

Internet in the classroom: Teachers as custodians?

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Abstract: This paper investigates the changing role of the teacher in the digital age. The recent increase of Internet connectivity in the classroom means that students will spend more time using the Internet to access information and inevitably they will access materials considered to be objectionable. Based on a recent study conducted in New Zealand, this paper examines the custodial role teachers have to play in using the Internet with their students. As well, this paper also discusses the legal and ethical issues involved and the strategies teachers used to deal with these issues.

Keywords: Internet censorship, role of the teacher, professional development

1. INTRODUCTION

According to a recent survey, Internet connectivity in public schools in the United States has skyrocketed from 64% in 1997, to 85% 1998, an increase of 21% over just one year (Market Data Retrieval, 1998). In New Zealand, there has also been a similar growth of Internet connectivity in recent years. For example, it is reported that in 1998, 83% of the 2,300 primary schools and 94% of the 340 secondary schools had access from at least one computer to the Internet (Ministry of Education, 1999). No doubt the growth of Internet connectivity would have an impact on learning and teaching strategies, classroom organisations, collegial interaction, as well as professional development of teachers.

As increasingly more students are using the Internet as a tool of learning, skills of information gathering and evaluation have now been considered as

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essential skills in schools. To successfully use the Internet as a teaching and learning resource, teachers thus need to become conversant with information and communication technology (ICT) as well. Frameworks or standards of ICT competencies for teachers have begun to emerge in recent years. For example, in the US, the International Society of Technology of Education (ISTE) has developed a set of foundation standards adopted by the National Council on Accreditation of Teacher Education (the full document is available at <http://www.iste.org>). In New Zealand, the recent Review of Education Green Paper (Ministry of Education, 1997) has recommended that information skills be included as a key element in the professional standards required for beginning teachers. It is also documented in an Education Review Office publication (1998) that a capable teacher should demonstrate informed professional knowledge of appropriate technology and resources.

Professional development has been clearly established in the literature as a key success factor if an innovation such as ICT is to be integrated into the learning process (Fullan, 1990). Developing "Internet literacy" for teachers thus has become a prominent focus of many professional development programmes. For example, the New Zealand Ministry of Education has recently launched a programme called *Interactive Education Strategies for Schools*, with one of its key components being the construction of an online learning centre to provide teachers with Internet-based resources. It is encouraging to see that policy makers have begun to recognise the importance of developing teachers' skills of integrating ICT into the school curriculum, as well as emphasising the role of the teacher as a facilitator in a computer-supported learning environment. However, the focus of the majority of these programmes is still very much on the cognitive aspects of ICT use, paying little attention to cultural and ethical issues, and the custodial role of the teacher has seldom been considered.

It has been demonstrated that the Internet could be used as a tool to support a constructivist and a student-centred approach to learning (Lai, 1999). However, if students are asked to take charge of their own learning and given the opportunity to retrieve information from the Internet, they not only will access unscrutinized and irrelevant materials, but will access objectionable material as well. This should be a major concern for Internet using teachers as students may be accessing materials which are not only unlawful to have in one's possession but may also be harmful to them. For example, under present New Zealand legislation (The Films, Videos, and Publications Classification Act 1993), it is unlawful to possess "objectionable" materials (information, pictures, moving images and sound). While the Ministry of Internal Affairs (through its Censorship Compliance Unit) attempts to ensure the unavailability of objectionable material in New Zealand, intercepting and controlling the availability of such materials

through the Internet is difficult. In providing students with access to the Internet, school administrators and teachers therefore have to address some major custodial and educational issues associated with online access.

Increasingly teachers have to interpret what constitutes “objectionable material” both from a legal as well as a custodial point of view while being mindful of the importance of freedom of speech and information gathering. Schools are faced with the problem of imposing some form of censorship on Internet use in their classrooms to keep students safe and often make ad hoc decisions on practices and strategies to deal with these issues. Most teachers are unprepared to deal with these legal and custodial responsibilities in an Internet-rich learning environment.

Supported by data collected from a recent New Zealand study on Internet censorship in schools, this paper examines the extent to which New Zealand secondary teachers are aware of their legal and custodial role when using the Internet with their students. Strategies for controlling access will be discussed and recommendations proposed as to how teachers may deal with these issues in the future schools.

