

Christine Ferris. *An Examination of Internet Filters in School Library Media Centers*. A Master's paper for the M.S. in L.S. degree. April, 2000. 30 pages. Advisor: Evelyn Daniel

Internet filtering has become an issue since the introduction of the Internet in schools and libraries. Concerns about “inappropriate content” on the Internet have arisen, especially when children are involved. This study uses content analysis of messages from LM\_NET (a popular mailing list for practicing school library media specialists) to examine common practices and decisions made by school library media specialists with respect to Internet filtering software. Alternatives to Internet filtering are also discussed.

#### Headings:

Internet – School libraries

Internet filtering software

AN EXAMINATION OF INTERNET FILTERS IN SCHOOL LIBRARY  
MEDIA CENTERS

by  
Christine Ferris

A Master's paper submitted to the faculty  
of the School of Information and Library Science  
of the University of North Carolina at Chapel Hill  
in partial fulfillment of the requirements  
for the degree of Master of Science in  
Library Science.

Chapel Hill, North Carolina

April, 2000

Approved by:

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Advisor

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## Introduction

Since the introduction of the Internet in libraries and schools, many people have expressed concern about “inappropriate” content being accessed by users, especially children. The information accessed through Internet is not a resource that has been purchased or selected for subscription. Actual subject content of each user’s Internet session varies depending on the user’s personal, informational needs and technical skills in satisfying those needs. The Internet is also not part of a library’s physical collection, and is thus not under the control of a librarian’s selection process. School library media specialists and teachers have the responsibility of teaching children how to use information resources and technology effectively and efficiently in order to prepare them for life beyond school boundaries. To do this, professionals struggle with the student’s right to free speech, the definition of “inappropriate materials” for children, and what crosses the thin line into censorship. While keeping these aspects in mind, professionals also strive to follow the law. Librarians try to create an educational collection, made of both print and non-print resources, which meets the standards set forth in the American Library Association’s “Library Bill of Rights” (<http://www.ala.org/work/freedom/lbr.html>).

On June 26, 1997, the United States Supreme Court decided that the Communications Decency Act (CDA) was unconstitutional, declaring that material on the Internet has the same protection under the First Amendment as print material. Following this decision, the American Library Association, one of the challengers of the and “Statement on Internet

Filtering.” It states, “The American Library Association affirms that the use of filtering software by libraries to block access to constitutionally protected speech violates the Library Bill of Rights.” Now, librarians must choose whether to provide direct access to unfiltered information on the Internet or to create a protected environment for which advocates of filtering software call.

This paper will examine the practices of current school library media specialists (SLMS's), as they can be determined from an analysis of messages from the mailing list LM\_NET with respect to the use of Internet filters in schools. LM\_NET is a mailing list where its participants, SLMS's from around the world, send e-mail messages to one e-mail address. This message is then distributed to all the participants who subscribe to this service. LM\_NET is owned and moderated by Peter Milbury and Michael Eisenberg ([http://ericir.syr.edu/lm\\_net](http://ericir.syr.edu/lm_net)).

In this paper, the types of available filtering products (also known as blocking products), and then the practices and thoughts of the SLMS's from LM\_NET will be discussed. Finally, some alternatives to blocking technology will be examined.

## Literature Review

Miller and Shontz (1999) surveyed library media specialists who subscribe to *School Library Journal* during the 1997-1998 school year. They found that 75 percent of library media centers (LMC's) have access to the Internet; this is up from 49 percent two years earlier. This increase is rather significant in that the SLMS's who run the LMC's have faced or will face the decision whether or not to install blocking software or purchase some other filtering product, such as an online subscription service. The survey shows also that 41 percent of the library media centers surveyed already have used an Internet filter. More recently, the independent education market research firm QED reported that in May of 1999, 52 percent of school districts in the United States were using some form of Internet filtering technology and that by the end of the 1999-2000 school year 72 percent expect to do the same ("Beyond filtering . . . toward Internet productivity" 2000). Before the filtering technology is purchased, professionals need to know the terminology and to distinguish among the various features of each filtering product on the market.

