

Spring 1998

Analyses of acceptable use policies regarding the Internet in selected K-12 schools in the United States

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ANALYSES OF ACCEPTABLE USE POLICIES
REGARDING THE INTERNET IN SELECTED
K-12 SCHOOLS IN THE UNITED STATES

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

COLLEGE OF EDUCATION
LOUISIANA TECH UNIVERSITY

May 1998

UMI Number: 9829095

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April 17, 1998

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Selected K-12 Schools in the United States

be accepted in partial fulfillment of the requirements for the Degree of
Doctor of Education



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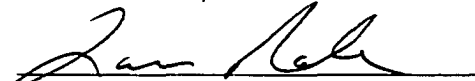
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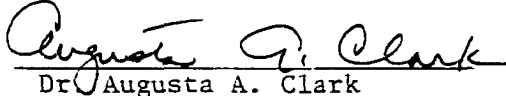
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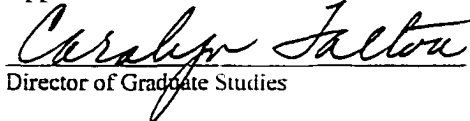
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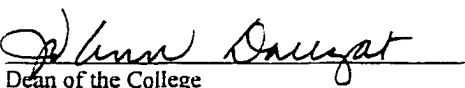


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ABSTRACT

The purpose of this study was to investigate the presence, origins, contents and purposes of Internet Acceptable Use Policies being used to address issues and concerns surrounding the Internet in 100 selected K-12 schools in the United States. The implementation practices of educators utilizing AUPs and the attitudes of educators toward the Internet were also examined. The study also investigated the number and location of Internet connections in the selected K-12 schools. A researcher-developed online survey was used to collect descriptive data in conjunction with qualitative data collected from a content analysis of 24 selected AUPs to address the purpose of this study and to answer the eight research questions presented to guide the research process. Descriptive analysis of the survey data was presented by frequency and percent. Qualitative analysis of the content analysis data was presented in narrative form. Data from the two sources were compared for confirmation and validation of the findings. The theoretical framework for the study was based on qualitative research theory and organizational communication theory. The findings indicated that K-12 schools were utilizing AUPs to address the Internet. The data indicated that AUPs were developed by educators usually at the district or school level. The key issues and concerns addressed in AUPs were found to be within four areas: liability, online behavior, system integrity, and quality of the content of materials on the Internet. Data suggested that the most common resource utilized to develop AUPs was the Internet policies of other schools or school districts. Access to the Internet was found to vary from

school to school with regard to number and location of connections. Most of the AUPs examined were developed for preventive reasons. The major intent of the policy writers appeared to be an effort to provide access to the Internet while at the same time protecting the rights of individual users and disclaim the liability of the schools as Internet service providers. The general attitudes of educators toward the Internet were positive; tempered with legal, ethical, pedagogical, social, and economic concerns and issues.

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CHAPTER I

INTRODUCTION

Well-known science fiction writer Arthur C. Clarke said of technology and the future: "The only way to discover the limits of the possible is to go beyond them into the impossible" (Moncur, 1997, paragraph 1). Technology seems to permeate most aspects of today's world as grocery stores, banks, department stores, government agencies, as well as schools utilize technology on a daily basis. Today's technology sometimes appears to have gone beyond the impossible, and educators are being asked to change to accommodate the overwhelming onslaught of these new technologies. Cultural anthropologist Jennifer James described the level of change required of educators as a result of new technologies as "unprecedented" (Institute for the Transfer of Technology to Education (ITTE), 1997b, paragraph 2) James insisted that today's educators must "grow a new fin" of technology; that is, develop a new way of thinking to adjust to the societal changes brought on by technology (ITTE, 1997b paragraph 1). Many educators are overcome by the demands to change what they are doing in the middle of their professional career and feel a "loss of integrity" (ITTE, 1997b, paragraph 2). Technologies only imagined a few years ago are now a reality. Noted author Ray Bradbury, keynote speaker at the 1995 ITTE Learning Conference stated that, "All great achievements had to be dreamt first, anything you dream is fiction, and anything you accomplish is science, the whole of history is nothing but science fiction" (ITTE, 1997a, paragraph 2).

Educators must deal with the seemingly overwhelming issues and concerns surrounding new technologies.

Technology continues to have a significant impact on various aspects of education. Despite reductions in school budgets across the nation, states are spending more on classroom computers than ever before (Vernadakis, 1997). The impact of technology on education was further evidenced by a national survey indicating that teachers ranked computer skills as more essential for students than the study of biology or Shakespeare. Strong directives from a presidential task force further underscored the importance of the information superhighway in educating K-12 students (Vernadakis). A recent survey by the U. S. Department of Education indicated that over one half of the nation's schools were connected to the Internet (Frieberger, 1996).

Statement of the Problem

As K-12 schools across the nation are being connected to the Internet, issues and concerns surrounding access and utilization by students and teachers are surfacing that must be acknowledged and addressed. Wolf (1994), Educational Technology Coordinator for Olympic School District in Bremerton, Washington, commented that technical issues such as how to connect, what is the cost, or who will provide the service were easy to address. The tougher questions involved issues surrounding such situations as deciding what to do when students accessed information that was racist, sexist, sexually explicit, or objectionable in some other way (Wolf). The Internet was initially created for adults; however, now that school-aged children have access to the Internet it is important that both the Internet and education

communities address the potentially difficult issues concerning minors on the Internet (Fishman & Pea, 1994). One way many schools and school districts are dealing with these concerns and issues is by developing acceptable use policies (AUPs). Acceptable use policies currently being used by schools and school districts vary in origin, content, purpose, and implementation. How and why these AUPs are developed, what elements are contained in the policies, and how the policies are being implemented are important keys to understanding the value of such policies and to determining if AUPs are the best way for the K-12 school community to address Internet access and utilization by students and teachers. The problem is for educators to determine how to best handle access to the Internet in K-12 schools. Educators need to take a leadership role in seeking appropriate measures to ensure safe effective utilization of Internet resources for teaching and learning.

Purpose of the Study

The purpose of this study was to investigate the presence, origins, contents, and purposes of AUPs being used by the educational community to address issues and concerns surrounding the Internet in K-12 schools in the United States. The implementation practices of educators utilizing AUPs in K-12 schools were also examined in the study. The researcher also examined the attitudes of educators toward the presence and utilization of the Internet in K-12 schools. The study also involved investigation of the number of Internet connections and where the connections were located in K-12 schools. The sample was two purposively selected K-12 schools from each of the fifty states to obtain a nationwide range of data for the study.

Justification for the Study

By 1993 there were approximately 19 million users on the Internet, with an annual growth rate approaching eighty percent (Fishman & Pea, 1994). As more and more K-12 schools link up to the Internet, it is imperative that the educational community develop a framework for thinking about some of the issues that are essential to making the connection between schools and the Internet successful (Fishman & Pea, 1994). Many educators believe that telecommunication technologies have the potential "to transform the curriculum and redefine schools" (Dyrli & Kinnaman, 1996, p. 56). Educational leaders struggled with questions about providing their staff and students with access to these powerful technical tools that significantly enrich and extend every school curriculum. As the roles and responsibilities of educators significantly changed and expanded, because of the infusion of technology into schools, it was imperative that they take a central role in deciding how technology was used, and in guiding, shaping, and evaluating new developments (Dyrli & Kinnaman). An understanding of how K-12 schools are currently utilizing AUPs would be helpful to educators in making effective policy decisions concerning Internet access. This study generated a body of knowledge that will contribute to that understanding.

