Abstract

Ethics and digital technologies policies in Australian schools: Challenges, dilemmas, and the discourse of compliance and control

The relationship between ethics and digital technologies in schools has been an area of growing concern in Australian education in recent years. This paper aims to make a contribution to greater understanding of the ways in which ethical issues are positioned and presented in digital technologies policies for Australian schools.

Media hype surrounding issues such as cyber bullying, students using mobile phones as cameras and accessing pornographic, racist and violent material through the Internet can create a negative perception of digital technologies. From this media perspective these issues are seen to be rife and out of control in Australian schools. Despite the increased use of digital technologies in schools and greater awareness of ethical issues associated with them there has been little published work from Australia about the interface between ethical considerations and policies relating to digital technologies in schools. The ethical dimension of digital technologies policies in Australian education requires further research to gain a more contextual and nuanced understanding and to give voice to the views of the key stakeholders in school communities regarding the nature of these policies. This is important particularly in the light of the Federal Government's 'Digital Technology Revolution' which occupies a high profile in the landscape of contemporary school education in Australia.

The paper argues that the policies designed by schools, educational bodies and government departments to direct and control the use of digital technologies in schools represents a discourse which is characterised by notions of compliance and control. This discourse contains language which calls upon a shared understanding of values and principles that are actually contested and ambiguous. Furthermore, the policies do not adequately acknowledge or promote the educative role schools can play in engendering responsible use of digital technologies. In order to explore the discourse associated with digital technologies policies some pertinent ethical issues related to the Internet and mobile phone use are discussed. National education declarations and documents regarding school education are examined along with regional and school based policies related to the use of digital technologies in specific contexts. The investigation of these policies and documents is concerned with critically analysing the ethical assumptions and value judgements which underpin the discursive language which forms the discourse of compliance and control.

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Introduction

Stephen is a year 10 student sitting in his social science class. The year is 2009. The teacher has just instructed the class to record the names of five Internet sites on the global economic crisis for homework. Stephen quickly pulls his mobile phone out and connects to the Internet to look up the sites. He then raises his hand to inform the teacher that he has located the sites and offers to let her know what they are. The teacher is caught in a dilemma knowing that the school's policy prohibits the use of mobile phones in the classroom. However, the student (Stephen) has obviously been using the mobile phone to quickly find the information that was requested of him: the other students are cognisant of this also. The teacher thanks him for contributing the information but reminds him that he is breaking the school rules, so he grudgingly puts his phone away. Stephen's frustration is compounded by an experience the day before when trying to access a human rights web site which he wanted to research for an assignment. He discovered that the school's internet filtering system blocked student access to the site, because it has one word which was classified as unacceptable.

Scenarios like the one involving Stephen are occurring in schools across Australia where the use of digital technologies are subject to rules and policy regulations which are intended to arbitrate their use. The dilemma faced by Stephen, his teacher and the other students is one example amongst a plethora relating to the ways in which digital technologies present ethical, educational and policy challenges to those involved in school communities. In this way the underlying issues in Stephen's story carry much

broader implications for the way in which digital technologies are perceived, regulated and translated into policy directives.

This article seeks to explore ethical issues related to digital technologies in Australian schools through an examination of policies devised to arbitrate their use. In the context of this study, 'digital technologies' include computers, computer software and related peripherals such as data projectors, mobile phones, television, DVD, video, satellites and interactive whiteboards. The article examines macro and micro policies, macro referring to Federal, state and education office policies: and micro referring to policies coming from school contexts. There is some degree of fluidity between these two levels (macro and micro) and they are to an extent interdependent in terms of policy development and implementation (Bell & Stevenson, 2006). It is argued that the policies designed by educational institutions and bodies to direct and control the use of digital technologies represents a discourse which is characterised by notions of compliance and control. Furthermore, these policies contain language which calls upon a shared understanding of values and principles that are actually contested and ambiguous. The discourse is largely instrumentalist and fails to take into account the educative dimension of ethics and digital technologies in schools.

This paper argues that in the light of the critical role played by digital technologies and their potential for enhancing all dimensions of school education in-depth research is required to provide a more holistic and richer understanding of the policies that are constructed to control and mediate their use. Of particular interest is the ethical dimensions and implications of digital technologies and the policies developed to guide their use in school contexts.

