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind students not to use any names
- State aim of interview

**MAIN INTERVIEW: Main Questions for Round 3**

1. Quite a lot of time and effort went into developing the ICT policies here at school. What are your views about the time spent on the project? Was it worthwhile?
2. How do you as an individual respond to the policy recommendations?
3. Are you personally committed to seeing that these recommendations are adopted? And if so, how would you go about it?
4. In your opinion was involving students in school decisions is a positive step for the school?
5. Can you think of other ways in which our students can be involved in school policymaking?
6. Has this project added to your understanding of whether students can lead ICT for learning at your school? And if so, how?
7. What are your views about the changes in teaching with ICT that may from this project?
8. Have you seen any changes in ICT within the classroom or the school that may be as a result of this project? And if so what?

**END OF INTERVIEW:**

- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 1 (Staff) INTERVIEW SCHEDULE

**Aims:** To elicit participant’s thinking about how ICT leadership operates in school (linked to research questions 1). To elicit participant’s thinking about where knowledge about teaching and learning with ICT originates (linked to research questions 2). To elicit participant’s views about the involvement of students in the High School ICT Project (linked to research questions 3).

**START OF INTERVIEW:**
- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

**MAIN INTERVIEW: Main Questions for Round 1**

1. What are your views about how ICT purchases at our school made?
2. Who is involved in making these decisions? Are students involved?
3. Who decides how ICT is used in the classroom?
4. How are such decisions generally made?
5. Can you request specific kinds of ICT equipment for your use?
6. How do you choose the kinds of ICT equipment you use?
7. Is there anything else about the way ICT decisions are made that you wish to comment on?

**END OF INTERVIEW:**
- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Towards an Understanding of Student Leadership for Learning with ICT in a High School

ROUND 2 (Staff) INTERVIEW SCHEDULE

Aims: To elicit adult’s opinions about the involvement of students in developing school ICT policy (linked to research questions 3).

START OF INTERVIEW:
- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

MAIN INTERVIEW: Main Questions for Round 2

1. What are your views about student being involved in developing ICT policies for our school?
2. Did you feel the process was fair and took into account multiple perspectives?
3. Did you feel students’ opinions counted?
4. How would you describe the general attitude about students participating in developing ICT policy statements?
5. What are your views about students participating in developing ICT policy statements?
6. Do you feel this interaction developed trust and respect, and promoted understanding between students and adults? If so, how?
7. In your opinion, is there anything else that could be done to improve the project?
8. Can you think of ways in which this project will influence student participation in other areas of school leadership?

END OF INTERVIEW:
- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Towards an Understanding of Student Leadership for Learning with ICT
in a High School

ROUND 3 (Staff) INTERVIEW SCHEDULE

Aims: To discuss the consequences of student involvement in the High School ICT Project (linked to research questions 3).

START OF INTERVIEW:

- Mention why interview needs to be recorded—check permission
- Provided reassurance of confidentiality
- Remind interviewee not to use any names
- State aim of interview

MAIN INTERVIEW: Main Questions for Round 3

1. Quite a lot of time and effort went into developing the ICT policies for your school. What are your views about the amount of time spent on the project?
2. How do you as an individual respond to these policy recommendations?
3. Are you personally committed to seeing that these policies statement are adopted by the high school, or in the classroom? And if so, how?
4. What are your views about involving students in school decisions? Is this a positive step for our school?
5. Can you think of other ways in which our students may be involved in school policymaking?
6. Has this project added to your understanding of whether students can lead ICT for learning at your school? And if so, how?
7. What are your views of changes in teaching with ICT that may result from this project?
8. Have you made (or recommended) any changes in ICT for learning within the classroom or the school as a result of this project? And if so what?

END OF INTERVIEW:

- Before we finish, is there anything we have not talked about today that you would like to mention? Anything, no matter how apparently small or insignificant?
- Is there anything you would like to ask me?

THANK YOU!
Appendix F

Research Plan including pilot study

Understanding Student Leadership for Learning with ICT in a High School

Professional context

Following postgraduate studies at the University of California at Berkeley, I began my full-time teaching career as a lecturer in mathematics at the University of Sierra Leone in 1994. Five years later I embarked on a career in secondary education, with a specialization in mathematics and computing. In July 2001 I started a master’s degree in educational technology at Teachers College, Columbia University. I have been head of computer studies at ACS Cobham International School in Surrey, England, since August 2002. In addition to teaching classes in programming and ICT, I am responsible for monitoring and improving the quality of teaching and learning within the department, and for integrating ICT throughout the high school curriculum.

I have been enrolled in the EdD programme since September 2007. My decision to pursue doctoral studies was prompted partly by my observation that, since the introduction of computers into classrooms over three decades ago, the voices of those who are intended to be the beneficiaries of this technology—namely, students and teachers—have to a large extent remained silent. The literature review conducted in my first research paper (Davies, 2008b) confirmed that students have little influence on decisions concerning school educational technology. This paper will soon be published in Management in Education (Davies, 2010b). In my second research paper (Davies, 2009a) I describes a small-scale case study in which I gathered, described and analysed students’ views about the access to, and uses of, ICT at their school. This gave me insight into the role that students could play in leading ICT for learning at their school. With over twenty-five years of experience teaching mathematics and computing, I now have things to say about teaching and learning with ICT and my doctoral studies are providing me with ways of communicating and disseminating this information. I have attended six research conferences since 2008, and presented posters and papers on my research (Davies, 2009a) at three of them. In July 2009 I attended a one-week seminar on transnational perspectives in democratic education at the Institute of Education, University of London. This course was a 30-credit module for masters and doctoral students.

Research questions and background literature

The aim of the research being proposed is to understand the role that students, can and do, play in leading learning with ICT in school. It will be centred on fieldwork which examines student leadership in developing ICT policy statements through co-operative inquiry at a case study school. Student researchers will undertake participatory action research to develop policy
statements about teaching and learning with ICT, for recommendation to the school’s senior management team. I will report on the process of involving students in policy-making, and on the consequences of their involvement. Three main questions will guide my research:

1. How has leadership in ICT developed in school?
   a. How does it operate in practice?
   b. What role do students play?
2. Where and how is knowledge about teaching and learning with ICT generated?
3. To what extent can student leadership of ICT for learning contribute to changes in knowledge, practice and environment in school?