Theoretical Framework

The conceptual and theoretical framework for this study was based on qualitative research theory and organizational communication theory. Qualitative research provided the primary basis for the research design of the study based on the works of Guba, Lincoln, Bogdan, and Bilkin (Guba & Lincoln, 1981; Bogdan & Bilkin, 1992). Organizational communication theory

provided the framework for understanding the role of educational policy within the context of this study (Hanson, 1996).

Hanson (1996) pointed out that classical theory, social system theory, and open system theory all incorporate a perspective toward the communication process. These perspectives suggested a theoretical framework for examining educational policy as a form of communication. The management information system model of organizational communication, defined as "a communication process in which information (input) is recorded, stored and retrieved (processed) for decisions (output) on planning, operating, and controlling" (Murdick & Ross, 1971, p. 292) was useful for understanding the focus of this study.

The paradigm of qualitative research includes ontological, epistemological, and methodological considerations (Guba & Lincoln, 1981). The ontological question is: what is the nature of reality, and what can be known about it? The epistemological question is: what is the relationship between the knower and what can be known, and how much can be known? The methodological question is: how can one go about learning what is to be known? The scope of qualitative research theory is multi-dimensional and complex. For the purposes of this study, the following basic beliefs and specific constructs of qualitative research were utilized in planning the study, developing strategies and techniques, implementing the data gathering process, analyzing the data, and interpreting the findings.

Lincoln and Guba defined a paradigm as a set of basic beliefs or metaphysics that deals with ultimates or first principles. It represents a world view that defines for its holder, the nature of the world, the individual's place in

it, and the range of possible relationships to that world and its parts. As explained in detail by Lincoln and Guba, the qualitative research paradigm is guided by critical theory and constructivist theory. According to Lincoln and Guba, critical theory states that reality is shaped over time by a series of social, political, cultural, and economic factors, while the constructivist theory says that realities depend upon people holding the construction; that is, there are no absolute truths, but informed or sophisticated and alterable realities. Critical theory is sometimes referred to as historical realism and constructivist theory as relativism. Epistemologically, critical theory posits that the investigator and investigated are interactively linked with values of the investigator influencing inquiry. The constructivist believes that the investigator and investigated are interactively linked and findings are created as the investigation proceeds. The methodological constructs of critical theory are dialogic and dialectical; that is, the transactional nature of inquiry requires a dialogue between investigator and subjects to move from ignorance to informed consciousness. The constructivist theory states that methodology is hermeneutical and dialectical; that is, constructions can be elicited and refined through interaction between and among investigator and respondents (Lincoln & Guba, 1985).

Research Questions

The following research questions were investigated:

1. Are K-12 schools in the United States utilizing AUPs?
2. Who develops AUPs for K-12 schools?
3. What does the content of AUPs reveal about the key issues and concerns addressed in AUPs?

-

4. What reference sources do education policy makers utilize to gather the tools and information needed to develop an AUP?
5. How much access to Internet is available to students in K-12 schools and where is the Internet accessible in the schools?
6. Why do educational leaders develop AUPs?
7. What implementation practices are found relative to violation of AUPs in K-12 schools across the nation?
8. What are the attitudes of educators toward the presence and utilization of the Internet in K-12 schools?

Definitions

The following definitions were applied for this study:

Acceptable Use Policies (AUPs): A written agreement between the provider (the school) and the user (the student), usually signed by students, their parents and teachers, outlining the terms and conditions of Internet use. It specifically sets out acceptable uses, rules of online behavior and access privileges. The policy usually also covers penalties for violations of the policy, including security violations and vandalism of the system. The signed policy is usually kept on file as a legal, binding document (Wentworth Worldwide Media, 1995).

Document: Any written or recorded material other than a record that was not prepared specifically in response to a request from the inquirer (Lincoln & Guba, 1985).

Document Analysis: Reconstructing the "constructions offered by or in the [data] sources" (Lincoln & Guba, 1985, p. 332).

Prescriptive literature: Literature that is not research-based; rather it is experience based (Hunt, 1995).

Purposive Sampling: Sampling method that allows the naturalist to pursue a particular purpose relative to the naturalistic nature of the inquiry (Lincoln & Guba, 1985).

Limitations

For the purposes of this study, the following four limitations were noted:

1. The scope of this study for the survey was limited to purposively selected school districts that have online access. On-line sites were located via K-12 listservs and other educational Internet sites. A minimum of 2 schools from each of the 50 states were included in the study.

2. The scope of this study for document analysis (AUPs) was limited to selected AUPs found in the literature, received in the pilot study, and/or found online through Internet searches.

3. The researcher-developed survey was field-tested only in selected school districts in the state of Louisiana.

4. The qualitative nature of this study limited the value of the findings for generalization to school districts other than those included in this study.

5. The legal implications of AUPs and how the courts have responded to legal actions were not specifically addressed in this study.

Assumptions

For the purposes of this study, the following assumptions were made:

1. Participants would understand the survey and answer to the best of their knowledge.

2. Participants would respond honestly to the survey.
3. The researcher-developed survey was an appropriate tool for the purposes of this study.

Summary

This study dealt with assessing the presence and utilization of AUPs to address the issues and concerns surrounding the Internet in selected K-12 schools in the United States. Data from an online survey and content analysis of AUPs were utilized to assess the purpose of this study.

Chapter one included the introduction to the problem, statement of the problem, purpose of the study, justification for the study, theoretical framework, research questions, definitions, limitations, and assumptions. Chapter two provides a current literature review and explores some of the related aspects of technology in education. Chapter three focuses on the methods and procedures used in this investigation. The results of the study are presented in Chapter four, and Chapter five contains a summary of study procedures, discussion of conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

Numerous articles have been written about the need for policies to address the issues and concerns surrounding the presence and utilization of the Internet in the K-12 educational community. These policies were commonly referred to as Acceptable Use Policies (AUPs) in the literature. Acceptable use policies, however, were too recent an innovation to have a well-documented impact or well-researched results. This chapter reviews prescriptive literature related to the many areas of concern prompted by the widespread influx of Internet access into the nation's K-12 schools. Prescriptive literature includes articles and books that described AUPs and related areas (Hunt, 1995). The literature about AUPs was, for the most part, experience-based rather than research-based. Some of the prescriptions described the need for AUPs; others were philosophical; while some were step-by-step instructions for writing an AUP. The ideas expressed in the literature were divided into three general categories: philosophical foundation, specific formulation guides, and related issues. Also included is a brief review of three educational policy studies that utilized content analysis as a research methodology.

Philosophical Foundation

Prescriptive AUP literature often presented the need for educators to become aware of and address the problems and prospects that the presence

of technology creates in schools. A number of writers proposed the need for the educational community to take action from pedagogical, social, and/or economic standpoints (Day & Schrum, 1995; Fishman & Pea, 1994; Futoran, Schofield & Eurich-Fulcer, 1995; Kerka, 1994; Mitchell-Powell, 1995; Plotnick, 1996; Thornburg, 1995). This philosophical rationale described the impact of technology on today's schools, implications of what the future would bring in the way of technology advances, and how the business of education could and should be changed as a result of the new technologies.

