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Web 2.0 site blocking in schools

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Foreword

This report focuses on identifying and overcoming the barriers associated with current site blocking practices in schools with regards to Web 2.0 services such as social networking, video sharing, blogs and wikis and popular sites such as YouTube, Facebook and Wikipedia.

Site blocking is one of the areas of investigation commissioned by the Australian Government's Department of Education, Employment and Workplace Relations as part of the Strategic ICT Advisory Service (SICTAS) project.

The report briefly describes Web 2.0 in terms of opportunities for teaching and learning and places site blocking in context within an overall framework that includes cyber-safety and 21st century learning.

This paper discusses key findings arising from desktop research, online surveys and consultation with Education.au's contacts in the educational jurisdictions and other relevant bodies.

Finally it provides a set of recommendations that could overcome many of the barriers that current site blocking practices in schools place on teachers looking to use Web 2.0 to improve teaching and learning.

I commend this report and its findings to the reader.

Greg Black

CEO Education.au

Table of contents

Glossary

ACMA	Australian Communication s and Media Authority
Becta	British Educational Communications and Technology Committee
CIO	Chief Information Officer
DEEWR	Department of Education, Employment and Workplace Relations
edna	education Network Australia
ICT	Information and communications technology
NSW	New South Wales
SA	South Australia
SICTAS	Strategic ICT Advisory Service
UK	United Kingdom
VIC	Victoria

1 Executive Summary

This is a report into current site blocking practices in the schools sector with a particular focus on Web 2.0 services such as social networking, video sharing, blogs and wikis and popular sites such as YouTube, Facebook and Wikipedia.

The report documents findings from desktop research, online surveys and consultation with Education.au's contacts in the educational jurisdictions and other relevant bodies. The key focus was the current site blocking practices of the Australian schools sector incorporating:

- State jurisdictions
- Catholic Schools
- Independent Schools.

This report forms part of the Strategic ICT Advisory Service (SICTAS), funded by the Australian Government's Department of Education, Employment and Workplace Relations (DEEWR).

Findings

Web 2.0 provides rich opportunities to improve student learning. Web 2.0 technologies significantly contribute to furthering personalised, collaborative learning and support the development of Internet literacy.

However, teachers and school policy makers face a number of barriers in regard to effective use of Web 2.0 in teaching and learning:

- teacher lack of knowledge and confidence in Web 2.0
- lack of safe places to gain experience with using Web 2.0 tools in teaching
- concerns about cyber-safety and cyber-bullying
- professional risk of allowing students access to popular social networking sites
- limited bandwidth for effective delivery of rich Web 2.0 media
- inflexibility of school site blocking systems
- inability to provide access to educationally-relevant content from blocked sites.

Schools have a fundamental duty of care to students and site blocking is a necessary and key component of every school's overall cyber-safety strategy. Site blocking has a clear role in front-line protection of students from illegal and inappropriate Internet sites and content. For schools with limited bandwidth, site blocking is also used as a method to limit download of bandwidth-heavy rich media content.

The case for blocking popular Web 2.0 sites such as Wikipedia, Facebook and YouTube is less clear. Typically these sites provide a mixture of both educationally-valuable and undesirable/risky content and interactivity.

Web 2.0 site blocking in schools is a risk management response to the difficult and not well understood issues that schools face in trying to balance cyber-safety concerns with the desire to harness innovative Web 2.0 style collaborative teaching and learning.

Recommendations

Overcoming these barriers will require a collaborative effort at the national, jurisdiction and school level. It is expected that the level of Web 2.0 access in schools will increase as school policy makers and teachers build expertise and gain confidence in managing Web 2.0 issues.

A key initiative to help to overcome these barriers and accelerate the adoption of Web 2.0 in schools is the establishment of a national collaboration so that leading jurisdictions, exemplar teachers and other education and ICT experts can publish and share their best practice and knowledge in regard to:

- Web 2.0 policy development and implementation
- Web 2.0-aware content filtering, Web 2.0 tools and safe access to Web 2.0 rich media content.

A number of policy implications arising out this investigation relate to other wider policy agendas. Education policy makers can use the findings of this report to help overcome many Web 2.0 teaching and learning barriers by providing Web 2.0-based drivers for these related initiatives:

- professional Learning for teachers: Web 2.0 proficiency
- a national approach to cyber-safety that covers schools, parents and the home: Web 2.0 cyber-safety.
- bandwidth in schools: support for delivery of Web 2.0-style rich media content.
- national curriculum: Web 2.0 cyber-safety and 21st century modes of collaborative Web 2.0-style learning.
- Trust Federation for Schools: support for students to collaborate safely beyond existing jurisdiction boundaries.

Conclusion

Society is increasingly relying on Web 2.0 social networking technologies to connect, collaborate and learn.

Schools face complex and not well understood issues in trying to balance cyber-safety concerns with the desire to harness innovative Web 2.0 style collaborative teaching and learning.

The key initiative recommended in this report to help overcome these barriers and accelerate the adoption of Web 2.0 in schools is the establishment of a national collaboration of leading jurisdictions, exemplar teachers and other education and ICT experts with the aim of publishing and sharing best practice and knowledge in regard to incorporating Web 2.0 in teaching and learning.

2 Recommendations

This is a report on current site blocking practices in the schools sector with a particular focus on Web 2.0 services such as social networking, video sharing, blogs and wikis and popular sites such as YouTube, Facebook and Wikipedia.

Web 2.0 site blocking in schools is a risk management response to the difficult and not well understood issues that schools face in trying to balance cyber-safety concerns with the desire to harness innovative Web 2.0 style collaborative teaching and learning.

Overcoming these barriers will require a collaborative effort at the national, jurisdiction and school level. It is expected that the level of Web 2.0 access in schools will increase as school policy makers and teachers build expertise and gain confidence in managing Web 2.0 issues.

A key initiative to help to overcome these barriers and accelerate the adoption of Web 2.0 in schools is the establishment of a national collaboration so that leading jurisdictions, exemplar teachers and other education and ICT experts can publish and share their best practice and knowledge in regard to:

- Web 2.0 policy development and implementation
- Web 2.0-aware content filtering, Web 2.0 tools and safe access to Web 2.0 rich media content.

2.1 Recommendations

Recommendation 1: Establish a national collaboration to identify, promote and share best practice in the development and implementation of Web 2.0-style collaborative online learning policies within schools.

A key barrier to a balanced, managed safe Web 2.0 adoption in schools is lack of knowledge and lack of access to support by school policy makers.

Any improvement in Web 2.0 access cannot come from individual teachers alone but must be supported by jurisdictions and policy makers.

United Kingdom (UK) evidence is that a key component of this support needs to be in the form of an ongoing conversation to bring all stakeholders to a common understanding of how to balance the complex issues and tensions in schools between cyber-safety concerns and the desire to harness innovative Web 2.0 style collaborative teaching and learning.

A national initiative to establish an online environment where leading jurisdictions, exemplar teachers and other education and ICT experts can publish and share their best practice and knowledge in regard to Web 2.0 policy development and implementation will have the following expected outcomes:

- Avoid inequities in teacher and student digital literacy across and within jurisdictions.
- Provide a mechanism where changes towards 21st century approaches to online learning can be accelerated nationally across jurisdictions.
- Provide a systematic way to leverage best practice nationally.

The development of a national collaborative environment for teachers as a shared infrastructure for professional learning would provide a place where teachers can learn from each other how best to apply Web 2.0 tools and techniques to their teaching and learning activities.

Recommendation 2: Establish a national collaboration to showcase and share tools and techniques in Web 2.0-aware content filtering, tools and safe access to rich media content.

Web 2.0-aware Filtering

Access to a national pool of best practice site blocking knowledge would empower teachers to better manage the risk/reward balances associated with embedding access to popular Web 2.0 sites into their teaching and learning practices.