While the body of research on student voice focusing mainly on the rights of students as espoused in the UN (1989) Convention on the rights of the child has grown, little work has been done on the relationship between students and leadership (Mitra and Gross, 2009a). I plan to examine the extent to which students can and do contribute to the development of school ICT policy. I will track the development of educational technology leadership since the 1980s to gain an understanding of the history of student participation in leading learning with ICT over the past thirty years. The proposed fieldwork will explore how an atmosphere of shared planning and decision-making might be developed through student leadership, to improve learning with ICT in school.

I plan to build on the arguments of Smyth (2006b), who suggests that it is time for schools to move away from old regimes to a different kind of educational leadership that encourages authentic forms of student participation. He proposes learner-centred policy generation (see Appendix A) as a more inclusive, more democratic, way of generating school policies. Such arguments are akin to Luckin’s (2008) plea for the development of a learner-generated context in educational technology, which she regards as a “more democratic learning economy ... where the balance between learner and teacher or mentor control is constantly changing” (p 461). Her arguments hinge on the fact that we are now faced with the situation in schools where many students know more than their teachers about digital learning tools.

There is also the issue of students’ participatory rights, such as those elaborated on by Thomson and Gunter (2009). Article 12 of the Convention on the rights of the child (UNCRC, 1989) is both a substantive and procedural right entitling children to participate in matters affecting them, such as schooling, as well as enabling them to defend these rights and to challenge any abuse of thereof. Lansdown (2000) describes three main ways in which participation of children can be carried out effectively: consultative processes—where the aim is to solicit children’s opinions for informing adult-led initiatives; participative initiatives—in which children are made to understand and apply democratic processes in matters concerning themselves; and promoting self-advocacy—where children are allowed to set the agenda and go about fulfilling these goals themselves. My research will address all of these.
The proposed research is about educational technology (or ICT for learning), which is different from technology for education. The latter deals with how many computers are in classrooms and how they might be used to support traditional school structures. Unfortunately this places inappropriate focus on hardware and often leads to a potentially dangerous interpretation of technology integration (Garnett and Ecclesfield, 2008). My focus will be on the uses of technology to enhance learning. The definition of the phrase *learning with ICT*, which I will assume, builds on the explanation of what makes a good lesson developed by Rudduck and McIntyre (2007), in their research project on consulting pupils about teaching and learning. Learning with ICT

- involves tasks that require mental initiative
- provides alternative forms of representation
- provides some broad understanding of the task, and possibly the challenges involved in what is to be achieved
- changes the roles between student and teacher dramatically.

**Proposed methodology, methods and analyses**

The proposed methodology is layered. At one level is an action research project in a case study school. Students, teachers and administrators are organised into a community of inquiry and action to address teaching and learning with ICT at the school. They will engage in systematic cycles of action and reflection. In action phases, student researchers will test practices and gather evidence; in reflection stages, the whole community will make sense of the data and plan future actions.

Case study operates at the second level of the methodology. I will observe, analyse and report on the process of involving students in ICT policy-making. I will also examine the consequences of this involvement. Much of my data will be collected through observations and interviews with student researchers, and with students, teachers and administrators participating in the consortium. I will engage the research participants, who are also co-researchers in the fieldwork, in defining the project. By allowing them to contribute to the creative thinking needed at this early stage to generate “knowledge-for-action” (Wallace and Poulson, 2003, p 23), the student researchers will be able to interpret the project within the context of their participation.

Students conducting the action research project are volunteers from three sections of the computer applications course I teach. During the autumn 2009 and early spring 2010 terms, they will design and conduct teacher-focused and student-focused activities to gather evidence that will provide information about the current ICT experiences of both teachers and students at the school. The student researchers will meet regularly with the High School Technology Consortium—a group consisting of administrators, teachers and student council representatives—to reflect on their strategies and on the data they collect. The consortium will serve as critical friends to the students and will guide them, in constructive ways, as they go about developing ICT policy statements.
Figure X shows the dense network of knowledge-producing actions and interactions arising from these two distinct methodological layers in this dialectical research process. In addition to initializing the student action research project, I will collect data through interviews with participants of the technology consortium about the process, and the consequences, of involving students in decision-making at the school. These interviews will be primarily semi-structured, in the form of conversations, to allow participants to share their own ideas and observations. According to Simons (2009, p 44), conversational interviews “establish a more equitable relationship between interviewer and interviewee and create opportunity for active dialog, co-constructed meaning and collaborative learning.” But there will also be highly structured sections to allow me to obtain specific information from all respondents. It may also be necessary to gather relevant documents generated through media coverage of the student project, such as internal publications and pages from school newspapers and websites.
I will keep a diary to note things I find interesting and things which strike me as significant, puzzling or odd; suggestions I need to follow up; and things that will in general help me to put the data in context or to understand how different pieces of information relate to each other. My field notes will help me develop perceptions and questions to be discussed during the interviews.

Progress to date and time-line

To date, I have used the literatures on definitions and the development of educational technology to understand political standpoints regarding the leadership of school educational technology, and to examine the role that students play in leading ICT for learning.

A term widely used in the field of education—educational technology—has come to include areas such as instructional technology, educational media and learning technology (Ely, 2008). The field developed during the 20th century as a result of an emphasis on audio-visual and communications media in teaching and learning. The rich developmental history of the field shows how several other fields have influenced it, in particular learning psychology, instructional psychology, and cognitive psychology. It is the last of these that has promoted constructivism—a student-centred learning approach—which is now adopted by many practitioners (Reiser and Ely, 1997). There have been several well-known attempts to understand patterns of successful integration of technology into school curricula. However, as Kowch (2004) argues, there is still need for leadership knowledge in the field of educational technology. Some authors argue that principals can provide effective educational technology leadership in schools by redefining their roles. But what results is a reorganization of principals’ roles so that their dominance extends to the use of ICT in schools, exposing the fact that technology leadership is traditionally about elite adults, and others as followers (Davies, 2008b). The voices of teachers and students, who are a key underpinning consideration of ICT for learning, remain silent.