The concepts of policy and discourse in relation to digital technologies policies are central to the analysis in this paper. Policies according to Stephen Ball project images of an ideal society and represent the authors' views about the operational statement of values and their allocation (Ball, 1990). A policy is both 'text and action, word and deeds, it is what is enacted as well as what is intended' (Ball, 1994, p10). Policies form and become a part of educational discourses. A discourse embodies meaning, social relationships and power relationships (Ball, 1990). Public policies can be understood in discourses which frame the policies and contain debates which pertain to them (Reid, 2000). According to Foucault language forms a vehicle for discursive communication and is formed by institutional practices and the nexus between power structures and knowledge (Foucault, 1974). Before proceeding with this inquiry it is helpful to briefly outline the context in which digital technologies are being used in schools in Australia and some of the pertinent literature, related to the context.

Context

The use of digital technologies in Australian school education has undergone many changes over the last decade related to new curriculum models being initiated and new approaches to learning and pedagogy at both the secondary and primary levels (Groundwater-Smith, Brennan, McFadden, Mitchell, Munns, 2009; Preston, 2004). Related to these changes is the rapid rate of technological advancement and the subsequent difficulties in maintaining policies that are relevant and engage effectively with emerging capacities and potentialities of these technologies. Despite these changes there is a view that the school system itself has remained fundamentally the same for many decades governed by conventional subjects, rigid timetabling, and

traditional classroom organisation. Teacher centred learning still predominates and the effective use of digital technologies is still largely peripheral (Selwyn, 2007; Pflaum, 2004). Against this backdrop Australian society has experienced major shifts in technological advancement since the 1990's particularly in the area of digital technologies (Ministerial Council on Education, Employment and Youth Affairs (MCEETYA), 2008a & 2005). Schools both primary and secondary have experienced increased integration of a range of digital technologies particularly computers (MCEETYA, 2008a; Robinson, 2007; Preston, 2004). However the rate and level of integration varies widely across school systems and regions. Likewise high levels of integration of digital technologies have not necessarily resulted in their effective utilisation as part of the curriculum and teaching and learning programs (Department of Education, Employment and Workplace Relations (DEEWR), 2008a; Neal, 2005).

The Rudd Government's 'Digital Education Revolution' (2007) has increased the focus on the use and integration of digital technologies (especially computers) in schools over the last two years (Rudd, Smith and Conroy, 2007). The greater integration and use of digital technologies in schools as proposed by the 'Digital Education Revolution' will require greater strategic and logistical planning in schools (particularly secondary schools). The 'Digital Education Revolution' policy will also necessitate more policy development at the local, regional, state and national level in the field of digital technologies in schools (DEEWR, 2008a&b).

It is important that discussion regarding policies designed for digital technologies in schools takes into account the ethical dimensions and considerations which emerge when the technology is used in educational settings. Failure to engage with or

recognise this aspect of digital technologies leaves a deficit in understanding of the role digital technologies are playing in schools and the dilemmas and issues they are generating. Many of the current ethical issues in the contemporary school settings revolve around the use and access to the Internet, and the use of email and mobile phones (Brooks-Young, 2006). Beyond a recognition of the ethical debates, the ways in which these issues are being responded to also requires examination and critical discussion (Selwyn, 2007). Schools, education departments and governments have developed a range of policies designed to guide and prescribe the use of digital technologies so their use conforms to legal, ethical and technical standards. These policy responses represent what Selwyn (2007) describes as socially constructed set of practices and responses to technology (Oushoon & Pinch, 2003). Digital technologies are not neutral artefacts, and responses and attitudes towards their use can be seen as:

> "a culturally contested zone, where users advocacy groups, consumer organisations, designers producers, sales people policy makes and intermediary groups, create negotiate, and give differing and sometimes conflicting forms, meanings and uses to technology" (Oushoorn & Pinch, 2003, p24).

As with all forms of technology digital technologies represent values and vested interests and thus are not neutral and have to be located as part of a social context (Wyatt, Henwood, Miller & Senker, 2000). A number of authors argue that the values embodied in the technology reflect the dominant values, institutions and power hierarchies of society (Apple, 2004; Apple, 1987; Kritt & Winegar, 2007). Furthermore, technology is constrained by existing social practices (including ethical

ones) and these greatly influence its use (Kritt & Winegar, 2007). This paper is interested in identifying the values and ethical precepts embedded in policies which are constructed to guide social practices in relation to digital technologies in schools.