In order to meet the demands of a changing society, Day and Schrum (1995) declared that sound acceptable use policies were needed to prepare schools to address adequately the issues involved with students' utilization of the new technologies. Day and Schrum strongly suggested that there was a compelling need for schools to respond adequately to changes in society so that students will be prepared to be successful in today's and tomorrow's world. Plotnick's (1996) content analysis to identify trends in the field of educational technology revealed that thirty percent of public elementary schools and forty-nine percent of secondary schools had Internet access in 1995 and that connections continue to grow by an eighty percent increase annually (Fishman & Pea, 1994). A significant educational trend identified by Plotnick was that "advocacy for the use of educational technology has increased among policy groups" (paragraph 5).

Puk (1993) claimed that it is important that today's students "acquire the knowledge and skills to be both intelligent consumers of technology and doers of technology" (p. 29). Because technology has both cultural and social context, Puk also noted that technology is a social process with implications for

one's private and professional activities. Because today's society is highly technological, it is important that education develop in students the capability for lifelong learning in all of the disciplines which contribute to that environment (Lisensky, Pfnister & Sweet, 1985). Technology is not just sophisticated machines such as lasers and satellites and is not a recent invention of the twentieth century. Throughout history, technology has existed as "the processes and products by which humans have coped with and changed their environment" (Kerka, 1994, p. 1). Technology includes such items as musical instruments, typewriters, pens, and forks. Lisensky et al. say that technology includes the tools, the systems within which the tools are used, and the way in which society manages the environment (as cited in Kerka, 1994). In 1990, Custer commented that technology is an integral part of today's culture as a change agent in social, economic, and cultural aspects of the environment. The differences between technology advances in the past and technology advances today are (a) the rapid pace of change, (b) the global scope of the effects, (c) the complexity and interdependence of today's technologies, and (d) the cultural value of technology in today's society (Kerka).

Technology has greatly changed the way people live and work. Gianni and Weitz (as cited in Kerka, 1994) remarked that occupational structure in today's age of information is based on mental rather than physical abilities. The nation's schools must provide students with the necessary skills and abilities needed in today's technological environment. Kerka declared that continuous technological change requires people to be flexible with the attitudes and skills of lifelong learners to cope successfully in both leisure and

work endeavors. He also claimed that this flexibility requires both education and training: training for application skills and education for commitment and perspective that give meaning to the practice of those skills. According to Kerka, the integration and application of technology into the curriculum is pedagogically sound, and the utilization of technology easily supports several current educational emphases such as critical thinking; cooperative learning; accommodation of various learning styles; theory paired with practice; abstract and applied knowledge; interdisciplinary approaches; integration of academic and vocational education; multicultural awareness; and ethics, responsibility, and values.

According to Kerka (1994), several considerations are significant in preparing students for life and work in a technological society. For example, it is important that the myth that males are innately better with technology than females be guarded against. Issues such as equity of access, respect for culturally diverse attitudes about technology, increase of access, and compatibility of technology with values of all cultures should be addressed. Kerka insisted that because technology has social, cultural, and environmental impact, users of technology must be taught ethics and values and how to form convictions and make life-style choices.

Formulation Guides

There was an abundance of literature available to assist educational policy writers in developing AUPs for their school districts (Day & Schrum, 1995; Dyrli, 1996; Fishman & Pea, 1994; Wentworth Worldwide Media, 1995). A number of articles offered step-by-step guidelines for developing an AUP and then listed online sites that have copies of AUPs available online and/or

supplied templates for creating one's own policy (Wentworth Worldwide Media, Dyrli, Day & Schrum). One such site was Wolf's (1994) online document that provided helpful background, practical guidelines, and sample policies for educators who might be struggling with Internet issues and concerns. The first part of the document identified the issues and concerns of educators involved in writing and implementing AUPs. The major areas of concern identified were intellectual freedom, copyright, limited resources, and plausible deniability. In the second portion of the document, Wolf gave three sample policies that were examples of different approaches that schools might choose to address Internet issues and concerns. The first sample policy took the positive approach and assumed that the signer "understands the issues and is volunteering the agreement points" (paragraph 21). In the second example, the approach was less positive and "consists of a list of prohibitions with the potential for stating penalties for specific transgressions" (paragraph 22), while the third example seemed to say "this is the way things are" (paragraph 23). Wolf then offered a policy template to be used as a guide for writing AUPS that was a combination of the three sample policies. Other online sites useful to AUP writers included the extensive collection of resources concerning AUPs at <http://www.rice.edu/armadillo/acceptable.html> (Perkins, 1993), the gopher site maintained by Hendry at gopher.oise.con.ca which provided resources and a space for discussion about Internet in schools (Hendry, 1997), and Pitsco's Launch to Acceptable Use Policies site at <http://www.keypals.com/pitsco/accept.html> which had an overwhelming list of links to resources for those interested in AUPs (Pitsco, 1997). There were several sources available in print form to guide policy makers in the

development of AUPs. Two excellent print sources were *An Anthology of Internet Acceptable Use Policies*, by the National Association of Regional Media Centers (NARMC), which contained copies of 27 university and K-12 school district policies (NARMC, 1995); and *Plans & Policies for Technology in Education: A Compendium*, by the National School Boards Association (NSBA), which included several K-12 district AUPs (NSBA, 1995).

Fishman and Pea (1994) suggested several analogies useful in establishing a framework for developing AUPs. "It is not farfetched to consider the Internet, at least in part, as a vast digital library" (Fishman & Pea, p. 24). They also recommended several additional sources as either reference tools or templates for policy writers to utilize in developing AUPs: (a) the code of ethics of the American Society for Information Science; (b) Prodigy's strict editorial policy for public forums and its members' e-mail exchanges; (c) school conduct codes that outline appropriate school behavior, outline rights, and set behavioral expectations for students; and (d) rules that apply to appropriate student behavior on field trips off campus. Recommendations and step-by-step guides for developing AUPs were readily available both in print and online for educators to access.

Related Issues

Internet connections in K-12 schools offer students and teachers an almost overwhelming array of information and communication possibilities. Those connections also bring an almost overwhelming array of problems and concerns that must be addressed to ensure safe and appropriate use of the Internet. These concerns extend well beyond the school walls. The controversial Communications Decency Act, the anti porn bill passed by

Congress in 1996, was declared unconstitutional by the U. S. Supreme Court on June 26, 1997. The Center for Democracy and Technology and People for the American Way of Life stated in its constitutional analysis of the Communications Decency Act that the act would make it a federal crime to put online, where children might see it, not just the obscene or the pornographic, but any “indecent” word or image (Center for Democracy and Technology and People for the American Way, 1995). Conservatively minded parents want access withheld from minor children, while the American Library Association has endorsed a policy of unrestricted access to electronic resources in the same way that they have supported equal access to print materials (American Library Association Council, 1990).

Some schools choose to address Internet concerns and issues by utilizing school board policies rather than AUPs (McKenzie, 1995). McKenzie pointed out that the basic difference between the two types of policies was that school board policies extend beyond the definition of acceptable behaviors by users of information systems. He concluded that board of education policies describe acceptable behaviors much as AUPs do, the difference being that board policies relate the standards for acceptable behavior on the Internet to the district's policies on student rights and responsibilities (McKenzie). He described a sound board of education policy as one that

...takes a position on access to potentially controversial information and relates these new information resources to preexisting policies on curriculum and the selection of curriculum materials, outlining clear expectations for staff supervising student use...also outline(s) staff

responsibilities and rights as employees using these utilities (McKenzie, paragraph 2).