One of the arguments I made earlier (Davies, 2008b) is that educational technology leadership needs to be conceptualized as involving all stakeholders responsible for teaching, learning, school policies and advancements in ICT. Such a construction would involve all sectors of the institution and create a space where these partners can contribute the interests of individual groups while interacting to create a shared vision about how school educational technology should be organised. Each contributor in the leadership diagram (shown in Appendix B) is a leader in his or her own right. All bring their expertise, as well as questions, to create a deeper understanding of how proposed changes would affect their sector of the organization. Through such discussions and interactions the different cultures within the organization find common ground, and grow in their understanding of each other. Meaningful exchanges such as these are bound to produce new questions central to the ideas being discussed, thus yielding unsullied knowledge (Davies, 2008b).

These arguments are in accord with Smyth’s (2006b) idea of positioning students as powerful people within the school community. As genuine stakeholders in
school educational technology, students are bound to make important contributions to these discussions because their experiences of using ICT for learning are unique (Davies, 2009a). This new kind of interaction makes it possible for them to be viewed in a different light—as individuals who are capable of generating knowledge—rather than simply being receptacles ready to be filled with information. Promoting such a culture of authentic student voice can provide good grounding for students to emerge as leaders of learning with ICT.

The fieldwork centres on students developing ICT policy statements on teaching and learning with ICT, through a process of co-operative inquiry at the case study school. There are 21 students conducting the action research project; each is enrolled in one of the three sections of the computer applications course I teach. They are referred to as student researchers in this paper. During the autumn 2009 term, they began investigating uses of ICT for research and collaboration, as part of the curriculum. The school has approved the yearlong project that will involve these students developing ICT policy statements for recommendation to the school’s senior management team. These students have been introduced to techniques for good survey design, gathering data, and analysing survey results. Issues regarding ethics and access to participants have also been discussed.

For one week in September 2009 the student researchers were asked to keep a diary about their experiences with ICT in and outside school. Data from their diaries revealed problems in three main areas:
- slow network connection, which students felt resulted in many missed learning opportunities
- teachers’ lack of skill and experience necessary for using ICT effectively in the classroom
- the dominance of a single approach to teachers’ use of ICT—namely to provide information.

Subsequent discussions confirmed that these students believe improvements in all of these areas would make classes much more interesting, and would improve learning with ICT at the school. These discussions provided an opportunity for students to learn about ways in which change could be achieved, and action research proved a popular option. They agreed it was necessary to investigate ICT practices at other schools, as these models could prove instructive. The student researchers also saw the importance of gathering further information from the wider student body and from teachers in the school about ways in which ICT is used. They nominated teachers to be part of the consortium. Of the 20 teachers and administrators invited, 13 accepted. The head of school and the ICT co-ordinator asked if they too could join. The consortium includes 6 administrators, 9 teachers and 7 student council representatives; a complete list is given in Appendix C. Pseudonyms are used for all participants throughout this paper.

On 15 October 2009 members of the High School Technology Consortium met for the first time. The student researchers are organised into 3 groups to collect data from teachers and students at their school, and about other schools. They
made presentations addressing the following questions. Each group specifically addressed the area of information gathering that was its focus.

1. Why are we doing this project?
2. What information do we need?
3. How will we gather this information?
4. What benefits will developing technology policy bring to our school?

I opened the meeting by thanking everyone for their participation, and reminded them of the project’s aims. I stated the consortium’s role as being critical reviewers of the data collection strategies the student researchers were about to present. Paper and pencil had been provided for everyone, and I urged them to make notes, as discussions would be held after all the presentations had been made. After the groups had completed their presentations, two students who had been appointed to chair the meeting opened it up for questions, comments and suggestions.

There was a general atmosphere of mutual respect and interest in the project. Several teachers offered to assist the student researchers with the data gathering: Mrs Cruse said she would help with providing contacts at other schools, Mr Powers offered to help with preparing surveys, and Mrs Ball, who is a statistician, said she would help the students with analysing the data. The school’s ICT co-ordinator and the head of school both expressed their unreserved interest in the project. The former suggested that the student researchers should make suggestions on ways of using technology in the classroom that involved portable digital devices, such as mobile phones. The head of school requested that in addition to making a presentation, the student researchers should prepare a final report for the senior management team.

During the spring 2010 term student researchers will design and conduct teacher-focused and student-focused activities. They will meet regularly with the High School Technology Consortium to reflect on the data collected, and discuss the next steps in the project. Their goal will be to compile a list of policy recommendations, which will be presented to the school’s senior management team in June 2010. I will report on the process and conduct interviews with students, teachers and administrators about their involvement in developing the policies. Appendix D lists sample questions that will be used to guide the interviews. During autumn 2010 the focus of my data gathering will turn to adults at the school, to gain insight into the consequences of the student action research project on knowledge, practice and environment in the school. Table X shows a proposed schedule of activity for the project; the shaded sections have already been completed. Stages at which I will collect data about the project are shown in bold type.
<table>
<thead>
<tr>
<th>DATE</th>
<th>PURPOSE/ACTIVITY</th>
<th>GROUPS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2009</td>
<td>Keep research diary for one week and document daily technology experiences</td>
<td>Student researchers</td>
</tr>
<tr>
<td>15 October 2009</td>
<td>Meeting of Technology Consortium to discuss project aims and strategy for collecting data from teachers and students</td>
<td>Student researchers, Consortium</td>
</tr>
<tr>
<td>Nov–Dec 2009</td>
<td>Prepare surveys for collecting data from teachers, students and other schools about teaching and learning with ICT</td>
<td>Student researchers</td>
</tr>
<tr>
<td>25 January 2010</td>
<td>Meeting of Technology Consortium to review data collection strategies, access and ethical issues</td>
<td>Student researchers, Consortium</td>
</tr>
<tr>
<td>January–March 2010</td>
<td>Data collection</td>
<td>Student researchers</td>
</tr>
<tr>
<td>22 February 2010 and 15 March 2010</td>
<td>Meeting of Technology Consortium to discuss data collected and identify key policy areas</td>
<td>Student researchers, Consortium</td>
</tr>
<tr>
<td></td>
<td><strong>Observation and interviews with students</strong></td>
<td>Me</td>
</tr>
<tr>
<td>26 March 2010</td>
<td>Presentation of data to high school faculty</td>
<td>Student researchers, faculty</td>
</tr>
<tr>
<td>April 2010</td>
<td>Work on developing policy statements</td>
<td>Student researchers, Me</td>
</tr>
<tr>
<td></td>
<td><strong>Observation and interviews with 3 consortium teachers</strong></td>
<td>Me</td>
</tr>
<tr>
<td>17 May 2010</td>
<td>Meeting of Technology Consortium to revise and finalise policy statements</td>
<td>Student researchers, Consortium</td>
</tr>
<tr>
<td>2 June 2010</td>
<td>Presentation of project and final policy statements to wider school community</td>
<td>Student researchers, wider school community</td>
</tr>
<tr>
<td>3 June 2010</td>
<td>Meeting of Technology Consortium to finalise presentation of policy statement to senior management team</td>
<td>Student researchers, Consortium</td>
</tr>
<tr>
<td>June 2010</td>
<td>Student researchers write reflections on their participation in policy-making</td>
<td>Student researchers, Me</td>
</tr>
<tr>
<td></td>
<td><strong>These narratives will be used to promote group discussions on the project and its consequences</strong></td>
<td>Me</td>
</tr>
<tr>
<td></td>
<td><strong>Group interviews with students researchers</strong></td>
<td>Me</td>
</tr>
<tr>
<td>June 2010</td>
<td><strong>Interviews with head of school and with assistant principal</strong></td>
<td>Me</td>
</tr>
<tr>
<td>October 2010</td>
<td><strong>Interviews with 6 students (2 per section) who participated as researchers</strong></td>
<td>Me</td>
</tr>
<tr>
<td>November 2010</td>
<td>Second interviews with same 3 consortium teachers as above</td>
<td>Me</td>
</tr>
<tr>
<td>December 2010</td>
<td>Second interviews with head of school and with assistant principal</td>
<td>Me</td>
</tr>
<tr>
<td>January–April 2011</td>
<td>Round 3 interviews with students, teachers and administrators</td>
<td>Me</td>
</tr>
</tbody>
</table>