A number of sources define the various methods that software developers have used to filter the Internet. Each vendor uses slightly different terminology to describe its methods. Some common techniques are "blacklists," "whitelists" and keywords. As Bobicki (1999) defines these terms, blacklists are lists of websites that are not allowed to be displayed, while whitelists are lists of permitted sites with other sites not allowed to be seen on the browser. These two ways of site blocking are time consuming for the software company in that someone has to determine which sites to add or delete from the lists. Since some librarians object to this "one-size-fits-all" method, some filter software

developers put the site lists into categories to make it easier for librarians to disable certain blocking. For example, from a list that includes items such as “violence,” “language” and “partial nudity,” “partial nudity” could be the only category turned on. Then the sites, which are listed in the “partial nudity” category, will not be allowed to be viewed while websites in the remaining categories will be permitted. This category filtering allows more flexibility for librarians who serve a wide-range of users and, thus, can more easily individualize which sites are to be blocked.

A third method of filtering, according to Bobicki, is blocking by keywords. By using lists of objectionable keywords, such as “sex” and “violence,” any page containing one of these keywords will not appear. Schneider (1998) points out that keyword blocking is also referred to as “content identification,” “content analysis,” “Dynamic Document Review,” and “phrase blocking” (36). Keyword blocking, despite its various names, is used in the least expensive filters because it requires less person power to set up and maintain than site blocking. However, it is less precise. The main problem is that it will not permit necessary sites through. Schneider tells about “pain” being one of the keywords on the filter CyberPatrol (36). Another classic case involves the blocking of sites about breast cancer due to the occurrence of the word “breast.”

Other methods of filtering described by Schneider (1998) include protocol, time, client, and user blocking. Protocol blocking will not allow retrieval of certain types of “Internet services.” That is, access to services such as telnet, Internet Relay Chat (IRC) or Usenet is forbidden. Time blocking limits access to the Internet to particular times of day. The third type of blocking listed above refers to “clients” as workstations, not as library patrons. Librarians can use client blocking to set user access levels for each

computer or for a specific location, such as a children's room in a public library.

The last type of filtering is user blocking. This lets a librarian set up individual or group access levels for users, but this feature is currently not widely available (Schneider, 1998, 38).

In addition to the above methods of Internet filtering, there are three different types of Internet filtering products available for schools as outlined in "Internet Filtering" (2000). One that is most often discussed in the literature is "software that can be installed on a school's server [or workstation] by school personnel." CyberPatrol is an example of this type of filtering product. The second type of filtering product works like an online database. Schools pay a subscription fee to have access to online filters, as they would for an online database. Finally, schools have the option of using a proxy server, where an outside (third-party) service maintains the server. The server acts as the filter. This type of Internet filtering product is easy for schools since they do not have to maintain them, unlike the first two types.

A few studies have been done to determine the pros and cons of various filtering products. One of the most ambitious is The Internet Filter Assessment Project (TIFAP), which was headed by Schneider (1997). It ran from April to September of 1997 and involved nearly 40 librarians worldwide. The project's main purpose was to "evaluate Internet content filters from a librarian's perspective" but not to offer an opinion as to whether filters should be used (Balas, 1998, 43). The librarians found that no filter among those tested blocked "inappropriate" sites perfectly, especially not if the software used keyword blocking. With all blocking techniques turned on, over "35% of the time the filters blocked some information they [the librarian researchers] needed to answer a



question” (Schneider, 1997). Only one filter was found “completely unsatisfactory.”

That was Cybersitter, a contradiction to what Bobicki found in his 1999 review of filters in which Cybersitter rated higher than any other filter. Given these contradictions from the research literature, it is no wonder that librarians have difficulty deciding which filter to install if they believe they must have one.

## Methodology

The professionals who participate in the LM\_NET mailing list have been chosen for this study as they exhibit knowledge of technology and the communication tools available with the Internet. In order to take part in this mailing list, users have to be able to send and receive e-mail messages. With this ability comes at least some familiarity with computers. This mailing list is owned and moderated by Peter Milbury and Michael Eisenberg and, according to its homepage,

focuses on the topics of interest to the school library media community, including the latest on school library media services, operations, and activities. It is a group for practitioners helping practitioners, sharing ideas, solving problems, . . . asking for assistance or information, and linking schools through their library media centers ([http://ericir.syr.edu/lm\\_net](http://ericir.syr.edu/lm_net)).

LM\_NET is open to school library media specialists all over the world, so the media specialist participant group is relatively cosmopolitan.