There is an opportunity to facilitate a national collaboration amongst school jurisdictions as to what constitutes best practice in fine-grained person-centric Web 2.0-aware Internet access control.

Web 2.0 Tools

Easy access within schools to locally installable versions of popular Web 2.0 tools for trialling and learning has proven to be a highly beneficial way to deliver online learning without the risks inherent in providing school access to popular Internet web 2.0 sites.

However, access to safe, local versions of Web 2.0 tools varies widely across jurisdictions and between schools within a jurisdiction.

The introduction of a national 'Web 2.0 tools for schools' collaboration would provide the opportunity to research the market, evaluate, test and recommend best of breed open source Web 2.0 tools once, for all jurisdictions. This collaboration would also identify gaps in the market and opportunities for developers to develop open source Web 2.0 tools to meet the needs of school jurisdictions.

Web 2.0 Content

Popular social media sites such as YouTube, MySpace and Wikipedia contain a vast array of educationally-valuable rich media resources (along with an equally large collection of undesirable content). However, the ability for teachers and students to access the educationally-relevant content from these sites depends upon local site blocking approaches and thus varies widely across jurisdictions and between schools within a jurisdiction.

A national collaboration to identify ways to provide safe access to an educationally-relevant subset of content from these sites would be of benefit to all stakeholders.

2.2 Wider Policy Implications

A number of policy implications arising out this investigation relate to other wider policy agendas. Education policy makers can use the findings of this report to help overcome many Web 2.0 teaching and learning barriers by providing Web 2.0-based drivers for these related initiatives:

- professional Learning for teachers: Web 2.0 proficiency
- a national approach to cyber-safety that covers schools, parents and the home: Web 2.0 cyber-safety
- bandwidth in schools: support for delivery of Web 2.0-style rich media content.

- national curriculum: Web 2.0 cyber-safety and 21st century modes of collaborative Web 2.0-style learning
- Trust Federation for Schools: support for students to collaborate safely beyond existing jurisdiction boundaries.

3 Introduction

3.1 Overview

This is a report into current site blocking practices in the schools sector with a particular focus on Web 2.0 services such as social networking, video sharing, blogs and wikis and popular sites such as YouTube, Facebook and Wikipedia.

This investigation sought to find answers to questions such as:

- Issues
    - What opportunities do popular Web 2.0 services and sites such as YouTube, Facebook and Wikipedia offer for the improvement of teaching and learning in Australian schools?
    - What is the current situation in Australian schools with regards to providing or preventing access to these sites?
    - What are the barriers that prevent teachers from using these tools to improve teaching and learning?
- Ways forward
    - How can these barriers be overcome?
    - Are there any national policy initiatives that can assist?

This report documents findings from desktop research, online surveys and consultation with Education.au's contacts in the educational jurisdictions and other relevant bodies. The key focus was the current site blocking practices of the Australian schools sector incorporating:

- State and Territory jurisdictions
- Catholic Schools
- Independent Schools.

This report forms part of the Strategic ICT Advisory Service (SICTAS), funded by the Australian Government's Department of Education, Employment and Workplace Relations (DEEWR).

The focus of this report is to highlight key findings and identify national initiatives that may help to overcome current site blocking barriers to effective use of Web 2.0 tools in teaching and learning.

3.2 Methodology

The objective of this investigation was to:

- obtain data as to current site blocking practice in Australian schools
- identify key issues associated with site blocking and the use of Web 2.0/social networking technologies in teaching and learning
- obtain examples of best practice implementations
- recommend ways forward.

The main tools of this investigation were:

- an online survey
- consultation with education professionals
- desktop research that focused on national and international investigations.

An online survey was developed to gather quantitative data about current site blocking practices of the Australian schools sector incorporating:

- State jurisdictions
- Catholic Schools
- Independent Schools.

The survey was sent to:

- CIO's from each of the state and territory jurisdictions
- Directors of each of the Catholic School dioceses
- Directors of each of the State Independent Schools Associations.

Invitations to complete the survey were sent out to a small group of 27 people, selected for their expertise and responsibility in the area of site blocking for their jurisdiction. The online survey was available to the invitees for four weeks. Although sufficient time was allocated to the completion of the survey, only ten respondents completed the survey. While this is a small number, the respondents provided valuable information that presented an insight into current practices of particular jurisdictions and validated the findings of other surveys, referred to below, conducted by Education.au.

Detailed information about the online survey is found in section 7 Appendices.

A consultation process was also undertaken to validate the findings from the survey responses and elicit further information from key personnel and practitioners in the sector about site filtering and the used of Web 2.0 in teaching and learning. The consultation processes included telephone interviews and face to face meetings. Much of the material gathered through the consultation processes is included in the case studies section of this report. The case studies depict real life experience of teachers using web 2.0 technologies in classrooms.

The investigation was also informed by earlier market research and surveys conducted by Education.au and by teacher-led discussions forums and mail-lists:

- survey and follow-up discussions on Internet filtering and cyber-safety in Australian Schools conducted in 2008 lead by Mal Lee and Pru Mitchell via the edna network[1]
- Education.au commissioned market research, using McGregor Tan Research, to find out about ICT and Internet usage by first year teachers in their teaching[2]
- earlier market research, commissioned by Education.au using McGregor Tan Research, into ICT and Internet usage by Australian educators.[3]

A desktop review was undertaken of literature relevant to the focus of this investigation. It included:

- Internet publications relating to site blocking and the use of Web 2.0 technologies in schools (both in Australia and internationally). Significant research and investigation in this area has been undertaken in the UK by Becta. This investigation noted the findings and recommendations of the Byron Review[4].
- wider industry research from ICT research organisations such as Gartner
- blog posts and articles by educators, IT and ICT professionals, and educational technologists.

This investigation is also informed by the other SICTAS investigations and Education.au consultations, including:

- Situation Analysis[5]
- Collaboration in Teaching and Learning[6]
- Education Workforce Capability[7]
- edna Consultations[8]
- 21st Century Learning discussion forums on edna Groups[9].

4 Background

This section provides context and introduces some of the terminology that is used throughout the report.

The term *Web 2.0* is used to describe the types of online activities that are characterised by popular Internet sites such as Facebook, MySpace, delicious, Flickr, YouTube, Wiki spaces and Blogging spaces. Online activities that are characteristic of these sites include:

- identity and user generated content (Blogs and wikis allow users to establish an online identity and publish their own content.)
- social bookmarking (Sites like del.icio.us allow people to share bookmarks online)
- social networking (Sites like Facebook allow people to network online)
- access to rich media (sites like YouTube, MySpace and Flickr provide a vast array of rich media content such as videos and pictures).

In addition to the popular public Internet sites there are a large number of software tools that schools can use to provide Web 2.0 functionality. Many of these are free open source products. Examples include:

- blogging Tools such as WordPress and MovableType
- wiki tools such as MediaWiki
- social Networking tools such as the education.au-developed Interchange[10] and FusEd.[11]

Schools can embed Web 2.0 activities in their teaching and learning in a number of ways:

- allowing students online access to popular Internet Web 2.0 sites
- installing Web 2.0 tools onto internal school networks.

The term *cyber-safety* is used in this report to describe a range of measures that schools use to manage the risks associated with online access to the Internet by teachers and students. These measures include:

- Internet filtering
- educational activities targeted at teachers, students and parents to promote awareness and competence in areas such as using technology, digital literacy, cyber-bullying, identity protection and the legal responsibility of schools to minimise risk.

There is considerable activity and debate in Australia (at both the national level and within the schools sector) on cyber-safety and Internet filtering.

The Commonwealth Government's *Plan for Cyber-Safety*[12] [13] includes:

- plans to mandate Internet Filtering at the ISP level.[14] [15]
- educational Activities to promote cyber-safety awareness[16].