Table X: Schedule of activity
Access and ethical issues

Ethics in research has to do with establishing a relationship with participants that respects their dignity and integrity. I will try to build up the trust of all involved in the project by providing clear information about the case study, and by letting them know why their participation is necessary. I will abide closely with BERA’s (2004) revised ethical guidelines for educational research, first by ensuring that people involved in the study give their informed consent and are aware of their right to withdraw at any time. As the student researchers are all under 18, consent will also be sought from their parents. Second, all will be accorded their rights to confidentiality and anonymity. Ethics are also inextricably connected with the political context of the case and there are abstract principles, which need to be applied to ensure that I continue to gain access to participants through the blessing of the school’s administrators. Therefore I will regularly provide the head of school, principal and his assistant with an account of the progress of the project.

Researching my own practice gives me access to students in my classes. It will provide the opportunity for me to explore not only my educational theories about student leadership for learning with ICT but also the instrumental practices, which I employ. It also removes some of the tensions that might exist due to differences between what a researcher values and what is appreciated by the teacher or school. The head of school’s participation in the consortium has given the project high status within the school, which in turn makes access to teachers and other administrators much easier than it would otherwise be.

In the classroom, I have tried to maintain an ethos in which students do not feel that they are in a one-sided power relation, and have to comply with what I say. I encourage them to freely challenge my views, to comment on my procedures and to suggest changes. I have had discussions with the students about the meanings of fairness and democratic freedom, and therefore there is need for me to model these principles in my teaching, and throughout the project.

Expected contribution to knowledge

The project will enhance ICT practice and policy, and impact decision-making in the case study school, and its sister schools. It will add to the body of literature on involving students in school policy-making, and deepen the understanding of the complexities and turbulence that “can influence the way that student voice is received at a school and its ability to achieve desired goals” (Mitra and Gross, 2009a).

Aspects of this research are strongly linked to the ideas of Cervero and Wilson (1994), and their studies of negotiation-based planning models in education. Their focus is on adult education, whereas mine is on secondary education. This work is an attempt to extend theirs into the compulsory education setting, and to address questions about the status of the learners and the ultimate beneficiaries of schooling. Also, I am developing and evaluating a methodology for implementing the notion of learner-generated contexts in practice.
Appendix G1

Application for variations to approved UREC form

Dear Dr Stibbs,

I am writing to request a minor variation to the project approved by the UREC on 28th April 2010.

1. I would like to merge Round 1 and Round 2 stages of the data collection into one interview event lasting no longer than 30 minutes as for Round 1. In preparing for the interview it made sense in terms of the interview questions and the organisational logistics to have one meeting. I plan to do this final round of interviews in December 2010.

2. A key member of staff, who was also a participant in the High School ICT Project, left the school in the summer and I brought forward their interview in order to ensure they could participate in the study.

3. The Head of School is a part of the research team and so he will be interviewed along with other colleagues. I would also like to interview him in his capacity as head of school and so I have written a letter, produced a consent form, and listed out the questions I intend to use.

These are minor adjustments to the project and do not fundamentally alter the aims and conduct of the project.

Please do not hesitate to contact me if you need any additional information or clarification.

With best wishes,

Patricia M. Davies
Appendix G2

Application for variations to approved UREC form

Dear Dr Stibbs,

I am writing to request another minor variation to the project approved by the UREC on 28th April 2010, as follows.

1. Our current head of school retires at the end of this academic year and I would like to interview the new head in an attempt to understand his perspective on student leadership. I plan to do this in January 2012. The invitation letter, participant information sheet and leading interview questions can be found in Appendix E. I will use the same adult/staff consent form as before.

2. In an attempt to examine the reach and significance of the student-led action research project, I would like to conduct a group interview with six teachers who were not involved in the project in January 2012. The invitation email letter, participant information sheet and main questions can be found in Appendix E. I will use the same adult/staff consent form as before.

3. I would like to interview three student participants of the student-led action research project in January 2012 who will then be in their final year to examine their views on the impact the project has had three years on, and to understand what they feel their legacy will/should be. The same email invitation and student consent forms provided previously will be used. A new participant information sheet and main questions for these interviews are provided in Appendix E.

These are minor adjustments to the project and do not fundamentally alter the aims and conduct of the project.

Please do not hesitate to contact me if you need any additional information or clarification.