A content analysis of messages recently posted (in 1999) on LM\_NET will provide the answer to the question: "What are common practices and decisions taken by current professional school library media specialists with respect to Internet filtering software?" Specific questions include

1. What proportion of practicing school library media specialists who are active on LM\_NET use filters in their school media centers?
2. Which filters do they have installed?
3. Why did they decide to use filtering software and why did they choose the specific software they are using?
4. For those school library media specialists who do not have filtering software installed in their library computers, what other methods or tools do SLMS use to make sure that access to the Internet does not lead to children's exposure to inappropriate materials?

Content analysis has been chosen as the research method. Analyses of mailing lists for libraries have been done (Bar-Ilan & Assouline, 1997; Wildemuth, et al., 1997). These analyses have explored the topics and functions of various discussion groups. Bar-Ilan and Assouline analyzed PUBYAC (PUBLIC librarians serving Young Adults and Children) and Wildemuth, et. al., investigated numerous groups, among them LM\_NET. Both studies have found that mailing lists are utilized by librarians to share information. The latter found that LM\_NET messages discuss Internet access and resources frequently.

LM\_NET has online Archives (available at <http://ericir.syr.edu/plweb-cgi/fastweb?searchform+listservs>) that can be searched by (almost) anyone with Internet access. (It, however, has been noted on LM\_NET that some filters deny access to the Archives. This is a hindrance to school library media specialists trying to find information from past messages on LM\_NET.) To begin, a search of the LM\_NET Archives produced 372 documents that were potentially useful for this study. (The search string was “filtering and 1999”.) Some of these documents contain a “Hit.” A “Hit” on LM\_NET is a document that contains multiple messages. That is, a subscriber will send a question, called a “Target,” to the mailing list and receive responses. These responses are collected by the subscriber and posted to the mailing list. The entire document is called a “Hit.” Of the 372 documents found in the LM\_NET Archives, 43 were “Hits.” For the purposes of this study, each separate message in a “Hit” was treated as an individual document, so that 415 documents were added to the 372. Thus, in total, 787 documents were sorted into messages that contain information about Internet filtering or blocking and those that do not. Then each of the former messages was further

analyzed. Each of these messages was directed into categories. The categories were generated from the data. Some messages fit into more than one category. In this case, the message was divided into multiple units and each unit was assigned a category, as done in the project headed by Wildemuth (1997).

## Results

After sorting the 787 documents into relevant and non-relevant messages, 248 messages remained to be further analyzed. In order to determine the extent to which these messages represent the positions of school library media specialists, the occupation of the poster, when specified, was first examined. Thirty-eight percent of the messages (94 messages) with relevant content and occupation listed originated from SLMS's from various levels.

Level of SLMS	Number of Messages
Elementary School	23
Middle School or Junior High School	9
High School	34
Middle / High School	4
Unspecified	24

Other librarians (non-SLMS's) made up six percent of the messages (15 messages). School administrators accounted for almost six percent (14 messages), while others in the field of education represented four percent of the messages (10 messages). LM\_NET posters from other occupations consisted of four percent of the messages. Forty-two percent of the relevant messages (105 messages) were written by individuals who did not clearly state their occupation or job title.

Of the 248 messages, 23 percent (57 messages) of LM\_NET subscribers reported that they used (in 1999) some sort of filter in their district or school, while six percent (15 messages) specifically stated that they did not. The rest of the messages did not state exactly whether or not an Internet filter is being utilized, but contained some information about filters, which will be further discussed below.

Those who had filtering capabilities used various methods and types of filtering products. Of the 23 percent who said that they had Internet filters, 77 percent (43 respondents) reported what products they were using.

<b>Filtering Product</b>	<b>Number Who Report Using Product</b>
SurfWatch	10
Bess	9
CyberPatrol	9
I-Gear	4
Screendoor	2
X-Stop	2
Active Guardian	1
CyberLibrary	1
KID Proof	1
Novell's Border Manager	1
SonicWall	1
WebConnect	1
Websense	1

As can be seen, 74 percent of those SLMS's who mentioned what filters they utilized reported using SurfWatch, Bess, CyberPatrol, or I-Gear.