The Australian Communications and Media Authority (ACMA)[17] undertakes a number of activities to promote cyber-safety.

The terms *site blocking* and *Internet filtering* are in common use within the Australian education sector. In this report they are used interchangeably to describe the various methods that schools use to control and restrict Internet access including:

- *Port filtering*. Firewalls control which Internet ports are allowed. Internet activities such as file sharing, online chat, web conferencing and virtual worlds can be controlled by this method.
- *Site (URL) filtering*. Access to selected Internet sites is controlled via lists of permitted ('white list') and non-permitted ('black list') URLs.
- *Content Filtering*. Access to content types can be controlled and blocked in real time. Examples include pop up ads, videos, images, audio.

The NSW Department of Education and Training has recently installed a comprehensive in-house Internet filtering capability.[18]

The Australian VET sector has completed a number of investigations into overcoming the firewall barrier issues associated with deploying popular e-learning software tools into VET jurisdictions.[19]

When considering which Internet sites to block education jurisdictions generally categorise sites as:

- Category 1: Illegal sites. These are sites that are known to contain illegal material and their blocking is mandatory.
- Category 2: Inappropriate sites. These are sites that are known to contain undesirable (e.g. adult) material and their blocking is mandatory.
- Category 3: Normally blocked sites. These are sites that are normally blocked by default due to cyber-safety concerns but can be selectively unblocked by an individual school if that school makes the case that it is of educational benefit and the school has measures in place to manage the associated cyber-safety risks. The popular Web 2.0 sites mentioned above generally fit into this category.
- Category 4: Normally un-blocked sites. These are sites that are available for access across all schools.

The Federal Government national Internet filtering plans may assist schools with the first two categories but schools will still be required to manage their own filtering of the third category.

5 Key Findings

This section documents the key findings from this investigation. The findings are based on analysis of survey information, desk research and consultation with education sector professionals. Where appropriate they are supported by case studies that depict best practice and quotations from practicing teachers.

5.1 Web 2.0 provides rich opportunities for teaching and learning

First generation instructional e-learning tools such as Learning Management Systems (LMSs) are now largely embedded in the everyday school experience. They have provided the means to collect and organise learning resources and provide access to those resources by students and teachers from inside networks and also from home.

Next generation e-learning paradigms (often called e-learning 2.0) focus on leveraging person-centric, social-networking Web 2.0 concepts to create new collaborative, learner-centric online e-learning environments. This paradigm is characterised by the ability to publish and widely engage with others in online environments.

Popular Web 2.0 social networking sites such as Facebook and YouTube are becoming part of everyday life, woven into the social fabric of students and, increasingly, teachers.

A key challenge for teaching and learning in a Web 2.0 environment is for teachers and students to develop strong Internet and digital literacy skills to not only be able to search, find, evaluate and critique information but also to be able to contribute and collaborate safely online.

For teacher professional development, Web 2.0 applications such as social networking tools, video sharing tools, blogs and wikis offer opportunities for mentoring and collaboration with other teachers across geographic and jurisdictional boundaries[20]. Social networks such as edna Groups, which provide a platform for educators to share information and knowledge and learn from each other, have been very important in filling a professional development niche. The importance and success of such networks can be measured by the online activity of the range and membership of these groups.

Research in the UK, undertaken by Becta, indicates that Web 2.0 provides positive opportunities to improve student learning.[21] The research team reports that although the use of Web 2.0 technologies at schools is limited and at experimental stages the impact of its use has been cautiously positive. Web 2.0 technologies significantly contribute to futhering personalised learning and support the development of critical Internet literacy.

In short this research indicates that Web 2.0 technologies had a positive impact on motivation and engagement through involving students in more participatory learning, particularly of learners reluctant to contribute in class or who had special needs, whilst also supporating the inquisitive learner through the availability of different media. Consistent with the UK research, the companion SICTAS report on *Collaboration in Teaching and Learning* finds that Web 2.0 is a key enabler for and driver of collaborative learning.[22]

For teaching and learning, Web 2.0 tools and sites provide teachers with innovative ways to:

- engage students who prefer to learn collaboratively online
- extend student learning to anywhere, anytime
- improve student quality and sense of ownership in their work via online publishing.

Schools have a number of strategy options for incorporating Web 2.0-style online learning:

- opening up (un-blocking) access to popular Web 2.0 Internet sites.
- deploying Web 2.0 interactive tools (such as blogs, wikis and social networking) internally onto school Intranets
- facilitating safe access to selected rich media content from popular Web 2.0 sites.

5.2 Site blocking is a necessary and key component of every school's overall cyber-safety strategy

Schools have a fundamental duty of care to students and site blocking is a necessary and key component of every school's overall cyber-safety strategy.

Site blocking has a clear role in front-line protection of students from illegal and inappropriate Internet sites and content.

For many schools with limited bandwidth, site blocking is also used as a method to limit download of bandwidth-heavy rich media content.

The case for blocking popular Web 2.0 sites such as Wikipedia, Facebook and YouTube is less clear. Typically these sites provide a mixture of both educationally-valuable and undesirable/risky content and interactivity.

Most school jurisdictions block Web 2.0 sites by default but individual schools have the ability to open up access.

5.3 Cyber-safety concerns head the list of barriers to the adoption of Web 2.0 in Schools

Surveys and discussions with school jurisdictions have confirmed the nature and extent of site blocking of Web 2.0 sites. Some observations include the following:

- In the case of state jurisdictions, filtering is implemented centrally with a default level of blocking which is quite restricted. Individual schools have devolved administrative rights to unblock selected sites at their discretion.
- Site blocking in Catholic schools follows a similar model, with central filtering at the diocese level and devolved administration rights down to the school level.
- Independent schools each implement their own filtering mechanisms and policies.

The following table shows the results of the extent of site blocking across Australian schools for a sample of popular Web 2.0 sites (the percentages relate to schools that block student access to that site):

Site	Blocked
YouTube	57%
Facebook	86%
Wikipedia	14%

Figure 1. Survey - Site blocking across Australian schools

The following table summarizes the key risks that were identified by survey participants as being associated with opening student and teacher access to popular Web 2.0 sites. Risks were identified as high, moderate and low:

Risk	High	Moderate	Low
Duty of care to students	57%	43%	0%
Concern about abusing school facilities for non-school use	14%	57%	29%
Information security and privacy concerns	43%	43%	14%
Potential impact on limited school bandwidth	29%	29%	43%

Figure 2. Survey – Risks associated with Web 2.0 technologies

These statistics are supported by UK research[23] which indicates that despite the desire of some teachers to explore the benefits of Web 2.0 for creativity and learning they are constrained by educational authorities and restrictive school policies framed around risk-averse practices in fear of legal action. Overall literature reveals that society seeks to protect children from perceived dangers of new media at the expense of creative, innovative and collaborative learning through the use of tools available in the 21st century.

Cyber-bullying was seen to be a key duty-of care issue. This is also support by UK research [24] which found that 42% of teachers considered cyber-bullying to be a problem in schools and research from Canada[25] that found that one in four students had been cyber-bullied.

The Byron report[26] on safety in a digital world advocates a multi prong approach, to the new media, that requires a combination of involvement by industry, families, government and education. That is reduce the availability of harmful and inappropriate content, equip children and their parents to effectively manage access to harmful content and equip children to deal with inappropriate content and online behaviour. A key message of this report is the need to educate the digital citizen to embrace the new technologies while being aware of the dangers.

5.4 Current Site blocking methods are blunt instruments when applied to Web 2.0 sites

All school jurisdictions are keenly aware that they have a duty of care and a legal responsibility to protect students from illegal and offensive Internet material. Jurisdictions have generally adopted a three level process to manage their responsibilities in this area:

- Internet filtering
- Internet access terms and conditions for students
- monitoring and supervising student online activities.