With best wishes,

Patricia M. Davies
Appendix H

Example of agent’s email letter to one participant (including sample reply)

----- Original Message ----- 

[Name omitted] writes:

Dear XXX,

I am writing on behalf of Patricia Davies to ask if you are willing to be involved in her doctoral research by being interviewed.

Patsy is undertaking a research project in which she is studying the work of the ‘High School Technology Student ICT Project Team’ following up on what the team did, when and why, and what difference this is making. This involves interviews with students, teachers and administrators involved in the Project. The outline of Patsy’s project and what is required of you is in the attached document.

The University requires that all people being asked to involved will be formally approached in this way, so students, teachers and administrators will all receive this request. The University also requires that someone other than Patsy approach you to ask if you are willing to be involved, and Patsy has asked me to undertake this task.

Please do not hesitate to get back to me if have some questions after you have read the attached document, so we can discuss it online or in person. Please let me know if you have any questions and how you prefer to discuss them.

At this stage what I need to know is if you are willing or not to be involved. Would you please email me back to let me know by Tuesday, 8th June? I will only allow the names of those willing to be interviewed will be given to Patsy. Once Patsy has all the names then she will contact you to arrange a date and time to meet. The University requires that you give signed consent if you agree to be interviewed. Patsy will then provide you with a consent form.

Many thanks for considering this request and I look forward to hearing from you.

Debra

Dear Debra,

Yes I am very happy to be interviewed!

XXX:)
## Appendix I

### Student researcher diary

<table>
<thead>
<tr>
<th>Activity or Subject</th>
<th>Location</th>
<th>What type of ICT was used?</th>
<th>By whom?</th>
<th>Describe how ICT was used. You may include a diagram of the setting if this helps with your description</th>
<th>How did you feel about the way ICT was used? (Choose one)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Me</td>
<td>□ Teacher</td>
<td>□ Great</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other (e.g. tutor, mum, dad, sister, brother)</td>
<td></td>
<td>□ Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>□ Indifferent</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>□ Unnecessary</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>□ Disappointing</td>
</tr>
</tbody>
</table>

(Students were provided with 12 of these records for writing about ICT use for each of the 7 days of the study, and one record as shown below for reflection at the end of each day.)

What are your thoughts about the ways in which ICT was used (or not used) today?
Appendix J

Student survey questionnaire

This questionnaire has been developed to survey the faculty of Northern Independent School about their views on information communications technology (ICT). Please read each question carefully, and mark the best response. The results will be used to make recommendations to school administrators on how to improve teaching and learning with ICT at our school. Please complete the survey and return it, in the envelope provided, to the marked box in the staff lounge. All responses are anonymous. Upon returning this survey, your name will be entered into a draw for one of three £25 iTunes vouchers.

Thank you for your participation!

1. What grade are you in? □ 9 □ 10 □ 11 □ 12 □ Other

2. What is your gender? □ Male □ Female

3. How many years have you been at Northern Independent School?  □ less than 1 □ 1 – 2 □ 2 – 3 □ more than 3

4. Tick the response that most applies to you:

   a. The high school provides sufficient access to ICT for students.
      □ Strongly agree
      □ Agree
      □ Disagree
      □ Strongly disagree

   b. The high school provides sufficient access to ICT for teaching.
      □ Strongly agree
      □ Agree
      □ Disagree
      □ Strongly disagree

   c. The Internet connection in school is fast enough for all my needs.
      □ Strongly agree
      □ Agree
      □ Disagree
      □ Strongly disagree

   d. It is easier to understand coursework when the teacher uses the electronic board.
      □ Strongly agree
      □ Agree
      □ Disagree
      □ Strongly disagree
5. Give the best response which applies for each of the courses in the list.

   a. I feel more in control of my own learning when I research information on the Internet.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>I don't take this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
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</tr>
<tr>
<td>Languages</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Science</td>
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<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

   b. I prefer being provided with information by the teacher.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>I don't take this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
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</tr>
<tr>
<td>Languages</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

   c. I prefer lessons which allow me to use a computer independently.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>I don't take this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mathematics</td>
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<td>Languages</td>
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<tr>
<td>Science</td>
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<tr>
<td>Social Studies</td>
<td></td>
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</tbody>
</table>

   d. How often does your teacher use some form of ICT when teaching?

<table>
<thead>
<tr>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
<th>I don't take this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
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<td>Languages</td>
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<td>Science</td>
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</tr>
<tr>
<td>Social Studies</td>
<td></td>
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</tr>
</tbody>
</table>

   e. How often does your teacher ask you to make presentations to the class using the electronic board?

<table>
<thead>
<tr>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
<th>I don't take this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Languages</td>
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</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. How often is a computer available for you in school when you need one?
   - Always
   - Often
   - Sometimes
   - Never

7. How does your access to ICT in school compare with access outside school?
   - I have more access to ICT in school
   - About the same
   - I have more access to ICT outside school

8. Which of these computer environments do you prefer to work in?
   - Mac
   - PC
   - It makes no difference to me

9. What changes would you like to see in the way ICT is used for teaching and learning here in the high school at Northern Independent School, and why?

😊 Thank you for your participation! 😊
Appendix K

Teacher participant information sheet

You have been randomly selected to take part in a survey. Before you start, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask if there is anything that is not clear or if you would like more information.

Thank you for reading this.

What is the aim of the research?

The survey aims to gather information that will help us understand and describe what teachers think about the availability and use of information technology (ICT) at Northern Independent School. It is part of a wider study which aims to develop ICT policy statements—based on the views of teachers and students at Northern Independent School and other international schools—for recommendation to the school’s senior management team.

Why have you been chosen?

40 randomly chosen high school teachers have been asked to participate in this survey.

What will you be asked to do?

You will be asked to complete a survey in order to find out your views, and patterns of use, of ICT.

What happens to the data collected?

The data will be analysed and used as evidence to convince the administration about the policy recommendations we make.

How is confidentiality maintained?

To protect your confidentiality, no names will be used in the report. Once the survey is finished you will be asked to put your survey in a sealed envelope, which will not be opened before all the others have been collected.

What is the duration of the research?
It should take you no more than 15 minutes to complete this survey. There will be a presentation about the project in March 2010. The policy statements will be completed by the end of April 2010.

**Where will the research be conducted?**

The research will be conducted at Northern Independent School.