Relevant Literature

The published research from Australia related to digital technologies in education is an emerging field. The body of work is relatively small in comparison to the scope of academic literature available in the United States, Europe and the United Kingdom. Given that the body of research in this field is still underdeveloped there are spaces and gaps that can be identified (Moyle, 2008). The existing published literature from Australia is focussed mainly on pedagogical, technical and cognitive aspects of digital technologies in schools and tends to be quantitative in nature (Moyle, 2008; Neal, 2005). A largely unexplored area is the views and understanding of key stake holders namely teachers, parents and students in regard to these policies; this also warrants research and recognition, although it is not within the scope of this paper to report on such research.

Ethics is a complicated field to define and has broad applications in the domains of social life, religion and philosophy. The word itself comes from the Greek word 'ethidos' which refers to the nature of a person's character (Mordini, 2002). Ethics involves the creation and implementation of moral standards and principles intended to guide behaviour, based on notions of goodness and right actions (Audi, 1995,). Modern ethics is often based on the assumption of moral imperatives that should have universal application (Tavini, 2002). Central to all notions of ethics is an examination of values which underpins decisions about the correct course of action or stance in

regard to particular issues (Tavini, 2002). This paper is concerned about ethics in relation to notions of right and wrong uses of digital technologies and the policies designed for school education. In this sense the discussion constitutes a form of applied ethics and encompasses notions of power and responsibility, and the dynamics between policy and practice (Tavani, 2002).

There is a well developed literature regarding what is commonly referred to as computer ethics or cyber ethics. The focus of much of this literature is on the use of computers in the government and private sectors (Tavani, 2002). There has been a long history of ethical concerns about computers going back to the Second World War (Johnson, 2001). The concerns and issues expanded particularly in the 1970's onwards with the wider proliferation of computers, and the focus turned largely to the Internet in the 1990's (Brooks-Young, 2006). Authors such as Moor (1985) argue that there are policy vacuums which are created when new technologies such as computers emerge (Johnson, 2001). Accordingly these vacuums have to be filled and the central task of computer ethics should be to determine what the policies should be. Developing the policies for digital technologies is difficult as there are conceptual complexities and constant change and the malleability of the technology (Tavani, 2002; Johnson, 2001).

A central question posed in the literature of computer ethics is in what ways are the ethical issues generated by computers unique? Related to this is the question of how computers can generate a new types of generic moral issue that cannot be accounted for by traditional ethical categories? (Moor, 1985; Johnson, 2001). This is partly because new technologies enable new forms of behaviour to emerge that would not be

possible without the technology, cyber bullying is an example (Johnson, 2001). These new behaviours also point to another question, are the issues associated with digital technologies so different that they require a new ethics, or are they really old ethical issues in a new guise? (Tavani, 2006; Moor, 1999). Different functionality (such as computer generated communication) can have moral significance both for individual actions and institutional arrangements (Johnson, 2001). The new instrumentation gives rise to moral and ethical issues or meta ethical, challenges normal moral concepts and categories (Moore, 1999).

In terms of the methodology for approaching these issues, the traditionalist accounts apply moral standards such as honesty and protection of privacy to computer problems to fit new situations (Bober, 2004; Johnson, 2001). The traditionalist view does not take into account the new opportunities and social relationships and practices that are brought about by the technology. However, traditional moral principles and values can help to clarify issues and understanding which norms can be applied to them. Ethics in the field of digital technologies involves more than conventional notions of right and wrong, it concerns relations of power, responsibility and efficacy at different levels. This is particularly the case when ethics intersects with educational policy and digital technologies. All policy is contested and involves competing values and differential access to power (Bell & Stevenson, 2006).