Most Internet filtering within school jurisdictions operates at three levels:

- **Port filtering**. Firewalls control which Internet ports are allowed. Internet activities such as file sharing, online chat, web conferencing and virtual worlds can be controlled by this method.
- **Site (URL) filtering**. Access to selected Internet sites is controlled via lists of permitted ('white list') and non-permitted ('black list') URLs.
- **Content Filtering**. Access to content types can be controlled and blocked in real time. Examples include pop up ads, videos, images and audio.

The filtering method that is most generally relevant to Web 2.0 sites in the Australian school sector is site (URL) filtering.

This method blocks or permits access to a whole site and is generally effective for traditional web 1.0 sites where the decision as to whether a site is desirable or undesirable is often fairly straightforward and jurisdictions have access to third party services that monitor the web and maintain black and white lists.

However, the emergence of hugely popular massive online Web 2.0 communities such as Facebook and YouTube has blurred the distinction between 'good' and 'bad' sites. These sites can be considered as microcosms of the Internet in that they enable access to a vast range of behaviours and content ranging from educationally desirable to undesirable.

When applied to Web 2.0 online communities, URL filtering is a 'blunt instrument' that does not provide the flexibility to meet the divergent needs of teachers looking for innovative ways to embed Internet technology and content into teaching and learning.

Limitations of commonly used filtering methods include:

- Web 1.0 site-based approach to filtering generally leads to an all or nothing approach to blocking Web 2.0 online communities.
- support to allow schools to customize access control only operates at a whole school site level (unable to differentiate between teachers and students).
- they lack other fine-grained person-centric access controls such as the ability to control access via activities, groups, available bandwidth, time limits and the time of day.

Attempting to apply first generation site blocking technologies and Internet protection policies to second generation massive online communities leaves jurisdictions and teachers in a dilemma:

- Blocking access protects students from the bad content but also stifles opportunities to access the good content to improve teaching and learning.
- Permitting access creates opportunities to innovate and improves teaching and learning but also exposes students to undesirable content and activities.

Case study: New Brunswick (Canada) school district supports fine-grain access control to Facebook

The New Brunswick Department of Education in Canada has installed Internet content filtering technology that supports fine-grained access control mechanisms.[27]

This has allowed teachers to better manage the risk/reward issues associated with allowing access to popular Internet sites such as Facebook.

The department originally allowed access to Facebook but found that too frequent use was disruptive in the classroom.

The content filtering technology allows the department to set up an access control rule that blocks the site during school hours only. Students and Teachers have un-blocked access to the site after hours.

Case Study: Access to web resources from sites that are often blocked: Wikipedia to go

Wikipedia is a vast online encyclopaedia of knowledge and a valuable learning tool. However it is banned in many schools because of past experiences where students with editing accounts on the site have mischievously contributed deliberately false content and vandalised the site.

The Wikipedia Selection for Schools[28] is a free subset of Wikipedia content that has been assessed as suitable for schools. It can be downloaded or sent out to schools as a DVD.

In this way, schools can provide students with access to the Wikipedia educational content without the risks and bandwidth usage associated with direct online access.

The 2009 *Horizon Report*[29] on emerging technologies identified site blocking as a key inhibitor to the adoption of new types of content and technologies in schools. This report identified the limitations of current content filtering technology with respect to emerging technologies such as Web 2.0 and recognized the need for new content filtering approaches that do a better job of distinguishing between useful and objectionable Web 2.0 content and tools.

A national survey[30], commissioned by Education.au using McGregor Tan Research, into ICT and Internet usage by Australian educators found that 41% of surveyed educators considered site blocking to be a major impediment to their using technology in teaching,

Anecdotal evidence from edna online discussion forums indicates that many teachers are frustrated with school site blocking processes for Web 2.0 sites and frequently employ work-arounds in order to incorporate Web 2.0 processes into their classroom activities:

- In schools where YouTube is banned teachers have resorted to a number of workarounds to embed educationally relevant YouTube content into their lessons. For example teachers often download YouTube content from home and bring it into the school on a USB stick. Other teachers provide YouTube URLs for students to access from home as part of their homework assignments.
- A teacher found that he could engage previously disengaged English students by creating videos of their work and putting them up on YouTube. But as YouTube was blocked at the school the students could only see their work online from home or at school via their own Internet-capable mobile phones.

- In schools that ban blogs and wikis some teachers have installed open source tools on their school intranets.
- A school opened up access to Wikipedia to enable student access to its vast educational resources. The school subsequently banned the site after discovering that some students were mischievously editing Wikipedia content.

5.5 Unblocking Web 2.0 sites must be done within a clear policy framework

UK research on *E-safety and Web 2.0*[31] identified a number of candidate policy models that could be useful to assist schools in developing Web 2.0 policies that suited their local requirements and capabilities. This report identified 4 candidate strategy positions:

- Walled garden – schools d0o not allow access to Web 2.0 sites but provide internal, safe Web 2.0 collaborative environments within the school Intranet.
- Empower and manage – schools allow access to Web 2.0 sites within a policy framework of student empowerment, monitored access and cyber-safety education.
- Lock down – schools prevent access to Web 2.0 sites
- Open access – schools allow open unrestricted access to Web 2.0 sites.

The UK report identified *empower and manage* as the most desirable strategy option for schools but noted that *Lock down* is the current situation at most schools in the UK primarily because schools lack the knowledge and support to develop appropriate Web 2.0 policies.

The report found no one policy would be suitable for all schools and that any improvement in Web 2.0 access cannot come from individual teachers alone but must be supported by jurisdictions and policy makers.

The report noted that a key component of this support needs to be in the form of an ongoing conversation to bring all all stakeholders to a common understanding of the complex issues and tensions in schools between cyber-safety concerns and the desire to harness innovative Web 2.0 style collaborative teaching and learning.

Discussions during this investigation with Australian school jurisdictions and practicing teachers have confirmed that there is also a wide variance in approach towards online learning and cyber-safety both across and within Australian school jurisdictions.

This reflects diversity in approach by jurisdictions to managing the benefits and risks associated with online learning and Internet access by students. Factors at play here are:

- duty of care to students
- professional risk for teachers and jurisdiction staff
- duty to teach digital literacy as part of the curriculum
- opportunity to use Web 2.0 activities to improve student learning.

This investigation conducted interviews with a small sample of schools looking at the range of approaches to Web 2.0 in schools.

At one end of the spectrum there are schools that embrace the philosophy of 21st century online learning and see a duty to teach students digital literacy as part of the curriculum.

'It's not about prohibition, it's about education' (Independent School Principal)

While at the other end of the spectrum the emphasis is on protecting students and teachers from the risks associated with Internet access.

'Our Internet filtering is unbreakable' (Education Department CIO)

Within school jurisdictions in Australia, the *walled garden* approach is becoming more evident:

- The Victorian Education Department's Knowledgebank[32] initiative will provide a comprehensive set of Web 2.0 interactive tools in-house for access by teachers and students.
- The Victorian and South Australian Education Departments are using the *SuperClubsPlus*[33] student social networking tool.
- The NSW Education Department is planning to trial an in-house version of the Education.au ltd developed social networking tool *me.edu.au*[34].

A number of progressive independent schools that have adopted an *empower and manage* approach. These schools were found to have the following characteristics:

- School principal philosophy for innovation in online learning
- Teachers with existing Web 2.0 interest and expertise
- School commitment to teaching digital literacy and cyber-safety as part of the curriculum
- Clear Internet behavior and cyber-bullying policies and close involvement and communication with parents.

Case study: An Independent School allows open access to popular Web 2.0 sites

An independent girls R-12 school in Adelaide has an innovative and pro-active approach to teaching and learning in a Web 2.0 world. The school Principal's philosophy on student Internet access is: 'It's not about prohibition, it's about education. We allow but monitor.'