**Will you be paid for participating in the research?**

You will not be paid for your participation in this survey. However, your name will be entered in a draw to win one of three £25 iTunes vouchers.
Appendix L

Teacher questionnaire

This questionnaire has been developed to survey the faculty of Northern Independent School about their views on information communications technology (ICT). Please read each question carefully, and mark the best response. The results will be used to make recommendations to school administrators on how to improve teaching and learning with ICT at our school. Please complete the survey and return it, in the envelope provided, to the marked box in the staff lounge. All responses are anonymous. Upon returning this survey, your name will be entered into a draw for one of three £25 iTunes vouchers.

Thank you for your participation!

1. What is your gender? □ Male □ Female

2. What levels of student have you taught?
   □ Lower School □ Middle School □ High School □ HE

3. How many years have you been using technology for teaching?
   □ 1 – 5 □ 6 – 10 □ 11 – 15 □ 26 – 20 □ 21+

4. How long have you been teaching at Northern Independent School?
   □ 1 – 2 □ 3 – 4 □ 5 – 7 □ 8 – 10 □ 11+

5. What subject(s) do you teach? ________________

6. How many times per week do you use each of these digital technologies in the classroom?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Every day</th>
<th>3-4 times</th>
<th>1-2 times</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive whiteboard (for writing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVDs/Videos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PowerPoint presentations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameras/video equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other software applications (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Which of the following most prevents you from using ICT in school?

☐ Lack of training ☐ Lack of experience
☐ Lack of equipment ☐ Lack of time
☐ Other: ____________________________

8. Rank the following according to how often you encounter them on school computers? (use a 1 – 4 scale: 1 being most often, 4 being least often)

_____ Slow Internet connection
_____ Programs take too long to load
_____ Program crashes
_____ Unable to log in

9. Have you ever received formal training on how to use ICT for teaching?

☐ Yes ☐ No

10. Does using technology make it harder for you to teach the way you would like to?

☐ Yes ☐ No

11. Are you willing to learn from students about new ways in which ICT could be used in the classroom?

☐ Yes ☐ No

12. What is your personal opinion about using technology in education?


13. What are some of the changes you would like to see at Northern Independent School that would motivate you to increase your use of ICT in teaching?


Many thanks for your participation!
Appendix M

Online questionnaire for survey of independent schools

This questionnaire has been developed by students at Northern Independent School International School to find out about the availability and use of information technology (ICT) at other international schools. We are embarking on a comparative study that will allow us to make recommendations on how to improve teaching and learning with ICT at our school. Please read each question carefully. Your anonymity will be preserved when reporting on the data. Kindly return your responses to us via email, no later than 15 February 2010. Thank you for your participation!

INSTRUCTIONS: Please select the response which most applies to your school.

<table>
<thead>
<tr>
<th>1. Where is your school located?</th>
<th>Africa</th>
<th>Asia</th>
<th>Europe</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central America</td>
<td>South America</td>
<td>Oceania</td>
<td></td>
</tr>
<tr>
<td>2. How many students are in your high or upper school/college?</td>
<td>0 – 500</td>
<td>501 – 1000</td>
<td>1001 – 2000</td>
<td>2001 – 3000</td>
</tr>
<tr>
<td>3. What is the student-teacher ratio in your high school/secondary school/college?</td>
<td>Less than 5:1 (lessthan5studentsperteacher)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 6:1 and 10:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 11:1 and 15:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 16:1 and 20:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Between 21:1 and 25:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>More than 25:1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Please add your comments here:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What is the ratio of students to computers in your high school/secondary school/college?</td>
<td>More than 10:1 (more than 10 students per computer)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 10:1 and 8:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 7:1 and 5:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 4:1 and 2:1 (inclusive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1:1 or less (there are more computers than students, for student access)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please add your comments here:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How many of the classrooms in your</td>
<td>More than 75% of our high school classrooms have one</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS: Please select the response which most applies to your school.

| high or upper school/college have an interactive whiteboard? | 51-75% of our high school classrooms have one  
26-50% of our high school classrooms have one  
0-25% of our high school classrooms have one  
None |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Please add your comments here:</td>
<td></td>
</tr>
</tbody>
</table>
| 6. How much training do teachers receive for using the interactive whiteboards? | A significant amount  
A moderate amount  
A small amount  
None |
| Please add your comments here: |
| 7. Which operating system(s) do you use? | Vista  
Windows7  
Snow Leopard  
Other |
| If 'Other', please specify which one(s): |
| 8. How often is the computer hardware at your school upgraded? | Annually  
Every 2 years  
Every 3 years  
Every 4 years  
Every 5+ years |
| 9. (a) What is the approximate student population of your entire school? | (a) |
| (b) How many trained ICT support staff are provided for the entire school? | (b) |
INSTRUCTIONS: Please select the response which most applies to your school.

10.  
(a) Do all students have a **school** email address?  
(b) Can students email their teachers?  
(c) Can students view all their grades online?  
(d) Can students access assignments online?  
(e) Can students submit assignments online?  
(f) Can students take home a school-owned laptop?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(b)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(c)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(d)</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>(e)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(f)</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

11. Would you like to receive a copy of the results of this survey? If yes, please provide an email address below.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If <strong>Yes</strong>, please provide an email:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Many thanks for your participation!*
Appendix N

Video of student presentation (digital file CD/DVD pocket)

Dropbox link

https://www.dropbox.com/s/1r2xnxome8nig3a/TechPresentation.mov

Presentation starts at 0:56 on recording
Appendix O

Student ICT Project report

Final Report
April 2010

*Improving Technology for the Beneficiaries

(*Title suggested by a Grade 9 student

Facilitator and Corresponding Author: Patricia M. Davies

)
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The research team

Core team:
- names omitted -

Research assistant: - name omitted -

Critical friends:
- names omitted -

Our thanks

The research team would like to thank all the high school students, teachers and administrators—especially our critical friends—for their co-operation, support and time, which made this research possible.
Project overview

The research project *Improving Technology for the Beneficiaries* was conducted during the 2009-10 academic year by high school students enrolled in Computer Applications. The project was designed to evaluate teaching and learning with information technology in the high school, and to make recommendations on how these could be improved. Data about the current IT experiences of learners and teachers were collected, and our current IT–related practices were compared to those of approximately 50 international schools. The project involved students being invited to be co-constructors and co-consumers, rather than passive consumers, of theirs and others' daily experiences with using IT for learning.