Many choices are available when the time comes to select filtering software. There are also many factors contributing to the decision process. One of the most important is whether the decision is being made by the school library media specialist or by an outside body. Six percent of the messages (14 messages) clearly stated who had made the final decision on installing filtering software:

<b>Entity Making Decision on Filter</b>	<b>Number of Occurrences</b>
District Level or School Board	6
School Level or Principal	5
Regional Council	1
State Level	1
Administration Not Sure Who Decided	1

Of these 14 messages, 50 percent of them were from SLMS's requesting information

about various filters to help them make recommendations to the groups who were deciding on filters. Overall, 12 percent of the total messages with relevant content (29 messages) were requests for information about filters. In some cases, the responses to these requests were collected and reposted to LM\_NET as “Hits” about filters. It is within these collective responses that SLMS’s can find a wealth of information about the various filtering software packages. A sample of relevant responses, results of requests for recommendations and information about filters, are presented here.

In this study, SurfWatch was the most-used filtering software in schools. SurfWatch offers products that can be installed on individual computers or on a server. The company sells customized packages for schools in addition to the packages that include five “Core categories” and an additional 15 “Productivity categories” (<http://www1.surfwatch.com/about/filter.html>). Few LM\_NET members who used this filter had positive comments regarding its filtering software. Of the 10 messages discussing SurfWatch, seven were negative, and only three positive. One of the positive points about the filter is that the software was updated daily. Another message pointed out that

for the most part, students have not been kept out of legitimate research due to SW. We had a problem early in the year when some student were doing reports on salamanders and other cold-blooded amphibians. The violence filter picked up on the terms “cold-blooded”.

Other comments pointed out negative aspects of SurfWatch. Fifty percent reported that the software blocked appropriate and necessary sites. It also allowed inappropriate sites to be accessed. As one school library media specialist noted,

My district installed SurfWatch and I hate it - it blocks me out of ridiculous things - (you can’t look up “The Owl and Pussycat”), but you

can get around it to more serious stuff without much effort - its [*sic*] a pointless inconvenience.

However, SurfWatch's website ("SurfWatch-How we filter") notes that "[w]hile no filtering program is 100 percent effective, SurfWatch is able to shield users from 90-95 percent [*sic*] of the explicit material on the 'net. SurfWatch currently tracks over 100,000 uniquely identified sites in our five core categories." This software uses keyword blocking, which can cause problems as noted earlier. One LM\_NET subscriber who writes articles for several publications found that one of his articles about adult education (<http://www.fno.org/eschool/adult.html>) had been blocked by SurfWatch because SurfWatch labeled the site as "sexually explicit material." The company also was using "adult.html" as a blocking keyword. Thus, any website with "adult.html" in the website address would not be permitted to be viewed by SurfWatch filtering users. According to the author, nothing in the articles was "inappropriate" to read. After a long and involved reconsideration process with the company, SurfWatch stopped filtering by using "adult.html" as a keyword.

N<sub>2</sub>H<sub>2</sub> is the producer of Bess Filtering System. N<sub>2</sub>H<sub>2</sub>'s website ("N<sub>2</sub>H<sub>2</sub>-A safe and productive internet 2000") claims that Bess "is now installed and in use by more schools than any other filtering system available." It was originally developed for schools, not for homes, so this might be one reason for the popularity of Bess in schools. Bess is a "proxy server filtered by human review and artificial intelligence" ("Internet  
N<sub>2</sub>H<sub>2</sub>, the producers of Bess, offers shared and dedicated proxy server service. The company's computer site houses the shared proxy service, while the company computer site or library's site houses the dedicated proxy service (Schneider,



1998, 37). Those LM\_NET members who named Bess as their filter did not say to which type of proxy service they subscribed. The latter service allows for more local control of what is being blocked. Inappropriate content is organized into categories, which can be turned off or on at the librarian's request. This filter also blocks websites using IP addresses. About one third of those who reported using Bess complained that it blocked useful websites. All of these people noted that it was relatively easy to get the useful websites unblocked, though.

I was *\*not\** happy about a filter at first, but it is actually not been a problem [*sic*]. Once I found a site blocked that had absolutely nothing objectionable remotely related to it, but the system allows our district Internet guy to unblock anything so that the problem was solved before noon on the day I discovered it. . . . The product allows enough local latitude on request that I am mollified and has yet to block essential, such as a search for "breast cancer" because of the word breast.