Limiting access was another strategy utilized by some schools to address Internet concerns. These technological fixes allowed system administrators to limit access to Internet materials (Allison & Baxter, 1995). At the school level, this strategy could be accomplished by limiting access to sites deemed suitable for children or by blocking access to sites deemed unsuitable for children (Allison & Baxter). Another way to limit access was the utilization of "intelligent software to filter information" such as SurfWatch (Allison & Baxter, p. 7). According to Kadie (1997), any limited access alternative utilized by schools to address Internet access would be subject to examination in terms of freedom of information and censorship rights of individuals. The concern to protect these rights may be why a number of schools and school districts opted to utilize school board policies and AUPs rather than limit access through electronic fire walls or filters to address the concerns surrounding the Internet. Information technology consultant Willard (1996) noted that utilization of blocking software to limit students' access to certain kinds of information offers a costly sense of false security. According to Willard,

The greatest danger to our young people through Internet access is the possibility that they will become involved with an 'online stalker,' and make the mistake of meeting with this individual in person resulting in a less-than-desirable outcome (Willard, paragraph 7).

Schools must establish a balance between protecting the rights of children to access online resources and at the same time ensure the safety and appropriateness of materials accessed by children via the Internet.

Several writers strongly suggested that educational leaders develop AUPs to protect their school districts from problems concerning equal access, district liability, copyright, censorship, and freedom of information (Futoran, Schofield & Eurich-Fulcer, 1995; Jensen, 1995; Mazur, 1995a; Mazur, 1995b; Sanchez, 1996).

It was determined, from the review of literature concerned with methodology for examination of educational policies, that a content analysis would be appropriate for this study. Three relatively recent studies conducted in the area of educational policy dealing with technology utilized qualitative techniques (Barrow, 1994; Cusack, 1996; Hunt, 1995). Cusack utilized content analysis as the primary research design in his study of school district strategic plans. Hunt's study to determine how local school districts formulate educational technology policy included content analysis as a strategy in analyzing interviews. Content analysis of interview transcripts and documents was utilized by Barrow in her 1994 investigation of the policies and practices that govern the selection and acquisition of information technology at public universities.

Summary

A large portion of the literature available concerning AUPs in K-12 schools was prescriptive in nature; that is, it was experience-based rather than research-based. The value of such literature to this study lies in the relatively short history of AUPs and the dynamic nature of technology in today's world. It is evident from the literature that there are social, cultural, pedagogical, and economic imperatives that strongly suggested the need for K-12 schools to develop and utilize AUPs. The literature also provided sufficient tools for policy

makers to utilize and develop AUPs. The review of literature effectively supported the purpose and design of the study; that is, a qualitative and descriptive research design to examine AUPs as they are currently being developed and utilized in K-12 schools.

CHAPTER III

METHODOLOGY AND PROCEDURES

This chapter describes the methodology used to investigate the questions posed in this study. The sections of this chapter describe the research design, sample selection, instrumentation, procedures, internal validity, pilot study, and data analysis. Little is known about how educational leaders formulate policies to address Internet concerns and issues surrounding the process. Existing AUP literature consisted of unsupported prescriptive models. The nature of the study indicated qualitative research methods in conjunction with descriptive statistics.

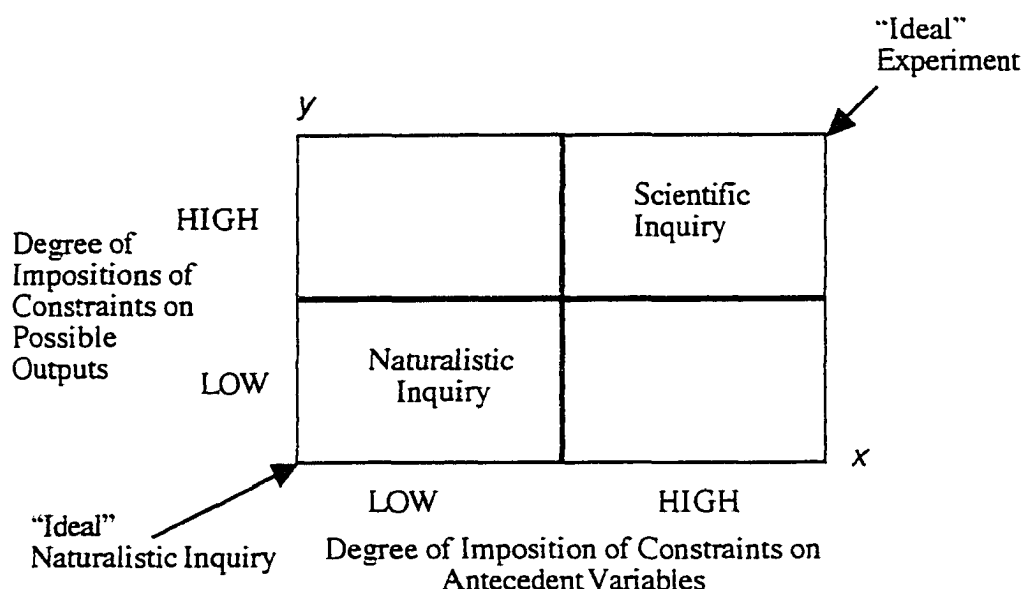
Research Design

The main focus of the study was, how do K-12 schools address the issues and concerns surrounding the utilization of the Internet by students and teachers? Since there was little previous research on this question at the K-12 level, there was a need for a foundational study. The foundation of this inquiry lies in the opinions and perspectives of educators, as well as the words of the practitioners in the formation of policy and related experiences.

The nature of the problem led to a quasi-qualitative study (Merriam, 1991; Yin, 1994) utilizing content analysis and a survey as the primary methodologies. According to Willems (Willems & Raush, 1969), the domain of inquiry is based upon two dimensions: antecedent conditions and outputs.

Willems' chart displays these two dimensions orthogonally, permitting labeling of various positions in the domain as experimental or naturalistic along the continuum from the ideal naturalistic inquiry to the ideal experiment (see Figure 1).

Figure 1. Representation of the Domain of Inquiry



Source: Based on Willems and Raush, 1969, p. 47.

The factors that impinge upon the inquiry at the outset are displayed along the x-axis of Figure 1, and the outputs, arrayed along the y-axis, are the factors the inquirer may impose once the inquiry is under way. The extreme upper right-hand corner of Figure 1 represents the position of maximum constraints on both antecedent conditions and outputs and may be thought of as the epitome of scientific inquiry, or the ideal experiment (Guba & Lincoln, 1981). The extreme lower left-hand corner of Figure 1 represents the position of minimum, or zero, constraints on both antecedent conditions and outputs

and thus represents the ideal naturalistic inquiry. Theoretically, therefore, an inquiry could be plotted somewhere in this inquiry domain. This concept was useful for two reasons: first, it suggested the possibility that all forms of inquiry can be understood within a single conceptual structure; and second, it suggested that pure forms of inquiry, either entirely scientific or entirely naturalistic, are rare. In other words, most inquiries combine these approaches in one way or another (Guba & Lincoln). The methodology of this study was more naturalistic or qualitative than it was experimental or quantitative. This study would fall well within the naturalistic inquiry portion of Willems and Rausch's *Domain of Inquiry* (See figure 1). The content analysis of the AUPs was a qualitative methodology. The descriptive analysis of the survey data was both qualitative and quantitative.

The utilization of multiple sources for data gathering is a qualitative method or strategy. Qualitative studies "focus on a few units, [they] are limited in their representativeness. They do not allow valid generalizations to the populations from which their units came..." (Isaac & Michael, 1981, p. 48), and they attempt to "understand human and social behavior from the 'insider's' perspective" (Ary, Jacobs & Razavieh, 1990, p. 445). Content analysis of the AUPs and portions of the survey responses allowed the insider's perspective in that it was based on the words of the policy writers within the context of the document's environment. Experimental inquiry requires control over behavioral events, which was not possible or intended in this study. The nature of this inquiry was to report on the process of acceptable use policy formulation and implementation currently practiced in selected K-12 schools.