**Student learning with IT is facilitated by:**

- Sufficient access to digital technologies
- Technical and teacher support
- Strengthening of teacher IT background

**Main barriers to student learning with IT**

- Slow Internet and network connection
- Blocked educational websites
- Teachers’ lack of IT training
Summary of findings

1.1 Students’ views

a) There are sufficient computers in the high school for student access and for teachers to use. However, these were not always available in places, such as the library and computer labs, when students need to use them. Computers are not available for student use during most of their classes. Most students have more access to computers outside of school than they have in school.

b) The software on school computers does not always serve the needs of learners. For example, there is very little to assist students with practicing their Math and Language (including foreign languages) skills. “Learner-led personalised learning can be facilitated by digital technologies (DTs) when learners are given the opportunities to develop skills and confidence in using technologies independently throughout their school careers” (Taylor and Robinson, 2009).

c) Some DTs that seem to be providing support to learner-influenced personalised learning outside schools are those being discouraged in school, for example mobile phones. “Where learners were engaged with and had access to a range of digital technologies the capacity for learner-influenced personalised learning was greater and learners had the freedom to use resources in the way that they chose” (Carrington et al., 2009).

d) Coursework is easier to understand when a teacher uses the electronic board. Even though most teachers use these boards for teaching, many experience technical difficulties with and often abandon attempts to use them in the classroom.

e) In all subjects, especially Mathematics, students most prefer being provided with information by the teacher. In certain subjects, such as English and Social Studies, most learners feel more in control of their learning when they use the Internet and for these subjects, many students prefer lesson where they are allowed to use a computer independently.

f) There is a dominance of a single approach to teaching in the classroom—namely, the teacher providing students with information. Learners seldom get to use the electronic boards, and there are very few laptops available for their use during lessons.

g) The presence of both Mac and Windows platforms provides students with choices and makes for more use. However, restricted Internet access sometimes results in learners having difficulty accessing sites that they or their teachers thought they could benefit from using.
1.2 Teachers’ views

a) The purchase and maintenance of computers in the high school is a significant ongoing financial investment. This should be supported with the provision of training and support to encourage the integration of IT across the high school curriculum. Money is wasted if teachers cannot use these technologies effectively. Perhaps some of the technology budget should go towards more significant IT training for teachers.

b) Training teachers how to implement IT into their subject is crucial to the developing and sustaining the use of technology in the high school. Teachers showed a willingness to learn how to use technology for teaching their subject.

c) Activities are sometimes abandoned due to technical difficulties with the equipment. Learners sometimes provided technical support which then enhanced the running of the equipment and enabled IT activities to continue. It is essential that adequate levels of technical support are available for teachers in order to deal with problems as they arise, and to keep IT resources in regular use.

d) Lack of time to practice in school discourages teachers from incorporating IT into their teaching methods. Teachers should be afforded the time and resources to experiment with IT tools, and develop the necessary skills and confidence for using technology in the classroom.

e) Teachers also need to learn how to address the needs of learners in their courses and become more confident about using digital learning tools. Research shows that IT Staff development is more effective when it addressed the specific needs of teachers (and learners) in school. Opportunities should be provided for students to work with teachers on integrating technology into the curriculum.

f) Restrictions to Internet access often result in teachers not being able to access websites that could be important in their teaching and beneficial to learners.

1.3 Other international schools

a) The student–computer ratio, like the student–teacher, at our school is comparable to those a large number of the international schools we surveyed.

b) Like our school, most international school upgrade their hardware every three years.
c) Our school has a higher percentage of classrooms with interactive whiteboards on average, compared to most of the schools we surveyed.

d) Most international schools only have computers running Windows whereas we have both Windows and Mac OS.

e) Over 80% of the school we surveyed provide school email accounts for all their students.

f) A large number of schools surveyed have online platforms which allow students to access and submit coursework electronically.

g) We looked at school in Europe and Asia and picked out the following best practices:

- Ratio of Students to computer: Less than 1 – 1
- Percentage of classrooms with IWB: More than 75%
- Amount of IWB training for teachers: Significant amount
- Annual upgrade of computer hardware
- Each student has a school e-mail address
- Students can view all their grades online
- Students access assignments online
- Students can submit assignments online
- Students can take home school laptops

h) One of the areas we feel we need to improve is the provision of IT support for teachers and students. We got this idea from another school about the same size as ours, with 1500 students. They have separated their IT support into two areas: Technical Support and Educational Support. This system would involve having a Head of IT who is in-charge of technical staff. The technical staff are responsible for fixing the computers. Then there is also a Head of Educational Technology in charge of technology facilitators. The technology facilitators help the teachers with using IT in the classroom.
1.4 Our recommendations

a) Remove Internet filters in the high school (at least, do a pilot). In keeping with the recommendations provided in the Byron Review, emphasis should be placed on equipping students with the confidence and skills to navigate the Internet safely.

b) Provide faster, more consistent, Internet connection and improve network so it is not slow. This will enhance opportunities for student-led personalising of learning while at the same time successfully allowing students and teachers to meet curricular and assessment requirements by accessing work via our new learning platform Forum.

c) Provide access to online learning platform (already in progress) and to grades online, although there are some concerns over various issues.

d) There is a need for more computers/computer labs for students to be able to do school work when they are not in class, and for use during classes other than IT courses. Our suggestion in the Appendix recommends a change in the layout of computer labs LG10 and LG12 so that there is a ‘work area’ that is always available to students and teachers, for accessing computers and printers without disturbing classes in session.
e) There is a need to look at the processes which other international schools use to embed learning with technology throughout the curriculum. The provision of educational technology support (and time) for teachers who need it is a good way to encourage our teachers to use technology in their teaching on a more regular basis. Ways in which to do this should be subject to further discussion at departmental and divisional level.