Ethics and education

Groundwater-Smith (et al, 2009) state that ethics in relation to teaching and learning is often based on common practice and agreed assumptions about what is right and wrong. They argue that ethical codes have been developed as a way to make more

explicit the tacit understandings and values that underpin the practice of the profession or group. These codes can be a way of defining shared stances and a public statement about best practice (Groundwater-Smith, et al, 2009). However, there exists a debate in education about the usefulness of such codes and the lack of focus on the process involved in arriving at a code (Groundwater-Smith, et al, 2009; Preston, 1994). The notion of ethical codes based on shared values for schools has also become contentious in terms of the role that these policies are perceived to play in providing a framework for inculcating values in young people, guiding them about what is right and wrong. This notion of shared values is problematic in a country such as Australia due to the plurality of cultures, religions and social backgrounds which inform students' values and beliefs. Acting legally and correctly is not enough for ethical action, treating every matter as if it were a technical matter for adjudication. All aspects of a teacher's work can raise ethical issues because education involves values and the enactment of social and cultural practices. (Groundwater-Smith, et al, 2009).

As digital technologies developed throughout the 1980's and 1990's, a number of ethical and social issues associated with these technologies in schools emerged (Brooks-Young, 2006; Nordkvelle & Olsen, 2006). These issues relate to who has access to certain digital technologies and the knowledge to use them effectively. Moreover, what limitations and guidelines are used to and facilitate the use of these technologies within the context of a school community? What values, assumptions and agendas are embedded in ethical codes of practice used within schools? Who determines and implements policies that are intended to address the ethical use of digital technologies in schools. Is it possible to develop generic policies at the macro

level which maintain efficacy at the local school level given a range of contextual differences? Do we see a discourse of technological instrumentalism emerging that is reactive to ethical concerns and issues rather than proactive and reflective? (Kritt & Winegar, 2007). Related to this discourse is the rapid rate of technological advancement and the subsequent difficulties in maintaining policies that are relevant and engage with the ethical dilemmas.

During the 1980's and 1990's there was a lack of ethical guidelines and policies which addressed ethical issues specifically (Nordkvelle & Olsen, 2005; McDougall, 2002; Johnson, 2001). For example email was introduced into many schools with staff having no direct guidance regarding email etiquette or appropriate usage. Policies created to guide and control the use of digital technologies in schools contain a range of assumptions and embedded values which may be implied or explicit. Difficulties can emerge when these generic policies are applied to whole school systems and regions as they can fail to address localised issues and requirements.

Macro Level Policies

Official statements concerning what education departments and schools regard as appropriate ethical use of digital technologies can be located in policy documents. There have been a number of statements in national policy documents referring to the ethical and socially responsible use of technology. Prominent amongst these are:

Adelaide Declaration (1999)

Learning in an Online World (2001)

The Digital Education Revolution (2007)

National Declaration of Education Melbourne (2008)

The *Adelaide Declaration* calls on schools to "provide a supportive and nurturing environment to provide a foundation for there intellectual, physical, moral, spiritual and aesthetic development" (MCEETYA, 1999, preamble, p1).
Specific goals of the *Declaration* acknowledge that schooling must develop the whole student not just in terms of achieving learning outcomes.

Goal 1.3 states that when students leave school "they should have the capacity to exercise judgement and responsibility in matters of morality, ethics and social justice," (MCEETYA, 1999). Goal 1.6 states that when students leave school they should be confident and productive users of information and communication technologies and understand the impact of these technologies on society (MCEETYA, 1999).

Learning in an Online World is a series of policy documents designed to inform the use of digital technologies in Australian schools but has little specific information about the relationship between digital technologies and policy directives relating to its ethical use. The *Learning in an Online World Contents Specifications Framework* specifies the need for further policy development of ICT to ensure legal and regulatory requirements are upheld across different educational jurisdictions (MCEETYA, 2006).
Another document from *Learning In An Online World* declares that

> "At the system level, all education authorities have made available online a range of documents setting out policies for internet usage and web publishing, including filtering and acceptable use policies to manage

> inappropriate sites, privacy, data protection and security of online transactions" (MCEETYA, 2001, p14).

Learning in an Online World does acknowledge the changes and ethical issues related to the use of digital technologies in education:

> "The social and economic changes created by technologies, together with student engagement and expertise in their use, create educational, management and ethical issues for leaders" (MCEETYA, 2006, p10).

However the nature of these changes in relation to ethical issues and digital technologies are not explored or analysed in this document.