In addition, one person reported that the proxy server slows the connection to the Internet. Around 56 percent wrote that Bess has some positives features: the filter "worked well" and the block status of a website could be changed by either the librarian or at the district level. The fact that the status can be changed is one feature of a filter that is recommended in the literature.

Like SurfWatch, CyberPatrol offers different methods and types of filtering. It filters by keyword and site blocking, using a whitelist (called CyberYES list), a blacklist (called CyberNOT), and categories. These categories can be switched on and off. The filtering products from CyberPatrol can be tweaked even more so that inappropriate sites can be added to the CyberNOT list and appropriate sites can be added to the CyberYES list. There are client- and server-based versions. Schools have great customizability with this filtering option. As with any Internet filter discussed so far, there are mixed feelings

about CyberPatrol. Whereas one message mentioned that the ability to change the block status of a website existed, two-thirds of the LM\_NET members who used CyberPatrol reported that appropriate websites were being blocked. One person was upset by CyberPatrol blocking the popular, kid-safe search engine Ask Jeeves for Kids (<http://www.ajkids.com>). Ironically, the “Ask Jeeves for Kids Safety Information” (<http://www.ajkids.com/dearpare.asp>) webpage recommends the purchase of a filter, and specifically names CyberPatrol among others. Other LM\_NET subscribers have had similar problems:

We have Cyber Patrol on our computer, but I disconnected it. It wouldn't let me get into the sites I wanted - all of them were very safe sites. Plus, I don't think it did a very good job filtering all of the bad sites.

CyberPatrol's problem with allowing inappropriate websites is partly based on objectionable keyword filtering when the CyberYES feature is turned off.

We had a problem when a student was looking for the Simpsons tv show page [*sic*] and ended up with the (anti) OJ Simpson webpage. There was a page that was listed as a picture of Nichole. It was a nude photo but was permitted because the word “nude” never appeared on the page. . . . Cyberpatrol responded to our concerns but basically said that the system only relied on words.

This person brings up a good point that keyword filtering cannot block graphics and pictures on webpages. CyberPatrol is also known to conflict with other software and students are able to “get around it.” Despite these problems other school library media specialists in this study faced, one SLMS felt “more secure” with the filter. It is interesting to note that one SLMS had used CyberPatrol, but it caused problems. As a result, she switched to another filtering product, Screendoor.

I-Gear is the fourth, most-used filtering product in this study. It is a “server-based Internet Content Management that uses multilevel filtering. [I-Gear] [a]llows bookmarks and history to follow roaming users regardless of [the] computer being used” (“Internet Filtering” 2000). This permits school officials to check to see if individual students are mishandling their Internet privileges. A school library media specialist made some discoveries concerning the I-Gear package used at her school. Users can “get around it by using a search engine that uses frames like Askjeeves.”

Nine other filters were mentioned in the remaining 11 messages. Of these 11 messages, 82 percent of them (nine messages) were warnings against filters that have been found to be unacceptable for some reason. Only one, Sonic Wall, was praised as a filter which is efficient in its filtering and which provides “a list of attempted infractions and the computer IP” so that problems can be handled. The other filters blocked too many appropriate sites, allowed inappropriate sites through, or had other problems. In the case of CyberLibrary, for instance, an elementary SLMS reported that students had access to the control panel and would simply turn off the filter. Websense did not allow staff to change the block status of an incorrectly blocked site, and Screendoor was criticized for allowing users to download files from the Internet. Two of the other programs had technical problems. KID Proof did not work with a popular workstation security program, Fortres 101; Novell’s Border Manager produced duplicate IP addresses.

All of this information, both the positive and negative comments, provides school library media specialists with valuable ammunition in the fight over the filtering decision. For those SLMS’s who have been told that having a filter is not an option, these

messages can help them suggest a better filter. Or for those SLMS's who decide themselves to purchase a filter, these messages can also assist them. As an example of one school library media specialist's experience with KID Proof, she wrote,

I just wanted to pass this information along. I learned this the hard way, if you have Fortres 101 on you [sic] computer and are thinking of getting a internet filter do not get KID Proof. Though both are wonderful programs, they both the use the same files and you can over protect your computer to the point of no windows desktop comes up. There is a way to fix this but it is better to avoid it.

It is important to note that these are recommendations and testimonials from professionals who can assess the filtering products in an actual academic environment.