The school does block illegal and undesirable sites but allows access to a full range of popular web 2.0 sites such as Facebook, Wikipedia, MySpace, Youtube, del.icio.us and various blog sites.

The school sees that it has a clear role and responsibility to teach students to be competent, discerning and safe online digital citizens. 'The school is not a bubble; it is part of society.'

Key aspects of this school's approach are:

- Clear policies and guidelines for Internet use; close involvement of parents: The school actively and clearly communicates the policies and guidelines for Internet use to teachers, students and parents. Students and parents must agree to and sign the network user policy before they are allowed access to the Internet. The school conducts parent information evenings on topics associated with Internet access and keeps parents fully informed on its approach to Internet access for students.
- Teacher education, support and mentoring: The school uses Wikispaces to share knowledge and information between teachers on the Internet, Web 2.0 and how to embed online access into teaching and learning. Teachers who are less confident in the use of the Internet are mentored by more experienced teachers.
- Educating Students from an early age in cyber-safety and new media literacy: The curriculum for year 2 students includes topics on Internet Security and Computer Security. In Year 8, curriculum topics include Identity Theft, Internet Safety and Cyber Bullying.

- Embedding use of web 2.0 online tools into the curriculum: Students make podcasts to record their Physics investigations. Students use blogs for documenting and reflecting on their assignments. Year 8 students use deli.co.us to manage and share references when researching assignments. Teachers also setup del.icio.us links as research suggestions for students. Students in year 10 use blogs and bookmarking to help organise their Personal Learning Plans.
- Allow but monitor; trust and responsibility: The school philosophy is to trust, empower and educate students and to teach them responsibility. Internet access is monitored and teachers can switch off screens in classrooms if needed.

5.6 Teachers need professional learning support in order to effectively use Web 2.0 in teaching and learning

In the absence of suitable technology and guidelines to manage access to Web 2.0 communities teacher activity in this area is often the product of the teacher's own Internet knowledge, confidence and tolerance for risk taking.

Discussions with teachers identified a number of barriers to effective use of Web 2.0 sites and paradigms to improve teaching and learning:

- teacher lack of knowledge and confidence in Web 2.0
- lack of safe places to trial and learn
- professional risk of allowing access to students
- limited bandwidth for effective delivery of rich Web 2.0 media
- inflexibility of school site blocking systems
- inability to provide access to educationally-relevant content from blocked sites.

Many teachers lack the knowledge and confidence in how to apply Internet/Web 2.0 technologies and content to their everyday learning and teaching. This finding is supported by intenational research[35] that indicates 59% of teachers believed that Web 2.0 resources should be used in the classroom but two thirds of teachers surveyed expressed concerns about time for familiarity and planning for the use of Web 2.0 technologies.

Some innovative schools have adopted an internal peer mentoring system where teachers proficient in the use of web technologies coach more inexperienced or uncertain teachers.

For many teachers, there is no safe (non-public) way to gain experience in the use of Web 2.0 technologies for themselves or their students. Many teachers are reluctant to take their first steps on public sites for fear their mistakes will be in full view of students, peer teachers, parents and the school jurisdiction.

Although all schools have acceptable use policies and procedures for student Internet access, many teachers are reluctant to include Web 2.0 activities in their teaching for fear of being exposed to risk of being blamed if something goes wrong.

Case study: Victorian Education Department guidelines for Teachers on Internet Access

The Victorian Education Department has established a comprehensive online set of policies, guidelines and resources for teachers called 'Working with the Web: A guide to ethical and safe use of the Internet for Victorian schools'.[36]

This site provides guidelines and resources to assist schools and teachers in leveraging the power of the web for teaching and learning while minimising the risks. Guidelines include:

- developing school policy on cyber safety and ethical Internet use
- managing Internet use within schools
- responsibilities relating to copyright and privacy
- embedding online learning into the curriculum.

Case study: Victorian Education Department provides safe versions of Web 2.0 interactive tools

The Victorian Education Department's Knowledgebank[37] initiative will provide a comprehensive set of Web 2.0 interactive tools in-house for access by teachers and students.

'Within this network, Victorian students will also able to interact with each other using Web 2.0 interactive tools - such as blogs, wikis and podcasts which are currently banned by most educational institutions due to a high risk of inappropriate use.'

6 Policy Implications and Recommendations

This section discusses the key findings in terms of implications for policy makers and provides:

- Recommendations for policy initiatives that can directly and significantly reduce the barriers teachers currently face in embedding Web 2.0-based innovations into their teaching and learning. These are presented as evidence-based recommendations for action, linked to relevant policy drivers and expected outcomes. Where appropriate, the recommendations are supported by quotations from practising teachers.

- Policy implications that relate to existing or wider policy agendas or add supporting evidence for recommendations already covered in other SICTAS papers.

6.1 Key Policy Issues and Implications

There is a complex tension in schools between cyber-safety concerns and the desire to harness innovative Web 2.0 style collaborative teaching and learning. In many jurisdictions, bandwidth continues to be a barrier to more widespread delivery of Web 2.0-style rich media content into schools.

Overcoming these barriers will require a collaborative effort at the national, jurisdiction and school level covering policy areas such as:

- a national cross-jurisdictional collaboration to showcase and share best practice in school Web 2.0 policy development and implementation

- a national cross-jurisdictional collaboration to showcase and share tools and techniques in Web 2.0-aware content filtering, Web 2.0 tools and safe access to Web 2.0 rich media content.

- professional Learning for teachers that incorporates Web 2.0 proficiency

- a national approach to Web 2.0-aware cyber-safety that covers schools, parents and the home.

- bandwidth in schools that is sufficient to support widespread delivery of new bandwidth-intensive Web 2.0-style rich media content.

- enhancements to the national curriculum to address cyber-safety and incorporate new 21st century modes of collaborative Web 2.0-style learning

- a Trust Federation for Schools that allows students to collaborate safely beyond existing jurisdiction boundaries.

6.2 National collaboration on Web 2.0 policy best practice for schools

Recommendation 1: Establish a national collaboration to identify, promote and share best practice in the development and implementation of Web 2.0-style collaborative online learning policies within schools.

Section *5.5 (Unblocking Web 2.0 sites must be done within a clear policy framework)* earlier found that a key barrier to a balanced, managed safe Web 2.0 adoption in schools was that lack of knowledge and lack of access to support by school policy makers tended to result in very conservative, risk averse school-level Web 2.0 policies.

> *Does anyone know of guidelines or policies for school staff using social networking sites? As we progress further with Web 2.0 interaction…have the policy areas of this new domain been mapped? Have governing bodies made recommendations, guidelines or policies?*
>
> *Teacher, mail-list forum*

This section also reported that any improvement in Web 2.0 access cannot come from individual teachers alone but must be supported by jurisdictions and policy makers.

UK evidence is that a key component of this support needs to be in the form of an ongoing conversation to bring all stakeholders to a common understanding of how to balance the complex issues and tensions in schools between cyber-safety concerns and the desire to harness innovative Web 2.0 style collaborative teaching and learning.

A national initiative to establish an online environment where leading jurisdictions, exemplar teachers and other education and ICT experts can publish and share their best practice and knowledge in regard to Web 2.0 policy development and implementation will have the following expected outcomes:

- Avoid inequities in teacher and student digital literacy across and within jurisdictions.
- Provide a mechanism where changes towards 21st century approaches to online learning can be accelerated nationally across jurisdictions.
- Provide a systematic way to leverage best practice nationally.

This approach aligns with current federal policy initiatives such as:

- DER professional development for teachers[38]
- Cyber-safety plan and the Australian Communications and Media Authority (ACMA) focus on education as a key cyber-safety strategy.[39]

It is clear that teacher professional learning in digital literacy is a major priority if the potential of Web 2.0 for teaching and learning is to be realised. The value of collaboration as a professional learning model for teachers will be explored in more detail in the report on the SICTAS investigative research into workforce development capability.