The most recent national education policy declaration is the *Melbourne Declaration on Educational Goals for Young Australians* (2008b). This document refers to the importance of moral development of students along with the development of values and attributes such as honesty, resilience and respect for others (MCEETYA, 2008b). Goal two of the declaration exhorts young people to act with moral and ethical integrity and to be responsible local and global citizens. The document also states that the school community should have access to "contextual information about the philosophy and educational approach of the schools" (MCEETYA, 2008b, p16). The way in which these values and ethical precepts can or will be related to guidelines pertaining to the use of digital technologies is intended to be interpreted at the State, and regional levels.

In relation to the ethical use of digital technologies the national education declarations and documents tend to be generalised and non-specific in terms implementation. However, they do point to a framework guided by moral principles and shared values.

Compared to the national education declarations, state and regional digital technologies policies are more prescriptive and contain more discussion of ethical guidelines and acceptable codes of usage. State education departments and Catholic Archdiocesan policies lay out some general policy frameworks for schools to develop their own policies. However, in these policies there is a clear imperative to follow a code of values and standards along with legal requirements.

The National Catholic Commission for Education and Independent School's Compliance Manual has policy documentation which provides guidelines for the use of the Internet and email. The policy makes reference to the necessity of developing reasonable steps in schools to ensure the protection of privacy of data stored via the Internet, however, what these 'reasonable' steps are is not stipulated. (Catholic Commission of Education and Independent Schools (CCEIS), 2004).

The New South Wales Department of Education and Training's policy *Online Communication Services: Acceptable usage for Schools* highlights the need for responsible and appropriate behaviour in regard to students' use of the Internet (New South Wales Department of Education and Training, NSWDET, 2006). Disciplinary procedures for breaches of the code are outlined, and students are warned not to send any material online that may be considered offensive, abusive or discriminatory (NSWDET, 2006). To reinforce this message the document states that students' accounts can be audited and traced if necessary to investigate breaches (NSWDET,

2006). However, this is a detailed policy and without adequate knowledge of it staff and students may be unclear about suitability of the material they are sending online.

At a regional jurisdiction level The ACT Department of Education's *Appropriate Use of Mobile Telephones P*olicy (2005) encourages schools and colleges "to make reasonable rules about what students can and cannot bring to school" (Australian Capital Territory Department of Education and Training, ACTDET, 2005). Bringing to school electronic devices such as MP3 players, pagers and mobile phones is seen as potentially dangerous and disruptive to the smooth running of the school: therefore schools should have a right to ban them (ACTDET, 2005). The policy also indicates that schools should develop their own policy statement and set of procedures which provide guidelines for the use of mobile phones, and suggests that although the recommendations may be useful in the development of the policy, there is no compulsion to comply with them (ACTDET, 2005). The ACTDET digital technologies policy guidelines emphasize certain values such as courtesy, consideration and respect (ACTDET, 2005). However, what this means in terms of constructing the policy is not articulated. For example in the ACT DET policy students are encouraged to use 'respect' 'courtesy' and 'consideration' while using them, what this means in practice remain somewhat ambiguous The general recommendation is that mobile phones are to be used only out of the classroom, as a means to contact parents to make arrangements about being collected from school and other related plans (ACTDET, 2005). There is no indication that the phones have the potential to become part of learning process and as in now the case in some schools (ACTDET, 2005). Protection against liability, negligence and damage to capital is a

recurring theme in this policy, and in other macro and micro level documents (ACTDET, 2005; ACTDET, 2007a).

Schools under the auspices of the Archdiocese of Canberra Goulburn Catholic Education Office are mandated to implement a code of practice based on and guided by the *Computer Facilities and External Networks – Acceptable Use* (Archdiocese of Canberra and Goulburn Catholic Education Office, ACGCEO, 2009). The responsibility for development and implementation of policy lies with the respective school principals. The policy emphasises that the safety and privacy of students and staff are paramount and practices should be in accordance with principles, regulations and laws relating to school students and staff. The practice must be made available to and understood by all users but it is not clear how this will take place (ACGCEO, 2009).

The language used to encourage correct usage of digital technologies is premised on an assumed code of values and moral standards framed by terms such as

- Appropriate
- Acceptable
- Reasonable
- Respectful
- Accountable
- Consideration
- Courtesy

While these terms are left unspecific in the context of the policies, a raft of negative consequences, legal sanctions, disciplinary and punitive measures are outlined in detail, along with persistent references to surveillance and monitoring of users (ACGCEO, 2009).