1.5 Outstanding issues

a. Further investigation is needed to determine ways in which students are using digital resources in the high school.

b. Further investigation is needed to determine ways in which information technology is used by individual departments throughout the curriculum and how best to provide IT support for these departments.

c. Guidance is needed on how to build on the skills and interests which learners have in digital technologies used outside school in order to develop aspects of their learning.
2.1 Origins of the project

In October 2008 a case study was conducted to examine ACS Cobham High School students’ views of the access to, and the uses of, information technology for teaching and learning in the high school. Forty students, 10 girls and 30 boys, aged between 14 and 19 participated in the study (a report on this study—*Through the Eyes of a Child*—is available). The findings indicated that a majority of these participants believed that:

- Transforming teaching and learning with IT in the high school could help to improve outcomes for learners and young people through more exciting lessons, and better prepare them for self-service digital culture of the 21st century
- By engaging students as researchers to devise ways of increasing effective use and access of IT for learning and instruction, school leaders will be in a better position to make decisions on how to make such transformations.

This student research project *Improving Technology for the Beneficiaries* was conducted in response to these findings.

2.2 Aim of the study

The aim of this present study is twofold. First, to document, analyse and report on the experiences of students and teachers in using IT for learning within the high school division. Second, to develop evidence based recommendations for improving teaching and learning with IT in the high school, through action-research.

The following questions were addressed by the study:

1. Do students learn better with information technology (IT)?
2. How does IT help students learn?
3. How is IT used for teaching in the high school?
4. What problems do high school teachers experience in using IT in school?
5. How do the IT practices at our school compare to those at other international schools?
Thus, the project sought to gather responses from high school students and teachers through surveys designed to address these questions. A consortium comprising 13 high school teachers and administrators worked with the student researchers on collecting and analysing the data.

One distinction between this project and other student voice projects is that students had the opportunity to talk with teachers, rather than about teachers, in addressing their daily experiences with using IT in school. Using action-research, the study looked specifically at the current barriers, and possible improvements, of using technology in the classroom.

2.3 Understanding action-research

Previous research by Sebba et al. (2007) found that participation is key to learning. This is emphasised by Ainscow (2006) who suggests:

‘... learning is a personal process of meaning-making, with each participant in any activity ‘constructing’ their own version of that shared event. The implication is that even in what might be seen as a rather traditional lesson, with little apparent concession being made by the teacher to the individual differences of members of the class, each pupil defines the meaning of what occurs in relation to their previous experience. In this way, individuals do inevitably personalise the experience and, in so doing, construct forms of knowledge that may or may not relate to the purposes and understandings of the teacher.’

Thus, this research began with the each student researcher keeping a diary, for one week, in which he/she recorded his/her daily experiences with using IT for learning in and outside of school. Data from these diaries were analysed by the facilitator, and then the students were invited to discuss some of the issues that emerged—slow internet connection, ineffective use of interactive whiteboards, and a dominance of a single approach to using technology in the classroom—all of which impede student learning. Through this initial process, students gained an understanding of what is involved in the plan, implement, and evaluate (PIE) stages of action-research.

The next stage of the research cycle involved the student researchers planning how they would collect data from high school students, and teachers, which would serve as supporting evidence of the need for changes to our IT practices. By allowing the student researchers to contribute to the creative thinking needed at this early stage to generate “knowledge-for-action” (Wallace and Poulson, 2003, p.23) they were able to interpret the project within the context of their participation.

Students nominated 20 teachers to work with them on analysing the data and drawing up recommendations on ways in which to improve using technology for
teaching and learning in the high school. Thirteen of these teachers agreed to participate in the project. Several administrators were also invited to be part of the consortium.

2.4 Methodology

The project ran from August 2009 to March 2010.

We carried out research to investigate the following three main areas: high school students’ experiences with using IT in school, high school teachers’ experiences with using IT in school, IT practices at other international schools. Student researchers nominated teachers and administrators to participate in a consortium, and serve as critical friends. The first consortium meeting took place on 15th October 2009. The student researchers presented their plans to collect data in these three areas. The consortium members provided comments and suggestions. There was some discussion on how to make the data collection processes more efficient. Teachers offered to assist the students with creating surveys and analysing the data.

The student survey was designed and piloted early in fall 2009. We were keen to gather the perspectives of a broad range of students to help us gain a clear picture of students’ daily experiences with using technology in school. We also wanted the students to provide suggestions on how learning and instruction with IT in the high school could be improved. It was therefore decided that it would be best to administer the survey in paper format to students during a 40-minute advisory period. This was done on Tuesday 15th December 2009. Each student present in an advisory session that day completed the survey.

This data were first compiled according to gender, for each grade level, in Excel spreadsheets. For example, we created a table of responses for each question (except for question 9) provided by grade 9 males, grade 9 females, grade 10 males, etc. Then we compiled all this information into a single workbook with responses for each question included in separate worksheets. Next, the student data was presented to the consortium for further analysis and discussion.

The teacher survey was designed in January 2010. Maintaining the principles of democratic freedom, whenever possible, underpins our student voice project. It was decided that the survey should include a participant information sheet for teachers. We also decided that a random sample of 40 high school teachers would be selected to participate in the survey. A copy of the survey was provided to each teacher in paper format in February 2010. These teachers were all entered into a prize draw for three £25 iTunes vouchers, as further incentive.
37 completed surveys were returned. The non-narrative data were again entered into Excel worksheets, and charts were produced. These were presented at the third consortium meeting for discussion and further analysis.

The survey created gathering information from international schools was initially sent out in paper in February 2010. A list of email addresses from 250 accredited schools was compiled from the website of the Council of International School (http://members.cois.org/directory/isd_accred.aspx). After the two-week deadline we had received responses from 30 schools. Then the survey was converted into and online format using the web-based survey tool, Survey Monkey (http://www.surveymonkey.com/). The link to the online survey was sent to 50 schools in Europe who had not previously responded to survey. We received responses from 20 of these schools, and added the previous 30 responses to the online database giving us a total of 50 responses. Of these 47 were from high or upper schools. Survey Monkey automatically produces some analysis of the data. Student researchers then contacted our IT department and produced responses to the survey questions for our school. A meeting of the consortium was called during which this data was reflected on.

The main aspects of this methodology relate to agency, engagement, student-teacher relationships, and student-centred learning, all of which reinforce Rudduck and Flutter’s (2000) respected view that students enter a partnership in learning when they feel they have a stake in school and are respected enough to be consulted at classroom and school level.

Appendix – Recommended layout for computer labs
Bibliographic references