Data were analyzed utilizing content analysis and descriptive statistical methodology combined for confirmation of findings.

Content Analysis as a Research Strategy

The use of qualitative methodology to examine educational policy does not appear to be widespread; however, there are sufficient examples found in the literature to confirm the appropriateness of the qualitative research design for further studies on educational policy (Barrow, 1994; Cusack, 1996 & Hunt, 1995). Qualitative and survey research strategies were utilized in Barrow's investigation of the policies and practices involved in the acquisition of information technology. Cusack utilized a content analysis research design to examine the components and characteristics of strategic plans of selected school districts using the Cambridge System of strategic planning. Another study pertinent to qualitative research methodology involving educational policies was Hunt's analysis of how local school districts formulate educational technology policy. The study presented, in detail, the qualitative analysis of the policy formulation process within the educational environment. Such studies affirmed the appropriateness of content analysis to analyze educational policies.

Content analysis was defined by Sutherland, Monson, and Arbuthnot (1986) as the objective, systematic study of specific aspects of a document. Rosengren (1981) pointed out that one important use of content analysis as a research methodology is for the identification of cultural elements that indicate the state of beliefs, values, or ideologies in the system. This application was

consistent with the components incorporated into AUPs. Content analysis is applicable to both qualitative and quantitative operations on text.

Content analysis was described as a methodology that separates complex materials into their basic components so they can be measured and the intent of the author can be examined (Berelson, 1952). Weber (1985) noted that content analysis was helpful in describing trends in the communication process. These functions were aligned with the structure of an AUP and focused on attributes that should be definitive in such documents. According to Borg and Gall (1983), content analysis has been utilized often to analyze education resource materials.

Sample

The population for this study consisted of K-12 schools with online access to the Internet. Survey participants were purposively selected through online inquiries soliciting responses to a researcher-developed survey. The sample was purposively selected by individual e-mail solicitations to K-12 school sites located through various educational lists on the Internet. Solicitations were made until at least two responses were received from each of the fifty states. The population consisted of those respondents who volunteered to answer the online survey. When more than two responses were received from a state, the selection criteria were to include the most complete survey forms received. The online survey was completed and returned to the researcher via email on the Internet. The survey was formatted in hypertext markup language (html) code for the study. A pilot study was conducted utilizing the researcher-developed instrument in print format. The survey was revised based on the responses received in the pilot study.

Policy content analysis was conducted on 24 purposively selected AUPs gathered through online sites, policies found in the literature, and policies available in print format.

Instrumentation

The AUPs and the surveys were used to gather data. A copy of the researcher-developed survey is included in the Appendix. The AUPs were official documents of the selected school districts made available to the researcher through the Internet, found in the literature, or received in the pilot study of the researcher-developed survey.

Surveys were accessed by participants through a web site established for the study. The web site contained the survey in hypertext markup language format, a description of the study and a participant consent form. Responses were completed on the web site and then submitted via e-mail to a password-protected account. At least two schools in each of the fifty states were surveyed. The population for the study consisted of K-12 schools that have web sites on the Internet. From this population, the researcher solicited on-line survey responses from at least two selected schools in each state as the sample for the study.

Procedures

A proposed time frame for the study began with data collection and analysis through online surveys from November 1997 through February 1998. Collection of AUPs for content analysis was also conducted through February 1998. Collection of data from the surveys and the AUPs was completed by the end of February, 1998.

The researcher-developed survey was converted to hypertext markup language (html) and placed on the Internet. Selected school web sites were identified through online searches and e-mailed a request to participate in the study by responding to the online survey questionnaire. The researcher solicited responses from approximately 20 sites in each of the fifty states. Follow-up solicitations were made until the goal of two responses from each of the fifty states was reached. The searches for appropriate sites were conducted online through K-12 education listservs and other educational sites on the Internet. The researcher selected those sites that have on-line access and were K-12 schools. The responses were e-mailed to a specific server that transferred the data into a password-protected account.

Internal Validity

Internal validity was established for this study by assessment of validity through cross-checking. Qualitative research methodology often involves the utilization of multiple sources for data collection and comparison of the data by source to determine the validity of the findings. There were two sources of data for this study: surveys and documents. Content analysis was conducted by the researcher on data from each of these sources and then analyzed by cross-checking findings from the two sources for reliability and validity.

Pilot Study

A pilot study with the researcher-developed survey was conducted during February and March of 1997 with selected schools throughout Louisiana. Sixty-eight surveys were mailed out during the first week of

February 1997. Twenty-two surveys were returned. Based on an examination of the responses, the survey was revised to improve the clarity of the questions.

Data Analysis

The documents were coded and categorized using standard qualitative methods, as described by Merriam (1991):

In addition to coding units of data by obvious factors such as who, what when, and where, analysis involves the development of conceptual categories, typologies or theories that interpret the data. . . . Developing categories, typologies, or themes involves looking for recurring regularities in the data. (p. 133)

Analysis of the survey data provided descriptive information in four areas: policy origins/availability, implementation and utilization of policy, student access/utilization, and respondents' personal opinions and comments concerning Internet in their schools. Demographic information about the school and the respondent was also requested on the survey. This information provided additional insights into the formulation and implementation of AUPs. Descriptive statistics were utilized to obtain measures of frequency and percent.

Content analysis of AUPs was used to identify characteristics present in each of the areas of the policy. This methodology allowed the researcher to classify systematically characteristics of uniquely developed and written AUPs. Content analysis methodology provided a means to establish reliability and validity in analysis through a consistent framework of reference for interpreting

AUPs developed by diverse and unique school districts in a wide variety of geographic and demographic settings across the United States.

The information generated from the content analysis of AUPs was examined in context with the information generated from the descriptive analysis of the survey data. Examination of data from the two sources by cross-checking was used to establish credibility of the findings. The examination determined similarities and discrepancies in the two sources of data to further generate credible findings.

CHAPTER IV

RESULTS OF THE STUDY

This chapter presents an analysis of the data collected as outlined by the procedures described in Chapter three. It includes sections that discuss the purpose of the study, the demographic data collected on the sample of Acceptable Use Policy Surveys and the sample of AUPs, a separate section answering each of the research questions with the relevant descriptive statistical data analysis and qualitative data analysis, and a summary.

Purpose of the Study

The purpose of this study was to investigate the presence, origins, contents, and purposes of AUPs being used by the educational community to address issues and concerns surrounding the Internet in selected K-12 schools in the United States. Implementation practices of educators utilizing AUPs in K-12 schools and attitudes of educators toward the presence and utilization of the Internet in K-12 schools were also examined. The study also investigated the number of Internet connections and the location of those connections in selected K-12 schools. An attempt was made to assess this information to provide a foundational database since such information was not available in the current literature. This assessment was made by analyzing the data collected on the surveys and a content analysis of Internet acceptable use policies. The descriptive data from the surveys and the qualitative data from the content analysis were then compared for confirmation of findings.