In summary, the macro level policies acknowledge the need for appropriate ethical guidance in relation to the use of digital technologies. The guidance provided in the macro polices to schools promotes an adherence to a shared code of values. The language of the macro policy documents also has a heavy emphasis on the legal ramifications of using digital technologies, and the punitive sanctions that can be imposed where there are breaches of conduct.

Micro Level Policies

In school based (micro level) policies regulating the use of digital technologies there are similarities in terms of the type of language and values being espoused in the macro level policies. Firstly, the language used in the school policies can also be found in the macro policies. Social and moral standards are referred to in the acceptable use codes of practice and guidelines and represented in the discursive terminology in micro level polices (Canberra Girls Grammar School; 2009; Saint. Edmund's College, 2009). The policy documentation at the micro (school) level contains codes of accepted practice and acceptable use of digital technologies to which staff and students are expected to adhere. Staff, students and parents are expected to sign these documents (Canberra Girls Grammar School; 2009; Saint. Edmund's College, 2009). The consequence of staff and students not signing acceptable user codes for digital technologies can vary considerably, however, usually some degree of restriction on access can be applied in the code.

Most school based ethical guidelines and codes of practice insist on compliance to legal statues, particular Acts, and education office policies directives. Two of these Acts are the Copyright Act 1968 and the Privacy Act 1988 (Commonwealth

Government of Australia, 1988 & 1968). The reference to legal statues and Acts may assist in bolstering the legitimacy and authority of policies within the school community. Micro level school policies can stipulate compliance to legal requirements and relevant macro level education office policies (Canberra Girls Grammar School; 2009; Saint. Edmund's College, 2009, Katoomba North Primary School, 2009). However, compliance is based on the assumption that the stakeholders are familiar with these legal requirements and policies and they are appropriate for the particular school context in which they are being implemented. Here once again the discursive features of digital policies are problematised at the level of policy enactment and responses.

Other themes and concerns that are prevalent in micro level policies include: photographing students, and the use of mobile phones in and out of classroom situations, privacy and security, Internet security and accessibility of sites, cyber bullying and protocols regarding email use. The discursive features of the language emphasise appropriateness acceptability and classifies the material being non-offensive or offensive (Canberra Girls Grammar School; 2009; St. Edmund's College, 2009, Katoomba North Primary School, 2009).

There is a level of complexity which lies in the interpretation and enactment of school rules of acceptable use of digital technologies. What can be considered offensive is the subject of debate, as in some instances this material can be educational. As Morias Morais da Costa (2007) explains:

> "When filters of the Internet try to control the information which people have access, a question appears. Are these filters a valuable tool to eliminate

> all of the ethical problems of the Internet? Each one of these filters is subjective and some of them eliminate information whose content could be considered as useful information" (Morais da Costa, 2007, p2).

For example, researching world poverty on the Internet may reveal images of mal nourished and starving people and dead bodies. On one level this material can be disturbing to people and is offensive in the sense that no human beings should be deprived of the basic necessities conditions of life. At the same time the images can function to educate the student as they graphically illustrate the consequences of extreme poverty and deprivation. Clearly, teacher judgement has to be applied to determine how graphic the images can be and also the age and maturity level of the students. This example also illustrates that context, intentionality, teacher judgement and critical awareness are important factors to facilitate the monitoring of what students and or staff may access via the Internet. These factors go beyond the boundaries of the acceptable codes of practice which generally neglect to include them as part of their framework. The example also illustrates that terms such as acceptability, offensive, disturbing, inappropriate are contested and can be subjected to multiple interpretations based on the school's cultural frames of reference. The processing and understanding of policy terminology will also be influenced by the religious and social backgrounds of the students. Furthermore, the education students and staff have received regarding the ethics of suitable Internet usage becomes important in relation to students' capacity to take ownership and responsibility for their actions and ethical choices.