The development of a national collaborative environment for teachers as a shared infrastructure for professional learning would provide a place where teachers can learn from each other how best to apply Web 2.0 tools and techniques to their teaching and learning activities.

This approach is described in more detail in the companion SICTAS report: ‘Collaboration in Teaching and Learning’.

6.3 National collaboration on Web 2.0 filtering, tools and content

Recommendation 2: Establish a national collaboration to showcase and share tools and techniques in Web 2.0-aware content filtering, tools and safe access to rich media content.

Section 5.4 discussed the limitations of current content filtering technology with respect to emerging technologies such as Web 2.0 and recognized the need for new content filtering approaches that do a better job of distinguishing between useful and objectionable Web 2.0 content and tools.

Section 5.4 found that school jurisdictions are independently looking to trial safe ways of delivering Web 2.0 tools and content into school Intranet environments.

6.3.1 Web 2.0-aware Filtering

Access to a national pool of best practice site blocking knowledge would empower teachers to better manage the risk/reward balances associated with embedding access to popular Web 2.0 sites into their teaching and learning practices.

There is an opportunity to facilitate a national collaboration amongst school jurisdictions as to what constitutes best practice in fine-grained person-centric Web 2.0-aware Internet access control.

Desirable functions include:

- devolved management to the school and teacher level
- ability to set fine-grained Internet access controls based on location (e.g. school), roles (e.g. teacher), year level, groups (e.g. classes), timeframes (e.g. after school).

Large state jurisdictions often have the resources and economies of scale to implement and support leading edge enterprise class content filtering systems. In many cases these capabilities are beyond the means of smaller Independent schools and Catholic dioceses.

There is a case to further investigate the feasibility and desirability of a national schools-focused fine-grained content filtering service for smaller Independent schools and Catholic dioceses.

6.3.2 Web 2.0 Tools

Easy access within schools to locally installable versions of popular Web 2.0 tools for trialling and learning has proved to be a highly beneficial way to deliver online learning without the risks inherent in providing school access to popular Internet web 2.0 sites.

> *I really would like to use social networking sites like Facebook with my students to promote collaborative learning. But I worry about the privacy issues. If only we could have our own private version social network on our school Intranet?*
>
> *Secondary School Teacher*

However, access to safe, local versions of Web 2.0 tools varies widely across jurisdictions and between schools within a jurisdiction.

The introduction of a national ‘web 2.0 tools for schools’ collaboration would provide the opportunity to research the market, evaluate, test and recommend best of breed open source Web 2.0 tools once, for all jurisdictions. This collaboration would also identify gaps in the market and opportunities for developers to develop open source Web 2.0 tools to meet the needs of school jurisdictions.

6.3.3 Web 2.0 Content

> *When I am online at home I often find great YouTube videos that I would like to share with my class but YouTube is blocked at our school.*
>
> *Secondary School Teacher*

Popular social media sites such as YouTube, MySpace and Wikipedia contain a vast array of educationally-valuable rich media resources (along with an equally large collection of undesirable content). However, the ability for teachers and students to access the educationally-relevant content from these sites depends upon local site blocking approaches and thus varies widely across jurisdictions and between schools within a jurisdiction.

A national collaboration to identify ways to provide safe access to an educationally-relevant subset of content from these sites would be of benefit to all stakeholders.

6.4 Other Policy Implications

This section addresses other Web 2.0 site blocking policy implications that relate to existing or wider policy agendas. It also relates to other policy issues already covered in companions SICTAS papers[40] [41] [42].

The *Situation Analysis* report provided as part of SICTAS[43] noted that

> Australia's education policy makers must influence broader, higher-level policy, especially around the construction of necessary infrastructure. This includes policy that supports training for teachers in the implementation of ICT in teaching and learning to enable transformational change rather than change that is layered on top of existing practice.

A number of wider policy implications arising out this investigation into Web 2.0 site blocking are presented here. This report may be used to inform and/or provide additional evidence-based drivers for these initiatives.

6.4.1 Professional learning for teachers that incorporates Web 2.0 proficiency.

It is clear that teacher professional learning in digital literacy is a major priority if the potential of Web 2.0 for teaching and learning is to be realised. The value of collaboration as a professional learning model for teachers will be explored in more detail in the report on the SICTAS investigative research into workforce development capability.

The development of a national collaborative environment for teachers as a shared infrastructure for professional learning would provide a place where teachers can learn from each other how best to apply Web 2.0 tools and techniques to their teaching and learning activities.

This approach, along with models for professional learning, is described in more detail in the companion SICTAS reports: '*Collaboration in Teaching and Learning*[44]' and *'Education Workforce Capability'*[45].

6.4.2 A national approach to Web 2.0-aware cyber-safety that covers schools, parents and the home.

This report found that cyber-safety concern is the key barrier to more widespread adoption of Web 2.0 collaborative learning in schools.

Policies that relate to Web 2.0 in schools must be closely aligned with and supported by existing federal government cyber-safety initiatives and the Australian Communications and Media Authority (ACMA) focus on education as a key cyber-safety strategy[46].

6.4.3 Bandwidth in schools that is sufficient to support widespread delivery of new bandwidth-intensive Web 2.0-style rich media content.

This report found that bandwidth is still a key driver for blanket site blocking of Web 2.0 sites in many schools and a common barrier to more widespread delivery of Web 2.0 rich media content in schools.

Policies that relate to Web 2.0 in schools must be closely aligned with and supported by existing national bandwidth for schools initiatives.

6.4.4 Enhancements to the national curriculum to address cyber-safety and incorporate new 21st century modes of collaborative Web 2.0-style learning.

This report found that Web 2.0 technologies are a key enabler for and driver of new modes of collaborative online learning.

Policies that relate to Web 2.0 in schools must be closely aligned with current and planned initiatives for a 21st century learning curriculum.

6.4.5 A Trust Federation for Schools that allows students to collaborate safely beyond existing jurisdiction boundaries.

This report found that school jurisdictions are implementing in-house Web 2.0 social networking tools to support collaborative learning.

It is likely that the opportunity to extend these *walled gardens* across jurisdictional boundaries in a secure manner could form a key policy driver for current and planned initiatives for a Trust federation for schools.

6.5 Conclusion

Web 2.0 provides rich opportunities to improve student learning and Web 2.0 technologies significantly contribute to furthering personalised learning and support the development of critical Internet literacy.

However the current default position in most schools is to block Web 2.0 sites.

Web 2.0 site blocking is a risk management response to the difficult and not well understood issues that schools face in trying to balance cyber-safety concerns with the desire to harness innovative Web 2.0 style collaborative teaching and learning.

Overcoming these barriers will require a collaborative effort at the national, jurisdiction and school level. It is expected that the level of Web 2.0 access in schools will increase as school policy makers and teachers build expertise and gain confidence in managing Web 2.0 issues.

A key initiative to help to overcome these barriers and accelerate the adoption of Web 2.0 in schools is the establishment of a national collaboration so that leading jurisdictions, exemplar teachers and other education and ICT experts can publish and share their best practice and knowledge in regard to Web 2.0 policy, filtering, tools, content and curriculum.

7 Appendices

7.1 Appendix 1: Survey Questions

WELCOME!

Thank you

The purpose of this survey is to gain a snapshot insight into the current state of play with regards to site blocking of web 2.0/social networking sites within your jurisdiction.
.
This survey should take about 5-7 minutes to complete. It will open in a new window so you will be able to move between the survey and the demonstrator if you wish to.

We value your feedback and your time. All information you provide will be treated confidentially. No information will published that will identify you.

Thank you.