Table 1

Demographic Data from Selected Acceptable Use Policy Surveys

Survey	State	Students	Faculty	Grades	Connections ^a	Position
(n = 100)						
1	AK	760	45	7-8	50	Computer teacher
2	AK	500	30	PK-5	10	Principal
3	AL	322	24	K-5	2	Librarian
4	AL	9000	1000	K-12	500	Other
5	AR	750	41	K-5	28	Other
6	AR	540	42	7-12	50	Principal
7	AZ	850	40	1-5	60	Other
8	AZ	2430	126	9-12	100	Other
9	CA	475	19	7-12	43	Principal
10	CA	730	42	6-8	60	Other
11	CO	475	25	K-6	50	Other
12	CO	775	55	6-8	42	Computer teacher
13	CT	780	60	5-8	5	Other
14	CT	470	35	6-8	4	Librarian
15	DE	675	90	PK-12	40	Librarian
16	DE	550	40	4-6	85	Other
17	FL	250	20	9-12	50	Computer teacher

Table 1 continued

Survey	State	Students	Faculty	Grades	Connections ^a	Position
<u>(n = 100)</u>						
18	FL	3400	115	9-12	300	Other
19	GA	1100	60	6-8	--	Other
20	GA	1400	80	9-12	2	Librarian
21	HI	630	30	K-6	30	Other
22	HI	560	45	9-12	95	Librarian
23	IA	376	21	K-6	25	Other
24	IA	320	26	K-12	30	Other
25	ID	386	25	6-8	35	Other
26	ID	300	15	1-5	30	Other
27	IL	280	25	6-8	60	Computer teacher
28	IL	600	42	PK-8	65	Other
29	IN	620	34	K-5	38	Other
30	IN	470	25	1-5	--	Other
31	KS	540	42	PK-5	140	Computer teacher
32	KS	190	15	6-8	38	Computer teacher
33	KY	1125	70	9-12	20	Librarian
34	KY	1900	110	9-12	10	Librarian
35	LA	10800	600	PK-12	1000	Other
36	LA	1200	90	9-12	20	Other

Table 1 continued

Survey	State	Students	Faculty	Grades	Connections ^a	Position
(n = 100)						
37	MA	1800	100	9-12	300	Computer teacher
38	MA	510	90	7-12	25	Computer teacher
39	MD	650	50	K-5	--	Librarian
40	MD	98	18	PK-5	2	Computer teacher
41	ME	1500	150	K-12	250	Other
42	ME	100	7	EK-5	25	Other
43	MI	1600	85	9-12	100	Librarian
44	MI	300	25	K-5	375	Other
45	MN	385	27	7-12	250	Computer teacher
46	MN	394	30	K-12	65	Other
47	MO	970	75	9-12	70	Librarian
48	MO	510	34	6-8	41	Computer teacher
49	MS	160	25	7-8	5	Computer teacher
50	MS	300	30	4-5	1	Other
51	MT	1200	90	K-8	250	Computer teacher
52	MT	3	1	2,5,8	1	Other
53	NC	800	40	K-5	396	Other
54	NC	360	60	PK-3	1	Other
55	ND	550	45	K-12	550	Computer teacher

Table 1 continued

Survey	State	Students	Faculty	Grades	Connections ^a	Position
(n = 100)						
56	ND	500	25	7-8	50	Other
57	NE	423	36	5-8	96	Other
58	NE	432	52	PK-12	140	Computer teacher
59	NH	475	60	PK-5	25	Other
60	NH	150	10	K-6	48	Principal
61	NJ	300	15	K-8	30	Computer teacher
62	NJ	1800	175	10-12	300	Other
63	NM	702	68	K-5	1	Other
64	NM	150	10	9-12	18	Other
65	NV	800	40	K-5	32	Other
66	NV	200	14	7-12	28	Computer teacher
67	NY	535	42	K-5	3	Computer teacher
68	NY	420	24	K-8	1	Computer teacher
69	OH	1121	115	9-12	150	Other
70	OH	7000	505	K-12	1500	Other
71	OK	270	25	PK-8	30	Other
72	OK	420	40	K-12	70	Computer teacher
73	OR	138	15	7-12	1	Other
74	OR	645	74	K-5	25	Other

Table 1 continued

Survey	State	Students	Faculty	Grades	Connections ^a	Position
<u>(n = 100)</u>						
75	PA	60	50	K-5	--	Librarian
76	PA	1800	120	10-12	60	Other
77	RI	400	40	7-8	100	Librarian
78	RI	815	78	9-12	61	Computer teacher
79	SC	655	42	K-5	5	Other
80	SC	1180	65	9-12	75	Other
81	SD	1423	91	K-12	200	Other
82	SD	200	20	K-12	3	Librarian
83	TN	1350	95	9-12	100	Other
84	TN	800	120	7-12	100	Other
85	TX	76000	5000	PK-12	1000	Other
86	TX	2500	130	9-12	150	Other
87	UT	720	45	7-8	100	Computer teacher
88	UT	1450	65	7-9	65	Other
89	VA	9500	750	PK-12	--	Other
90	VA	710	80	9-12	60	Other
91	VT	425	50	9-12	10	Librarian
92	VT	1000	45	K-1	28	Other
93	WA	410	23	K-8	2	Assistant Principal

Table 1 continued

Survey	State	Students	Faculty	Grades	Connections ^a	Position
<u>(n = 100)</u>						
94	WA	600	40	9-12	--	Other
95	WI	550	40	K-5	40	Other
96	WI	1000	64	9-12	75	Other
97	WV	400	35	7-8	60	Other
98	WV	620	50	7-9	30	Computer teacher
99	WY	15	26	K-5	25	Other
100	WY	220	15	K-6	70	Other

Note. All of the surveys represent individual school sites except numbers 4, 35, 41, 70, 81, and 85. Those six surveys represent entire school districts.

^a Eight surveys did not give a number for Internet connections.

Sample Demographic Results

Descriptive statistics were utilized in this study to describe the characteristics of participants in relation to the presence and utilization of AUPs by compiling and analyzing the demographic characteristics in terms of frequencies and percentages.

There were 178 surveys received during the data collection period from November 1997 through February 1998. The purposive sample was selected

from the 178 surveys received with the following criteria: (a) two surveys from each of the 50 states, and (b) completeness of the survey form.

Table 2

Demographic Summaries from Selected Acceptable Use Policy Surveys

Students	Faculty	Grade level	Connections	Position
12,687	177,789	55 elementary	10,792	23 computer teacher
		17 middle		14 librarian
		27 high		4 principal
		8 K-12		1 assistant principal
		6 system/district		58 other
		2 middle/high		
		3 elem/middle		

The sample for the study was 100 surveys purposively selected from the 178 surveys received. The demographic information collected on the surveys included name of school, state, number of students, number of faculty, grade levels, number of Internet connections, and position of respondent. Tables one and two provide the demographic information for the 100 surveys included in the study.

Table 3

AUPs Utilized for Content Analysis by State, Description of Institution, and Year Written (n = 24)

AUP	State	Description	Year Written
1	WA	District	1993
2	CO	District	1994
3	NE	School	1996
4	IL	District	1995
5	FL	District	--
6	MI	School	--
7	CA	District	1997
8	WA	District	1996
9	VA	School	1997
10	WY	District	--
11	WV	District	--
12	WI	School	--
13	TX	District	--
14	LA	District	1997
15	MI	District	--
16	MI	School	1993
17	MI	School	1993
18	MI	School	1992

Table 3 continued

AUP	State	Description	Year Written
19	NE	District	--
20	IN	School	1994
21	MI	District	1994
22	VA	State Network	1994
23	WA	District	1994
24	MI	District	1994

Note. Eight AUPs did not give a publication date.