The Discourse of Compliance and Control

The type of language used in digital technologies policies (both macro and micro) discussed in this paper represents a discourse characterised by notions of compliance and control. Compliance and control are present in the tone and intent of the language which is premised on legal and regulatory requirements. The language used is also underpinned by assumptions about a shared system of understanding and standards defining what is appropriate use of digital technologies. The discourse also serves to delineate the boundaries between acceptable and non-acceptable practice in schools. The discourse as presented in the form of educational policy represents a codified response to perceived threats and dangers to schools occurring through transgressions of prescribed ethical frameworks and values. In this way schools become sites of reconstruction for the discourse of compliance and control. At a policy level this involves seeing policy as a form of social practice more than the text itself (Olssen, Codd & O'Neil, 2004).

The assumed adherence to a system of values in the discourse of digital technologies polices is problematic when viewed from a critical analysis perspective. The values and ethical precepts underpinning the policies are not articulated clearly in the policy discourse but are used as referential guide to sanction student and staff behaviour in relation to the use of digital technologies. Whether the recipients understand or share these values is difficult to determine. The imperative to stay within the designated guidelines is based on a recourse to education system and legal sanctions which can be called upon to the discipline the transgressor.

While it is important that students and staff do not breach laws regarding privacy, confidentiality, distribution of defamatory or harmful material. The emphasis in policies on the parameters of acceptable use devalues and largely neglects the educative dimension of engagement with ethics and digital technologies school settings. Education can mean promoting a greater awareness and understanding in school communities regarding the ethical use of digital technologies. Fusco (1999) in his paper *Teaching Children about the Internet* asserts that awareness and understanding of ethical considerations amongst teachers, parents and students is essential and without this awareness policies and programs created for the protection of unwanted Internet sites and to filter emails are rendered ineffective. An example of a course designed to increase awareness and discernment is one designed by Grabowska and Nagabushan (2002). In their course the emphasis is on how to approach ethical decision making through engaging the students with digital technologies (computers) and assessing the ethical implications of taking certain decisions (Grabowska and Nagabushan, 2002).

The concept of ethical competence for digital technology users in schools is critical and requires the stakeholders to have a reasonable knowledge of policy guidelines so they can respond in an informed and constructive manner to ethical dilemmas. This approach goes beyond narrow based rule compliance to the dictates of digital technologies policies. Whitton (2007) argues that ethical competence in applying the principles of a code of ethics or practice should produce better informed and properly considered decisions. In contrast the discourse of sanctions, control and penalties, places the emphasis on an extrinsic or imposed model of regulation as opposed to a participatory approach where stakeholders take ownership and engage in constructive

understanding of the process. As Nordkvelle and Olsen ask, "what do teachers need to consider in reflecting on the ethical statues in their practice using ICT?" (Nordkvelle and Olsen, 2005, p 25). In this way it is possible to argue for a reflective approach in regard to comprehending ethical frameworks and guidelines, which involves teachers questioning the assumptions which underpin their responses to ethical problems (Groundwater-Smith, et al, 2009).

Alternative Approaches

In the United States and Australia filtering, blocking and surveillance of students' use of the internet is the favoured approach. This approach is typified in *Critical Technology Issues for School Leaders*, where Brooks-Young argues that a rigorous regime of constant vigilance and controls is necessary if teachers are going to prevent students from committing transgressions using the Internet (Brooks-Young, 2006). There are a range of filtering and blocking and Internet security type systems in place in Australian schools to regulate what Internet sites they want to block or restrict access to. Access to Youtube provides an interesting case, with schools adopting a range of approaches to accessing this site ranging from no access for staff and students, to open access. The Youtube site is considered to be controversial for use in schools by some school leaders. Their reasons given for this stance are related to Youtube's video clips some of which contain sexual, violent and inflammatory content. Teachers are denied access to Youtube in schools despite the potential to access a lot of educationally useful material. The more bland and limited Teachertube is offered as an alternative for teachers to use and access at school.