Please describe your jurisdiction

- HE
- VET
- State School
- Independent School
- Catholic School
- Other, please elaborate

_____

_____

_____

_____

Your policy on site blocking of web 2.0/social networking sites:

Do you block web 2.0/social networking sites?

- All
- Some
- None

Are there differences in your web 2.0/social networking site blocking for staff and students?

- Yes
- No

Here are some popular web 2.0/social networking sites.

Do you allow access to these sites for teachers?

- Google Mail
- Google Maps
- Google Apps
- YouTube
- TeacherTube
- Twitter
- Facebook
- Second Life
- LinkedIn

- Wikipedia
- Blogger
- Wikispaces

Do you allow access to these sites for students?

- Google Mail
- Google Maps
- Google Apps
- YouTube
- TeacherTube
- Twitter
- Facebook
- Second Life
- LinkedIn
- Wikipedia
- Blogger
- Wikispaces

Rationale

If you do block web 2.0/social networking sites, what do you see as the key risks and issues that prompted you to take this action? Please rate the following in terms of risk (high, moderate, low):

- Duty of care to students
- Concern about abusing school facilities for non-school use
- Concerns about information security and privacy associated with storing school data on public, commercial sites
- Potential impact on limited school bandwidth

Please list any other risks that prompted you to take this action

If you do block web 2.0/social networking sites, can an individual school or teacher request a site to be unblocked?

- Yes
- No

If yes, what is the process?

Please summarize your technical site blocking implementation. What blocking method do you use (tick one or more)?

- Content filtering
- white list of sites
- black list of sites
- other, please elaborate

If you do not block web 2.0/social networking sites, please describe any specific web 2.0/social networking terms and conditions of use?

Please feel free to add any comments here

7.2 Appendix 2: Survey Participants

Invitations were extended to the following representatives of the school sector.

State Jurisdictions		
NSW	*CIO*	Stephen Wilson
VIC	*CIO*	Adam Todhunter
SA	*CIO*	Kay Nolte
TAS	*CIO*	Trevor Hill
ACT	*CIO*	Mark Huxley
WA	*CIO*	Bevan Doyle
QLD	*CIO*	Richard Eden
NT	*CIO*	Greg Moo

Catholic Schools	
VIC	Stephen Elder
QLD	Liam Garvey
NSW	Brian Croke
TAS	Grant Sutherland
SA	Edgar Bliss
NT	Michael Avery
WA	Ron Dullard
ACT	Leonie Kelly

Independent Schools Executive Director	
WA	Audrey Jackson
VIC	Michelle Green
TAS	Tony Crehan
SA	Garry Le Duff
ACT	Jeremy Irvine
NSW	Geoff Newcombe
QLD	Dr John Roulston
NT	Gail Barker

Lutheran Education	
Queensland	Sue Kloeden
South Eastern region	Ken Bartel
SA NT	Barry Kahl

7.3 Appendix 3: Survey Results

What educational sector does your organisation belong to?		
Higher Education		0%
Vocational Education and Training		0%
State school		20%
Independent school		60%
Catholic school		20%
Other, please specify		10%

Does your organisation block web 2.0/social networking sites?	
All	10%
Some	90%
None	0%

Here are some popular web 2.0/social networking sites. Do you allow access to these sites for teachers?		
	Yes	**No**
Google Mail	90%	10%
Google Maps	100%	0%
Google Docs	100%	0%
YouTube	70%	30%
TeacherTube	90%	10%
Twitter	90%	10%
Facebook	80%	20%
Second Life	50%	50%
LinkedIn	90%	10%
Wikipedia	100%	0%
Blogger	100%	0%
Wikispaces	100%	0%

Do you allow access to these sites for students?		
	Yes	**No**
Google Mail	40%	60%
Google Maps	80%	20%
Google Docs	80%	20%
YouTube	30%	70%
TeacherTube	60%	40%
Twitter	30%	70%
Facebook	20%	80%
Second Life	0%	100%
LinkedIn	30%	70%
Wikipedia	80%	20%
Blogger	70%	30%
Wikispaces	90%	10%

If you do block web 2.0/social networking sites what are the key risks and issues that prompted you to take this action? Rate the following as high, moderate or low risk.			
	High risk	**Moderate risk**	**Low risk**
Duty of care to students	60%	40%	0%
Concern about use of school facilities for non-school purposes	10%	70%	20%
Concern about information security and privacy associated with storing school data on public, commercial sites	30%	60%	10%
Potential impact on limited school bandwidth	30%	40%	30%

Please list any other risks that prompted you to take this action.

1 Time consuming

2 litigation

3 inappropriate use and cyber bullying

4 Posts to these sites which have been detrimental to other students, and organizations.

Can an individual school, campus or teacher request a site to be unblocked?		
Yes		100%
No		0%

What is the process?	
1	automatic email to administrator requesting reclassification
2	Ask the principal/IT Admin of a school to request a site to be unblocked at the school level by the department.
3	email to IT staff... if it fits within policy is unblocked... if is outside policy IT staff may take it to Policy body for decision if needed. eg Youtube went thru this process at start of T4 thins your and is now unblocked for all.
4	Contact help desk by email or via web interface. It then is moderated to check.
5	Referred to either Curriculum or Pastoral Committees
6	ICT or principal in the school can fill in a white-list form which has to be signed by the principal and submitted to Technology and Information Services.
7	Occasionally, our filters block sites, which were not meant to be blocked. These sites are unblocked by the IT Staff. Other sites which have been determined to be inappropriate by the school executive are not unblocked unless the staff member gets approval from their Head of School.
8	Unblock request goes to the school ICT and from there the request is reviewed and it must not conflict with any issue raised in question 7.
9	Click a link on the block page to e-mail IT staff to have it re-considered
10	Can be done at a school level

What blocking method(s) do you use?		
	Yes	**No**
Content filtering	90%	10%
White list of sites	60%	40%
Black list of sites	80%	20%

If you use other methods of site blocking please list below.	
1	We use content filtering which filters categories.

	If you allow access to web 2.0/social networking sites, please describe any specific web 2.0/social networking terms and conditions of use your organization has implemented.
1	We have been trialing Mahara as an 'internal' social networking and e-portfolio example. It sits on a school server and is accessed with a school allocated login. Students and parents can access and view it from home
2	Signed acceptable use state - signed by all staff and the parents of school children.
3	Boarders have wide access to these sites after hours and not during prep.
4	Both staff and students are expected to sign a proper use policy before their account is activated
5	copyright
6	This is decided by the schools executive committee.
7	Schools have policies that guide staff and student use and the users must sign on to a contract for appropriate use of the Internet resources provided by the school and system.
8	rss feeds

8 Endnotes

[1] Internet Filtering and Cyber-safety survey, Mal Lee and Pru Mitchell, unpublished.