By grade levels, the sample consisted of 35 elementary schools, 19 middle schools, 27 high schools, eight K-12 schools, six school districts/systems, two middle/high schools, and three elementary/middle schools. The sample represents 177,789 students, 10,792 Internet connections, and 12,687 faculty members. Five respondents to the survey did not provide a number for Internet connections. The responses to those five were two respondents inserted question marks, two respondents inserted the word "many," and one respondent inserted the word "schoolwide." Respondents to the survey were 23 computer teachers, 14 librarian/media specialists, four principals, one assistant principal, and 58 others. Table two, on page 36, summarizes the demographic data for the sample.

Content analysis of AUPs was utilized to provide qualitative data for this study. Analysis was done on the content of 24 AUPs gathered from three sources: the pilot study, print sources, and the Internet. See Table three, on page 38, for descriptive data on the sample of AUPs utilized for the content analysis process.

The content analysis was designed to provide answers to the eight research questions presented in Chapter three. The analysis procedure was designed to identify key words and phrases as well as an examination of the overall format of the policies. The qualitative data from the content analysis of the AUPs and the descriptive data from the surveys were then examined within the context of each of the eight research questions for validation of the findings from the two sources. The comparison of data from the two sources provided additional confirmation of the findings of the study.

Table 4

Answers to Survey Questions 1^a, 7^b, and 8^c by Frequency and Percent

Question Number	Response Options	Frequency	Percent
<u>Policy developed</u>			
1 (<u>n</u> =100)	Yes	82	82.0
	No	5	5.0
	In process of developing	13	13.0
<u>Available formats</u>			
7 (<u>n</u> =206)	Printed	83	40.3

Table 4 continued

Question Number	Response Options	Frequency	Percent
8 ($n = 85$)	On-line	25	12.1
	Hand-outs	54	26.2
	Orally	35	17.0
	Other	9	4.4
	<u>Revisions/updates</u>		
	Yes	26	30.6
	No	59	69.4

^a Do you have an AUP?

^b In what format(s) is/are your AUP available?

^c Has the policy been revised/updated since the original policy was written?

Research Question One

Are K-12 schools in the United States utilizing AUPs? Five questions on the A.U.P.S. provided information to answer this question. (see Table four, page 39) The first question on the survey was "Do you have an AUP?" with instructions for respondents to select one of the following three options: "yes," "no," "in process of developing," and if "no" to provide a brief explanation of how they address Internet in their school/district. All 100 participants responded to this question. Eighty-two responded "yes," five responded "no," and 13 responded "in process of developing." Four of the five respondents

who answered "no" to this questions provided information about other strategies utilized to address Internet concerns. Two respondents reported that their schools utilized blocking mechanisms to limit access to the Internet. On survey number 60 from New Hampshire, a respondent wrote, "Close supervision of Internet use. All e-mail is checked by a teacher before it is sent. Also, student research is limited to specific web sites or research is done with one on one supervision." A respondent from Massachusetts, on survey number 37, expressed concern because the school did not have an AUP in place:

When I tried to write a blurb to send home to parents to specify a few responsibilities and consequences until a formal AUP was established, I was told by the principal that our attorneys said that we could not send anything home that parents had to sign off in order for the students to get online. He said it would be like not giving text books to students. So we are a huge technology school operating with no standards. Each teacher ends up being responsible for running their classroom however they choose. Some are lax and allow freedom, some of us are more strict and try to monitor closely what is done on the Internet. We do have a block on our server that prevents students access to some sites.

Question seven was, "In what format(s) is/are your AUP available?" with instructions to check all that apply from the following options: printed, online, hand-outs in orientation, presented orally in orientation sessions, other please explain. Eighty-three respondents checked printed format, 54 indicated that they presented the AUP in hand-outs at orientation sessions, 35 indicated that they presented their AUPs orally, 25 had their AUPs available online, and nine

indicated that they have their AUPs available in other formats. The student handbook was reported by three respondents as the other format in which the AUP was presented to the students.

Question two was "Is your school AUP available online?" with instructions to select either "yes" or "no," and if "yes," to provide the online address. Twenty-two respondents indicated that their AUPs were available online. Question three was "In what year was your AUP written?" with a blank space for respondents to provide the year. The survey data showed that two AUPs were written in 1994, 11 in 1995, 43 in 1996 and 19 in 1997.

Table 5

Format Descriptors/Content Components Identified in 24 Selected AUPs

Content Component	Frequency	Percent
Mission/goal statement(s)	24	100.0
Disclaimer statement(s)	11	45.8
Required signature of parent/ guardian	20	83.0
Netiquette guidelines	5	21.0
Consequences of inappropriate behavior statement(s)	24	100.0
Network security statement(s)	21	87.5
Orientation requirement statement(s)	2	8.3

Table 5 continued

Content Component	Frequency	Percent
Formal presentation ^a	9	37.5
Informal presentation	15	62.5
Five pages or less in length	20	83.3
Six to ten pages in length	4	16.6

^a Formal or informal presentation was determined by length of policy, tone of introduction, and reference(s) to specific school/district within the policy.

An examination of the overall format of the selected sample of AUPs identified the following areas for analysis: (a) length of the policy, (b) discrete content components, and (c) formal versus informal presentation. The average length of the sample AUPs was just under four pages. The discrete content components identified in the AUPs were (a) mission/goal statements, (b) disclaimer statements, (c) parental consent forms, (d) netiquette guidelines, (e) consequences for inappropriate behavior statements, (f) network security statements, and (g) orientation requirement statements. An analysis of the content components, as well as length and wording, indicated that sixty-two point five percent of the policies were written in an informal manner. The other thirty-seven point five percent of the AUPs were more formal in wording and were longer than the more informal AUPs.

Question eight was "Has the policy been revised/updated since the original policy was written?" with instructions to select either "yes" or "no" and to explain if they answered "yes." Fifty-nine respondents indicated that no

revision or update had been made to the original policy, while 26 indicated that revisions and/or updates had been made to their AUPs since the original policy was written. Explanations for revisions/updates fell within four categories: (a) revisions were made on a regular basis, (b) revisions were made as a result of incidents and/or concerns that had arisen since the policy was written, (c) wording was changed to improve readability and/or clarity, or (d) the policy was rewritten to address evolving technologies. For example, a respondent from Tennessee, survey number 84, wrote, "Additional explanations were added for clarity"; a respondent from Alaska, survey number one, reported, "I believe it is revised on a regular basis"; and a respondent from Kansas, survey number 32, wrote, "Policies changed to handle problems that had arisen, to clarify difficult passages, and to reflect changes in practices in lab." Table four, on page 39, provides frequency and percentages on survey questions one, seven, and eight to illustrate the presence of AUPs in selected K-12 schools in the United States.

The large number of AUPs available in print, as well as on-line, was a clear indication that K-12 schools in the United States were utilizing AUPs to address the issues and concerns surrounding the presence and utilization of Internet in the education community. A number of sites on the Internet, such as the Rice University web site, the Academic Computing Policy Statements web site, and Pitsco's Launch to Acceptable Use Policies web site, provided full-text Internet policies. There were print resources also available that contained full-text copies of AUPs. Two excellent print sources were *An Anthology of Internet Acceptable Use Policies* published in 1995 by the National Association of Regional Media Centers and *Plans and Policies for Technology*

in Education: A Compendium, a 1995 publication of the National School Boards Association. In addition, AUPs of individual K-12 schools were available online via the individual schools' web sites. The volume of available AUPs and the ease with which they could be accessed affirmed the concept that K-12 schools were currently utilizing AUPs to address Internet policy needs. The analysis of the survey data and the content analysis data confirmed the presence of AUPs in selected K-12 schools.