The question of ownership of responsibility concerning ethical behaviour with digital technologies in schools is illuminated by models in operation in Scandinavian countries, where filtering and blocking systems are generally not used with the Internet in schools. Accessing the Internet in Sweden, Denmark and Finland is based largely on a philosophy of student responsibility. Internet filters rarely exist on school computers other than for protection of viruses or spam. According to a CoSN report on ICT use in schools in Scandinavia (Sweden, Denmark and Finland) a different approach is taken to controlling students access to the Internet (CoSN, 2007). A school librarian in Copenhagen said "The students understand that the computers here are for learning" and "the filter is in their head" (CoSN, 2007). Asked about the number of transgressions due to unfettered Internet access, teachers and administrators told us they "could individually deal with any true abuse, but indicated this was not a problem. " (CoSN, 2007 ,p4). In terms of ICT teachers, they are free to make the best use of their capabilities with fewer imposed rules and restrictions. (CoSN, 2007). This sentiment is also reflected in the British Educational Communications and Technology Agency's (BECTA) Local Authorities document which states that:

> "Children and young people should be supported in their use of ICT, through education and rules for using the technology safely and clear routes for accessing help and advice." (British Educational and Communications Technology Agency, 2009)

Schools can be sites of reinterpretation and reconstruction, in response to the discourse of compliance and control. At a policy level this involves seeing policy as a form of social practice more than the text itself (Olssen, Codd and O'Neil, 2004).

Stephen's dilemma

Returning then to Stephen and his year ten classroom. The rules designed by his school in regard to mobile phones were written almost a decade ago, when mobile phones were basically equipped with the functions of conventional phones. They were a lot more expensive, less widespread, and generally regarded as a nuisance and a distraction in the classroom. In 2009 mobile phones can function as cameras, video cameras, computers, internet accessors, and can store large amounts of visual and written information. A student is increasingly more likely to use his or her phone to record a homework or assignment task than write it down in a diary. This illustrates how the terms of use set down at a policy level are difficult to maintain over even short period of time as digital technologies are changing rapidly. Along with the pace of change, issues relating to degrees of access, and students' and teachers' ability to use the digital technologies for multi purposes also complicates policy development in this area.

Stephen is a competent user of sophisticated forms of digital technology but access to and ability to use the digital technologies in his school is constrained by rules and guidelines which are comprised largely of negative consequences. These guidelines attempt to safeguard against the ethical controversies and breaches of protocols that can occur when students use these technologies in school contexts. As exemplified in this statement from the *Digital Education Revolution Strategic Plan* "Cyber safety education policy at the local school level may not allow innovative use of ICT" (DEEWR, 2008, p7). This sentiment is also identified in Neal's study in 2005 where students communicate their frustrations with internet sites being blocked by restrictive policies. (Neal, 2005) Neal argues that these restrictions in regard to Internet access

represent an imposition on student learning. In his study students reported that they felt more comfortable with accessing computers at home where they usually have more freedom to access Internet sites (Neal, 2005).

Conclusion

This paper has sought to broaden the discussion about the nature of digital technologies policies in Australian schools by focussing on how they relate to ethical concerns and issues. A discourse has been identified in macro and micro policy documents which seek to mandate the ethical use of digital technologies according to with reference to a code of values. These values are characterised by their level of generality and ambiguity, particularly when subjected to critical analysis. The discourse is characterised by notions of compliance and control which are represented through the discursive terminology present in policies and acceptable codes of practice. The language used to generate the discourse is contested and value laden and open to multiple to interpretations particularly at the school level. Another aspect of the discourse is its limited recognition of the educative possibilities of guiding students and teachers to become better informed about the ethical implications of using digital technologies in school environments.

Greater reflection, research and critical inquiry is essential to gain a more nuanced and contextual understanding of the dynamics of policy implementation and interpretation in Australian schools. Such research can also reveal more about the nature of these policy documents as texts representing a form of official discourse. The macro level policies inherited by school communities are to an extent being ‘steered from a distance’, as school leaders are left to interpret and reconfigure these

policies in accordance with their educational and social contexts (Lingard, 1996; Lingard & Blackmore, 1997). By taking ownership of digital technologies policies school communities can engage in a mediation and transformation of the discourse of compliance and control. To better understand these processes requires recognition and understanding of the views of students, staff and parents regarding digital technologies policies. Their voices are largely absent from the current landscape of Australian research in the field. With a major expansion of digital technologies access and availability in Australian schools brought about largely due to the 'Digital Education Revolution', the findings of such research has potential to deepen and enrich our understanding of this dynamic and complex field. The findings can also contribute to the formation of dynamic and flexible policies which could allow students such as Stephen to use digital technologies with greater educational potential and with an enhanced sense of ethical responsibility.

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