2. THE NEW ZEALAND EXPERIENCE

A study was conducted in 1999 to investigate the awareness of New Zealand teachers of ethical issues involved in accessing Internet resources and the strategies they used to deal with these issues. This research was divided into three stages. In the first stage an online questionnaire was sent to 983 primary and secondary schools (out of a total of about 2,640 schools). 280 schools (28.5%) returned their questionnaires. In the second stage, a follow-up hard copy questionnaire was sent to each of these 280 schools. 196 (70%) schools returned the questionnaires. 74 were secondary schools (out of a total of about 340 secondary schools). In the final stage of the research, ICT co-ordinators/managers of 16 secondary schools were interviewed during site visits. In addition, 65 students from these schools were also interviewed. This paper uses some of the findings gathered from the second and third stages of the study to illustrate the changing role of the teachers and the need for professional development in this area. These 74 secondary school respondents were mostly heads of ICT departments or ICT co-ordinators (62%), teacher-librarians (22%), and principals (9%). More details about the study can be found in Lai, Elliot, & Trewern (1999).

3. LEGAL AND ETHICAL RESPONSIBILITIES

3.1 Lack of awareness

To examine teachers' understanding of their legal responsibilities in accessing materials from the Internet, participants of this study were asked how much they knew about the Films, Video and Publications Act 1993, which defines whether a publication (including Internet resources) is objectionable or not. On average, the awareness of the respondents was low. Of the 74 secondary school respondents, only 16 (22%) knew about the Act. When asked to describe what they knew about the Act and its implications on Internet use, their responses showed that they had very limited understandings of its implications. The following comment, from a technology-rich school, which had a large proportion of teachers using the Internet at the time of the interview, was a typical response:

“a lot of them had an idea that there was something they didn't know much about it. They had a feeling that there were some issues there, but they didn't know what they were...”

Secondary teachers seldom talked about ethical issues related to Internet use. For example, while over half (57%) of the respondents (mostly ICT coordinators) considered Internet censorship a moderately or extremely important issue in their schools, their colleagues only occasionally talked about it in the staff rooms (“No. It hasn't been raised...as a topical issue at all”). One teacher reported that the last time they talked about these issues was “probably last year... at the beginning of last year [20 months ago] when we organized the policy”.

3.2 Lack of ownership of school Internet policy

Most of the schools had developed a policy on Web use for their students (82%) and nearly two-thirds of the schools (63%) had a policy on students' e-mail use, although fewer than one-third of the schools (30%) had a policy on staff use of the Internet. Although a high proportion of schools in this study have developed some kind of Internet policies for their students (e.g. an Acceptable Use Policy (AUP)), it seems that teachers had little ownership of these policies. Very often, it was the ICT co-ordinator who was responsible for the development of the policy, which was subsequently approved by the principal and/or the board of trustees, with little staff input. Parent and community support was also limited in developing these policies,

with only 12% of the schools having some form of community involvement. Parent's involvement was not high either (31%).

3.3 Lack of professional development

The lack of awareness of the ethical issues had a lot to do with the lack of professional development in this area. Typically, schools spent very little time on professional development. According to one school:

“We had it as a staff briefing at the beginning of the year... we ran a workshop at the beginning of the year for all new staff, and all staff, and that was one of the issues that was raised, as to what are our legal and moral and ethical responsibilities... we spent probably 20 minutes to half an hour on that.”

For those schools that had professional development on Internet censorship, not every teacher had the opportunity to participate. One respondent gave the following answer when asked whether he had participated in any professional development in this area:

Teacher: “we had an advisor in”

Researcher: “...and most people had an opportunity of participating?”

Teacher: “Umm, not all of them. Only those ones who felt they had the need to at that stage were in line”

It is sometimes difficult for teachers to “feel the need” if they have not been informed about the issues. The lack of full participation may result in some kind of tension in some schools because of the lack of understanding and consensus of the school's policies. For example, the following incident was reported in one school:

“...We did have big trouble, at the beginning of this year where we got [a] new computer teacher, and he is in the computer room and the kids have got easy access to the Internet. And when they weren't doing things, they'd flip into the Internet and they'd be in all sorts of places...Of course, he was a new teacher...I even had to ban somebody from using the Internet for the way they were carrying on in that class.”

A similar incident was reported in another school:

“...the child will not have the permission slip therefore they can't access the Internet but they [the staff] don't feel it's wrong to sit that person next to someone [who is] using the Internet. And that is a worry to me because to me it's wrong, the parents have not given us permission for their child to look at the Internet.”