[2] http://www.educationau.edu.au/jahia/Jahia/home/pid/755

[3] http://www.educationau.edu.au/jahia/Jahia/pid/664

[4] Safer Children in a Digital World: the report of the Byron Review http://www.dcsf.gov.uk/byronreview/

[5] Williams, A, 2008, Situation Analysis (Strategic ICT Advisory Service), Education.au (unpublished)

[6] Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

[7] Travers, J, 2008, Education Workforce Capability (Strategic ICT Advisory Service), Education.au (unpublished)

[8] Education.au, 2008, Education.au and edna national consultations Update and Progress Report, November 2008, Reference: http://www.edna.edu.au/edna/webdav/site/myjahiasite/shared/0811_edna_consultation_report.pdf Accessed 3 December 2008

[9] 21clearn EdnA Group. Reference: http://www.groups.edna.edu.au/course/view.php?id=1843

[10] http://educationau.edu.au/jahia/Jahia/pid/734

[11] http://educationau.edu.au/jahia/Jahia/home/pid/724

[12] http://www.minister.dbcde.gov.au/media/media_releases/2008/060

[13] http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan

[14] http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan/Internet_service_provider_isp_filtering

[15] http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan/Internet_service_provider_isp_filtering

[16] http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan/education

[17] http://www.acma.gov.au/WEB/HOMEPAGE/PC=HOME

[18] http://www.zdnet.com.au/news/software/soa/NSW-to-censor-student-laptops/0,130061733,339292846,00.htm

[19] http://e-standards.flexiblelearning.net.au/news.htm#a15

[20] Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

[21] Becta, 2008, UK, Government and partners, Web 2.0 technologies for learning at KS3 and KS4 – Project overview, Reference: http://partners.becta.org.uk/index.php?section=rh&catcode=_re_rp_02&rid=14543 Accessed 21 November 2008

[22] Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

[23] Becta, 2008, E-safety and Web 2.0: Web 2.0 technologies for learning at Key Stages 3 and 4. Reference http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/web2_esafety.pdf

[24] Becta, 2008, E-safety and Web 2.0: Web 2.0 technologies for learning at Key Stages 3 and 4. Reference http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/web2_esafety.pdf

[25] Li, Q (2006), Cyber-bullying in schools. *Schools Psychology International*.

[26] Byron, T, 2007, Safer Children in a Digital World: The report of the Byron Review, Reference: http://www.dcsf.gov.uk/byronreview

[27] CBC News, Canada, 2008. Reference: http://www.cbc.ca/canada/new-brunswick/story/2008/11/21/nb-facebook-ban.html?ref=rss

[28] Wikipedia Selection for Schools (Download or DVD), 2008. Reference: http://schools-wikipedia.org/

[29] Horizon Report: 2009 K12 Edition, 2009. Reference http://www.nmc.org/pdf/2009-Horizon Report-K12.pdf

[30] Educators and ICT Usage: Market research report. http://www.educationau.edu.au/jahia/Jahia/pid/664

[31] Becta, 2008, E-safety and Web 2.0: Web 2.0 technologies for learning at Key Stages 3 and 4. Reference http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/web2_esafety.pdf

[32] Victorian Education Department Knowledge Bank initiative. Reference: http://www.dbcde.gov.au/communications_for_business/funding_programs__and__support/clever_networks/isd/knowledgebank_next_generation

[33] http://www.superclubsplus.com/

[34] Me, 2008, Education Network Australia (edna), Reference: http://www.me.edu.au/

[35] Becta, 2008, UK, Government and partners, Web 2.0 technologies for learning at KS3 and KS4 – Project overview, Reference: http://partners.becta.org.uk/index.php?section=rh&catcode=_re_rp_02&rid=14543

[36] Victorian Education Department 'Working with the Web: a guide for teachers on ethical and safe use of the Internet. Reference: http://www.education.vic.gov.au/management/elearningsupportservices/www/

[37] Victorian Education Department Knowledge Bank initiative. Reference: http://www.dbcde.gov.au/communications_for_business/funding_programs__and__support/clever_networks/isd/knowledgebank_next_generation

[38] Australian Government Digital Education Revolution: Professional Development for teachers. http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/Pages/ProfessionalDevelopmentforTeachers.aspx

[39] Australian Government Cyber-safey Plan. http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan

[40] Williams, A, 2008, Situation Analysis (Strategic ICT Advisory Service), Education.au (unpublished)

[41] Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

[42] Travers, J, 2008, Education Workforce Capability (Strategic ICT Advisory Service), Education.au (unpublished)

[43] Williams, A, 2008, Situation Analysis (Strategic ICT Advisory Service), Education.au (unpublished)

[44] Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

[45] Travers, J, 2008, Education Workforce Capability (Strategic ICT Advisory Service), Education.au (unpublished)

[46] Australian Government Cyber-safey Plan. http://www.dbcde.gov.au/communications_for_consumers/funding_programs__and__support/cyber-safety_plan

9 Bibliography

Australian Access Federation, Department of Innovation, Industry, Science and Research, Reference: http://www.aaf.edu.au/

Australian Communications and Media Authority, 2008, ACMA Media Release 156/2008 - 8 December: Australians increasingly rely on digital communications in work and leisure, Reference: http://www.acma.gov.au/WEB/STANDARD/pc=PC_311563 Accessed 16 December 2008

Becta, 2008, UK, Government and partners, Web 2.0 technologies for learning at KS3 and KS4 – Project overview, Reference: http://partners.becta.org.uk/index.php?section=rh&catcode=_re_rp_02&rid=14543

Becta, 2008, UK, Press releases, Becta report shows benefit of Web 2.0 in the classroom, Reference: http://news.becta.org.uk/display.cfm?resID=38417

Byron Review, Children and New Technology, 2008, UK, Safer Children in a Digital World: Executive Summary, Department of Children, Schoo.s and Families, Reference: http://www.dcsf.gov.uk/byronreview/pdfs/Executive%20summary.pdf

Delicious, 2008, USA, Reference: http://delicious.com/

Department of Education and Early Childhood Development, 2008, VIC, Strategies for 'Safe Schools are effective schools', Victorian Government, Reference: http://www.education.vic.gov.au/healthwellbeing/safety/bullying/safeschoolsstrategy.htm

Department of Education, Employment and Workplace Relations, National Safe Schools Framework, 2003, Reference: http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/national_safe_schools_framework.htm#publication

Department of Education and Training, 2008, NSW, Connected Classrooms Project, Reference: https://www.det.nsw.edu.au/strat_direction/schools/ccp/index.htm

Department of Education and Training, 2008, WA, Resourcing the Curriculum, Blogs in Education, Reference: http://www.det.wa.edu.au/education/cmis/eval/curriculum/ict/weblogs/

Department of Education, Training and the Arts, 2008, QLD, Smart Classrooms, Reference: http://education.qld.gov.au/smartclassrooms/

Education Network Australia (edna), 2008, Reference: http://www.edna.edu.au/

Education.au, 2008, Education.au and edna national consultations Update and Progress Report, November 2008, Reference: http://www.edna.edu.au/edna/webdav/site/myjahiasite/shared/0811_edna_consultation_report.pdf Accessed 3 December 2008

Facebook, 2008, USA, Reference: http://www.facebook.com/

Flickr, 2008, USA, Yahoo!7 Pty Ltd, Reference: http://www.flickr.com/

Gartner, 2008, Reference: http://www.gartner.com/

LinkedIn, 2008, USA, LinkedIn Corporation, Reference: http://www.linkedin.com/

Me, 2008, Education Network Australia (edna), Reference: http://www.me.edu.au/

Millea, J, 2008, Jen Millea @ education.au, Reference: http://blogs.educationau.edu.au/jmillea

Millea, J, 2008, Collaboration in Teaching and Learning (Strategic ICT Advisory Service), Education.au (unpublished)

MySpace, 2008, USA, News Corporation, Reference: http://www.myspace.com

NetAlert, ACT, Australian Government, Reference, http://www.netalert.gov.au/

O'Reilly, T, 2005, What is Web2.0?, O'Reilly, Reference: http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html Accessed 10 October 2008

Putland, G, Smith, K and Black, G, 2008, National Curriculum Board Framework for ICT Curriculum, Education.au (unpublished)

Second Life, 2008, USA, Reference: http://www.secondlife.com/

Teacher Tube, 2008, USA, Reference: http://www.teachertube.com

Travers, J, 2008, Education Workforce Capability (Strategic ICT Advisory Service), Education.au (unpublished)

Twitter, 2008, Reference: http://www.twitter.com/

Wikipedia, 2008, Reference: http://www.wikipedia.com/

Williams, A, 2008, Situation Analysis (Strategic ICT Advisory Service), Education.au (unpublished)

YouTube, 2008, USA, Google, Inc, Reference: http://www.youtube.com