The reasons for purchasing Internet filtering products varied. Only eight of the 43 messages that contained information about the choice of filter being used in 1999 mentioned a reason or reasons for filtering Internet content in the school library media centers. None of the messages explained exactly why they chose one filter over another, other than what has already been discussed in this paper. The grounds for purchasing this type of software given here were more general. A few library media centers had filters due to decisions made on the district level. For one LMC, the Superintendent demanded a filter and, thus, it was part of a package deal. Another LMC used the district server, which had Bess already installed on it. Finally, on the district level, aggressive School Board members had the filters installed without the school library media specialist's knowledge until after the fact. While the district level makes the decision at times, the school level decides at other times. Many reasons for obtaining filtering software were practical. One SLMS utilized the filters at her school, in coordination with user logins, for tracking usage. Since one person cannot monitor all computers in a room at all times,

a blocking software can be used to alleviate the burden. SLMS's are busy professionals and this kind of software may assist them with monitoring computers. An alternative to filtering software is selecting websites for the school library media center. However, this is also time-consuming since there are millions of websites available on the Internet. So, a SLMS lets a third-party, a software company, help her with this. Finally, as one LM\_NET member wrote, "It's unfortunate that we have to block sites, but with the way it is there really is no choice at times."

Federal and state laws are being considered by legislators to mandate Internet filtering in school and public libraries with terminals. At the federal level, there is pending legislation tying filters with federal funding, such as Senator John McCain's "legislation mandating filters for schools and libraries that receive federal e-rate subsidies for Internet connections" (Flagg, 1999, 12). Different states have passed or are considering similar legislation. Amanda Ferguson in April 1999 provided a sample of this legislation from 15 states, one of which was Virginia. Virginia's State Legislature passed a law, H.B. 1043, "requiring all schools and libraries to adopt 'acceptable Internet use policies' and file them with the appropriate state agencies by December 1, 1999" (12). It, however, did not pass other legislation that would have forced public elementary and secondary schools to install filtering products on computers.

With such similar legislation being considered on the federal and state levels, it is no wonder that there is great confusion among school library media specialists and other school officials as to whether laws have been passed that affect their schools. One school installed filtering software on its computers because officials thought there was a law requiring this action. The school library media specialist at this school wrote to

LM\_NET asking for information on any recent legislation regarding mandatory filtering. Five other LM\_NET subscribers requested or provided such information to be posted to the mailing list.

Even with filters installed, be it for peace of mind, because the district mandated it, or due to legislative pressures, some school library media specialists still want to do more to create a safe, online environment. Eighteen percent of the SLMS's who posted messages (10 posters) to LM\_NET in 1999 in which they clearly stated that they employed a filter in their school also discussed using an additional method to ensure appropriate Internet access. The most prevalent actions were either having students (and staff) sign an acceptable use policy (AUP) or simply keeping watch of students using the Internet.

<b>Alternatives in Addition to Filtering</b>	<b>Number of Posters Employing Method</b>
Acceptable Use Policy	4
Monitoring/Supervising Internet Use	4
Students Login to a Network	2
Students Sign In or Check Out Computers	1

The school library media specialists who posted these messages were, in 50 percent of the responses (five messages), responding with additional information to a question about filters, not a question about alternatives to filters. This is important to note because it stresses the SLMS's feelings that filters can not be trusted to serve as secure guardians for students using the Internet. "All in all I feel somewhat more secure with a filter," one

vigorously patrol the computer area once I have allowed a

child to go on the Net." Another SLMS noted that the filter used in her school, SurfWatch, would create a report of infractions allowing disciplinary action to occur.

Not all school library media specialists saw the need for a filter. There were 14 messages written to LM\_NET by SLMS's who specifically stated that they did not have a filter. Of those, 79 percent (11 messages) wrote to discuss the measure or measures they used instead of Internet filters in order to regulate Internet access. For some of the respondents, the lack of a filter was seen as better in that the students have to learn how to use the Internet appropriately themselves. "I am glad that we do not have a filter package," stated one message, "I think that with one you assume all the responsibility instead of putting it on the students." Many of the alternatives being used by SLMS's can be seen as working to empower students and teach them responsible Internet use.