4. CONTROL, CONTROL AND CONTROL

While teachers in general have limited awareness of the importance of the ethical issues involved in Internet use, at the management level, principals and ICT co-ordinators were keen to have tight control so that students would be protected from accessing objectionable material from the Net. For example, close to three-quarters (74%) of the secondary schools in the study had developed a policy of tracking students' WWW use and about half (44%) of the schools tracked their students' e-mail use. From the study it is clearly noted that respondents were very concerned that their students might access materials they should not be accessing. For example, some schools did not allow students to use Web-based e-mail because of the lack of control over what they would send out. Teachers saw that it was their responsibility to supervise and monitor their students' Internet activities. They felt the need to provide students with a safe environment without exposing them to objectionable material. A number of the respondents suggested that they adopted a similar role to a parent when they used the Internet with their students.

Various strategies were used to control access to objectionable materials. These included: supervision (92%); signing an AUP (70%); using a filtering software (38%); educating students (39%); and setting up an Intranet (30%). Most schools used multiple strategies, although fourteen schools (19%) relied solely on physical supervision, two schools used an AUP alone, and one school used educational strategies to inform students about objectionable materials without employing any restrictive measures to block out access. For example, the following school used a combination of strategies to achieve tight control over access:

“... We have a programme which checks for keywords in any e-mails sent and we have some programmes which check for particular stuff that's downloaded, and because the Intranet is set up [in] a particular way, we can identify every site, that every student has been to...most of the computers are visible by a teacher. And during lunchtime, they're still visible by a supervisor...”

4.1 Supervision

The main objective of physical supervision was to make sure that students had no opportunity to access inappropriate materials. The supervision process normally began by requesting students to get parental permission to use the Net for school work-related purposes. For example, “Students are asked to show their permission note which must be signed if they are on the Internet”.

Sometimes tighter supervision might include:

“Teachers set tasks, nominate URLs to be used and keep a watch as it is done in the PC lab”

“use of bookmarked sites only...Actual searching under close supervision with discussion as to efficient key word searching first and supervision as to which sites to look at...”

Supervision almost always meant the physical presence of the teacher:

“A staff member is expected to monitor the sessions by checking the screens every few minutes and advising as necessary”

“Computer is in “visible” part of the room. Students can only access when staff is present”

Physical supervision has its limitations. For example:

“Experienced users know how to access a site in the background, fooling an inexperienced teacher that they are on task”

“Teachers have 30 or so pupils to cater for. Supervision cannot be fully relied upon as a safeguard.”

Also, time was a major factor, as “close supervision means loss of time to do other work” and “not many staff [are] willing to supervise due to lack of time”.

4.2 Filtering software and Intranet

Some schools were quite happy with using filtering software to screen out inappropriate materials. For example, one respondent being interviewed was very proud of using *Cyber Patrol* for filtering out unwanted sites, although problems were encountered in the process.

“... if we didn't have...a censorship programme with the *Cyber Patrol* software, that would be a big concern... [students] do a lot of things like downloading song lyrics, downloading games, downloading zip files that they never use and its just an overhead on the system...Alright, we paid \$2000 to purchase *Cyber Patrol*...Everyday it downloads from the United States a new set of updated rules...identifies all the nasty stuff, and it goes from pornography to um, nudism in art to racism in art to racism, hatred, violence, sex, drugs, alcohol, general substance abuse, and anything unpleasant, and they create what they call these “Not rules”...we can look at the list of Not rules and we can tick whether we want to have...basically we tick the whole lot ...”

When asked whether this program has excluded students from going to sites that actually would have been acceptable, the teacher replied:

“Yes. A teacher came the other day, in social science, I think it was a history class, they were doing research on the KKK (Klu Klux Klan) in the United States and they couldn't get to the site that they wanted to get because it was blocked.”

Although a high percentage of teachers using filtering software agreed that it was an efficient way of limiting access to the Internet, some teachers doubted its effectiveness. One respondent commented that it was “far too much effort for dubious results,” as many appropriate sites were blocked and also because “it is like a challenge to some students to see if they can get around the system. It also limits and cuts out some useful sites.”

Setting up an Intranet had similar problems. The following are some of the negative comments given by the respondents:

“Information can be limited/dated”

“No online access but it is impractical in terms of time taken to pre-cache. In that respect it is not effective”.

“Very time consuming – removes many of the features of the Web – i. e., free thinking/surfing”

4.3 Educating students

It is surprising to note that just one school used only educational strategies to deal with problems of accessing objectionable materials. Views such as the following were rare:

“[educating students involves helping] them develop skills in finding out, [exploring] with assistance the range of information in specific areas they are studying and be discriminating in selecting info to answer their questions. Developing personal integrity in what they choose to view and access, understanding that the validity and content of many sites is very suspect – yet not denying the vital tool it is becoming to find out fast...”

In secondary schools, there was a view that at the end of the day teachers could not really do a lot about Internet censorship:

“Secondary students are old enough to know what they should and should not be accessing...ultimately we can no more stop them accessing some sites if they are really determined than we can prevent them from bringing a porn mag [pornographic magazine] in from home...”

While primary teachers placed greater emphasis on supervision, their counterparts in secondary schools put more emphasis on the responsibilities of the students.

“...Students are ultimately responsible for their choices and it is helpful for them to sign usage contracts upon entry to the school. These contracts can state clear consequences for abuse of Internet usage.”

5. THE CUSTODIAL ROLE OF TEACHERS

While secondary schools in New Zealand are using a variety of strategies to limit access to objectionable materials on the Internet, teachers are not clear how to define objectionable materials, nor have they reflected on the implications of adopting restrictive measures on using Internet resources. One comment from a teacher summarises this feeling succinctly,

“reasonably...who decides what is appropriate? Too many value judgement involved in the absence of a policy...”

Limiting access to Internet resources may not be compatible with a constructivist approach to learning where students are asked to actively explore, gather, and evaluate information. Decision making is an important component in the research process, particularly for senior secondary students, and limiting access may undermine independent research. According to one teacher,

“...so much stuff out there that would be stopped by using a filter. And I don't think it teaches the children how to evaluate what they're reading...we want them to decide whether its authentic or not...If we had filters on and stopped them having to make decisions, I think that's wrong...”

However, students have already faced the problem of information overload. There is simply too much irrelevant information available on the Internet. If teachers do not take up the gate-keeping or custodial role it may mean a waste a lot of students' time and resources. However, how much protection students should have from accessing inappropriate materials is a difficult question to answer. One teacher from the study illustrated the need for protection with the following example:

“Downloading Web pages about the Columbine High School massacre resulted in our students having access to document containing hateful and violent racism in the form of vocal statements recorded from court records.”

How far should teachers' custodial role go? Should teachers keep track of students' e-mail and their Web browsing activities? Many schools contended that as long as they had included it in the policies it would be legal. If teachers go as far as the following comment by one of the respondents suggests, would it eventually come into conflict with teacher's role as facilitators?

“...we track where they have been...I go and check their mail...it is in the policy, they know its not private...I always go through and see where people have visited...”

6. CONCLUSION

From the questionnaire survey and interviews it is clear that teachers do have to take up a custodial role when using the Internet with their students. However, many teachers are unprepared to take up such a role. The tendency to impose control and limit access will clearly pose problems for those teachers who are willing to allow students to freely explore the Internet and make their own evaluative decisions. The lack of emphasis on educating students about their ethical responsibilities in these schools is a big concern. If there are no clear guidelines for teachers to follow, tension among colleagues on Internet use may result. The lack of professional support in this area may also mean that teachers may be discouraged from using the Internet in their teaching simply because it is too hard and time consuming to make ad hoc decisions.

Teachers cannot deal with these ethical issues alone. As one respondent commented, “you cannot stop inappropriate use if it is supported at home,” teachers have to work closely with parents and the community to deal with these issues. Their involvement should begin at the stage when schools begin to formulate their policies. Perhaps the following procedure, reported by one of the respondents, could increase the involvement of both teachers and parents:

“The technology committee introduced [the policy] at a staff meeting and then we went, split up into what we have as forums, which is 6 groups of teachers, and we debated the issues that were in here and came up with this as the consensus and said, yes, we’ll live with that...last year, when were formulating the policy, I went to the PTA [parent-teacher association] meeting, we had a special parent teacher meeting on technology where we explained what we were doing and the implications and the contracts and other things, and they had a bit of input as to what they would like and what they wouldn’t (like) for their kids”

Teachers of the future need to reflect on the kind of ethical issues involved in using the Internet with their students as well as the desirable strategies needed to deal with these issues. They need to decide whether student access should be limited and whether student e-mail and Web browsing should be tracked and recorded. In addition, teachers have to decide the optimal level of involvement of parents and the community. Equity issues involved in Internet access also need to be considered. The issue of accessing objectionable material from the Internet is used in this

paper as an example to illustrate the new custodial role teachers have to take up in a Internet-rich learning environment.

Deciding what Internet resources should or shouldn't be accessed is a moral as well as a legal issue. Teachers clearly have a custodial role to play when they allow their students to access the Internet for their work. Professional development is needed to prepare teachers to take up this role in the new millennium. The question of whether, as well as how to, control or educate students so that they are aware of their legal rights and ethical responsibilities is a big issue for teachers to resolve in future schools.

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BIOGRAPHY

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