<b>Alternative Used in Place of Filter</b>	<b>Number of Posters Employing Method</b>
Acceptable Use Policy	5
Pre-Selection of Acceptable Sites	3
Monitoring/Supervising Internet Use	2
Remote Screen Monitoring <sup>1</sup>	1
Filtered Search Engine	1
Firewall Blocking of Inappropriate Sites	1
Student Sign-In	1
SLMS Works With Internet Users	1
Checking of History Files	1
Test on Internet Policies	1

Even with an alternative such as remote screen monitoring - a method of regulating Internet access that may seem to deplete students' privacy - the purpose is to make students aware of the fact that they need to think about making good, responsible choices while using the Internet. A message describing how this alternative has worked came from a high school SLMS who prefaced his remarks with the unequivocal statement "I

-- period."

What has worked for us is monitoring student screens . . . Word gets around and last year we had only one or two offenses. This year we added NetSupport to the Windows side (Lab and OPAC terminals) and have not had any incidents. We \*want\* students to know that their monitors can be observed. We don't want to have to deal with network violations but we will.

In another message, a SLMS wrote about how supervision can be used instead of a filter to help ensure responsible use:

In our district, we say the best filter for a child is the teacher. Internet access is only via [a] teacher putting in his/her password and then supervising student use. Only students with parent permission who have passed a test over district Internet policies can search even with teacher

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<sup>1</sup> The SLMS employs a software package which allows viewing of workstation screens from a master station. Random checks are made to see what students are doing.



supervision. I would do my best to discourage filtering at my school. The system in effect is working.

The most prevalent alternative (45 percent), having an AUP which students and possibly staff sign, was also seen as a way to avoid the costs and problems of a filter. “Our current policy is - every student and staff person signs an AUP prohibiting student surfing and chat rooms and requiring use for classroom purposes,” an SLMS explains. She went on to clarify that she thinks it is a better service to instill a sense of responsibility because “[w]e know that filters aren’t perfect and that disreputable sites work very hard to use names which won’t be caught. We also know that students are denied access to valuable sites when filters are used.”

The call for alternatives to filters comes not only from school library media specialists who do not have filters installed, but also from editors, library consultants, and other LM\_NET posters. Thirty-five percent of the messages in 1999 (87 total messages) described the use of alternatives to filters. Of those messages, 76 percent (66 messages) were posted in response to questions about the effectiveness of alternatives like acceptable use policies, by persons other than SLMS’s, or with no specific mention of whether or not a filter is being used. The information presented in these messages is similar to the data reported above.

<b>Alternatives In Place of or in Addition to Filters</b>	<b>Number of Posters Recommending Method</b>
Acceptable Use Policies	44
Monitoring/Supervising Internet Use	9
Teaching Parents/Students Responsible Use	5
Filtered Search Engines	4
Sign-In Sheets	3
Teaching Website Evaluation Techniques	3
Internet Access Only With a Defined Purpose	2
Login to a Network	2
Checking of History Files	1
Pre-Selection of Sites	1

Messages supporting acceptable use policies were slightly more prevalent in this group, 67 percent of the messages, as compared to the other groups, 40 percent for those with filters and 45 percent for those without filters, due to a “Hit” which directly addressed AUP’s. Once again, however, the messages echo the feeling that “[f]ilters are not going to save your students from inappropriate sites. The best way to handle this is to have guidelines for use of the Internet that make individual students responsible for the sites they access and adult supervision.” This message, coming from a SLMS who did not report whether or not the school is using a filter seems to speak, however, for both those SLMS’s who had filters and those who did not. The general consensus of the messages discussing alternatives is that they can be very successful in replacing a filter in that they offer students freedom with responsibility, but that even if a filter is being used, alternatives such as monitoring and acceptable use policies still need to be considered.

### **Limitations**

There were some limitations to this study. By using content analysis as a research method, this study was limited to the information that subscribers to LM\_NET provided without prompting from the author of this paper. A survey or interview would have prompted responses to certain questions. As such, some of the numbers used to answer the research questions are lower than expected, and, thus, should not be generalized to a great extent. In addition, the search for “filtering and 1999” in the LM\_NET Archives produced several documents which were not related to Internet filtering. Some, for example, dealt with filtering e-mail messages from LM\_NET using specific programs, such as Netscape Messenger. There may be more messages in the Archives related to Internet filtering products that were not found as well. Two hundred forty-eight messages, however, is a good sampling of messages related to Internet filtering in schools, including school library media centers. These messages provided this study with professionals’ practices and opinions, as well as alternatives to blocking technology.

## Conclusions

Through a content analysis of 1999 messages on LM\_NET, a mailing list for school library media specialists, in which filtering software in school media centers was discussed, answers to the questions posed in this paper were answered. This study found that, of the 248 messages posted in 1999 about filtering software, 23 percent of the persons clearly stated that they were employing some form of Internet filtering software. This result is lower than Adams' 1999 survey of LM\_NET users due to the limitations of content analysis addressed above. (Adams found that 32 percent of LM\_NET respondents used filters.) In May of 1999, a national survey concluded that 52 percent of school districts in the United States were using an Internet filter ("Beyond filtering . . . toward Internet productivity" 2000). It seems that the trend in the messages posted to LM\_NET points to an increase in the number of schools installing Internet filtering software. A number of requests for information about different brands of filters came from SLMS's facing a mandate to filter. There was a very vocal minority, however, which called for the development of alternatives to filtering, such as acceptable use policies or closer supervision.

It was further found that a number of different filtering packages were being used. SurfWatch was the most used software, with 23 percent of the school library media specialists reporting it was the filter they employed. The other popular filters were Bess and CyberPatrol with each being used by 21 percent of the SLMS's reporting. This study discovered that the LM\_NET Archives could perhaps provide a better review of filtering software packages than commercial reviewers. The anecdotal information presented in responses to requests for information offers an authentic view into the effectiveness of

the filter in a real setting. It should be noted that although Bess performed better, none of the top three filters received many complimentary reviews. Most of the respondents complained of ineffective filtering which blocked appropriate sites and allowed access to inappropriate materials. LM\_NET offers a forum in which SLMS's can discuss the problems they are having with different filters so that others can make more informed choices.

The true reasons why a school library media specialist might decide to install filtering software were not easily uncovered in this study. While some SLMS's posted to LM\_NET about installing filters to track usage or have a kind of selection process applied to the Internet, many of the other posters shared a different reason. Numerous requests for information on filters were prefaced with phrases like "My district is forcing me to install a filter, which one is the best?"

The final question concerned alternatives that are being used in place of or in addition to filters and was answered with many useful ideas. Overall, school library media specialists seem to endorse the need for an acceptable use policy. Only one SLMS stated that his or her school did not have an acceptable use policy. Many of the others agreed that a filter is not enough because of their known ineffectiveness. Thus, SLMS's reported, they supplemented their filters with AUP's and supervision. Not all schools took this approach to AUP's however. Some SLMS's discussed taking the AUP beyond the level of a simple permission slip. In some schools, students, parents and teachers are being educated in the fields of Netiquette and website evaluation. Empowered with a sense of responsibility, students are then allowed to navigate the Internet without the limitations of a filter. In other schools, school library media specialists are treating

Internet access as a school would another potentially harmful place, such as the playground, by requiring teacher supervision during Internet sessions. The school library media specialists who embrace alternatives to filtering as a way to foster responsibility in students were quite vocal in their denunciations of filtering packages. They also made very clear their belief that the systems they employed tend to be more effective than filters. They expressed a strong desire to remain filter-less. Their fear, however, is that the district or school they work for will succumb to the pressures of a “pushy board-member” or “Internet legislation” which has caused other districts to mandate filters.

## **Recommendations**

Given the continued legislative pressures for Internet filtering software in schools and the 20 percent increase in schools using filters in the 1999-2000 school year projected by some studies, it is vital that the issues of filter use in school library media centers and of alternatives to filters that are being successfully employed be further examined (“Beyond filtering . . . toward Internet productivity” 2000). LM\_NET offers a wealth of information concerning the use of filters and alternatives to filters in school library media centers. School library media specialists need to become aware of the availability of practical, authentic reviews of filter software and alternatives available through LM\_NET and LM\_NET Archive searches. More importantly, this information needs to be presented to those administrators who are making the decisions about installing filtering software. A full study of the limitations to research imposed by filtered Internet access, combined with an examination of the incident reports from library media centers employing filters as compared to those using alternatives is needed. Such a study could offer valuable ammunition to a SLMS attempting to follow the guidelines of the American Library Association by advocating for unfiltered Internet access.

## Resources

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