Table 6

Answers to Survey Question 4^a by Frequency and Percent

Response Options (<i>n</i> = 85)	Frequency	Percent
Committee	62	72.9
One person	14	16.5
School board	9	10.6
Other	0	0

^aWho developed the policy?

Research Question Two

Who develops AUPs for K-12 schools? Question four on the survey was "Who developed the policy?" with instructions for respondents who have AUPs in place to select one of the following four options: committee, one person,

school board, or other. Space was also provided for respondents to name the positions of the committee members and/or the position of the individual person responsible for developing the policy, as well as a description of other responsible parties.

Eighty-five respondents answered question four on the survey. Sixty-two respondents indicated that committees developed their AUPs, 14 respondents indicated that one person was responsible for developing the policy, and nine indicated that the school board developed the policy. Respondents indicating that one person was responsible for developing the policy identified the following as the responsible parties: one technology coordinator, two librarians, and three others. (see Table six on page 45)

The content analysis of 24 AUPs revealed that most of the policies were developed by personnel at the school district level. Of the 24 AUPs examined, two were developed at the state educational network level, eight were developed at the individual school site level, and 14 were developed by personnel at the school district level. The policies examined were written between the years of 1992 and 1997, which indicated the current utilization of such policies. The results of the data analysis indicated that AUPs were developed by various individuals and groups within the K-12 school systems.

Table 7

Answers to Survey Question 17^a by Frequency and Percent

Response Options (<u>n</u> = 88)	Frequency	Percent
None	1	1.1
Very little	43	48.9
Some	39	44.3
A lot	5	5.7
Too much	0	0

^a In your opinion, how much “techno” language is present in the AUP?

Research Question Three

What does the content of AUPs reveal about the key issues and concerns addressed in AUPs? The survey results indicated that the current AUPs utilized by K-12 schools were relatively clear and understandable. (see Table seven on page 47) Question seventeen was “In your opinion, how much ‘techno’ language is present in the AUP?” with instructions to select one of the following options: none, very little, some, a lot, too much. The results were one indicated none, 43 indicated very little, 39 indicated some, five indicated a lot ,and no respondents indicated that there was too much technical language in their AUPs. The content analysis confirmed the findings

of the survey results; that is, very little technical language was found in the 24 sample policies.

The content analysis revealed several key issues and concerns addressed in AUPs that were categorized into four general descriptive areas: (a) liability issues and concerns, (b) on-line behavior issues and concerns, (c) system integrity issues and concerns, and (d) quality of content of materials on the Internet. It should be noted that within these four general descriptive areas were a number of legal issues that were not closely examined. Detailed descriptions of the issues and concerns identified in these four general descriptive areas follow, beginning with the findings that expressed liability issues and concerns.

The liability issues and concerns expressed in the AUPs were noted in three areas: (a) services liability, (b) damages and/or costs incurred by users, and (c) content quality and/or accuracy. Twelve of the AUPs examined contained liability disclaimer statements. Eight of the AUPs specifically stated that they could not be held liable for the availability of services provided by the system. The policies often stated what services were available to the system users such as, (a) electronic mail communication; (b) information and news services; (c) public domain and shareware software of all types; (d) discussion groups on a variety of issues; and (e) connections to many libraries, companies, agencies, and businesses. The disclaimers of liability for services usually stated that the system did not warrant that the functions of the network would always be accessible, nor that service would be error-free or uninterrupted. The second liability area dealt with disclaimer statements that addressed damages or costs that users might incur while utilizing the system.

The disclaimer statements declared that the system would not be liable for any direct or indirect, incidental or consequential damages sustained or incurred in connection with the use, operation, or inability to use the system; nor for any costs incurred by the user through use of the system. The quality and/or accuracy of the content available on the system was another area in which the policies declared that the school/district was not liable. Ten of the AUPs examined specifically stated that the school/district was not responsible for the accuracy or the quality of the information or materials available on the system.

The second general descriptive area of key issues and concerns identified in the content analysis process was online behavior of the school/district system users and unidentified others on the Internet. These issues and concerns addressed the behavior of the specific system users as well as the behavior of unidentified others on the Internet. That is, the policies stated that the users of the system should not engage in the described inappropriate behaviors and should be aware of and guard against the possibility of similar inappropriate behavior by others on the Internet. Policy content that addressed behavior dealing with inappropriate content was so broad that it was included in this area of findings as well as in the section describing Internet content issues and concerns. According to the content analysis of 24 AUPs, inappropriate behaviors were identified as the following: (a) violation of copyright laws; (b) utilization of the system for commercial, political, or religious purposes; (c) violation of the rights and/or privacy of others; (d) utilization of the system for non-academic purposes; (e) subscriptions to listservs and/or chat groups without prior approval from the system administrator; and (f) activity involving content that might be

pornographic, profane, sexually oriented, offensive, objectionable, defamatory, inaccurate, abusive, obscene, threatening, racially offensive, illegal, or otherwise inappropriate.

Fourteen of the policies specifically addressed the behavior of users with regard to e-mail activity. In those 14 policies, users were instructed to use e-mail only for the stated educational and research goals and missions of the school/district system. Inappropriate behaviors prohibited within email activities included (a) use of or receipt of inappropriate content with regard to language and intent; (b) chain letters; (c) privacy of individual accounts; (d) privacy of passwords; (e) failure to remove old messages; (f) use of another individual's account; (g) posting anonymous messages; (h) illegal activity; and (i) downloading, storing, or printing files that contained inappropriate content. Five of the AUPs included sections on netiquette; that is, polite behavior guidelines for network users. These guidelines expressed the need for users not only to guard against inappropriate behaviors, but also to abide by what might be generally accepted rules for polite behavior on the network. The guidelines suggested that the users (a) be polite, (b) use appropriate language, (c) use upper and lower case letters, (d) keep messages short and to the point, (e) check e-mail regularly and delete old messages as quickly as possible, and (f) not reveal personal information. As a final note in this general area, only two of the policies examined addressed student work online. Both of those policies outlined the process for students to submit materials for online access and cautioned the students to reveal no personal information other than their first name online.

The third general descriptive area identified was issues and concerns addressing the integrity and/or security of the network systems. Security of the network system was described as a high priority in nine of the AUPs examined. In those nine policies, users were instructed (a) to notify the system administrator or other appropriate person of any security problem, (b) never to demonstrate the problem to other users, and (c) never to use another individual's account without written permission from that person. The policies also stated that any person identified as a security risk would be denied access to the network system. Within the context of the security of the network system, other concerns specifically addressed in the AUPs were the following: (a) the limitations of resources on the system (space for storage of data), (b) efficient use of the network, (c) computer viruses, (d) vandalism, and (e) actions that might infiltrate or damage the integrity of the network system. Many of these concerns overlap, but were listed separately because they were presented in the AUPs utilizing various descriptive terminologies. For example, some of the descriptions of vandalism in one policy were presented under cautions about computer viruses in another policy, but the actions described were within the context of maintaining the integrity or security of the network system.

A related issue that was not specifically addressed in the disclaimer statements, but was mentioned in every AUP examined, dealt with the privacy of user activities on the system. Each policy stated that the system reserved the right to examine and/or monitor user activities for the purposes of maintaining the integrity of the system. Some of the policies mentioned only e-mail activity as subject to scrutiny by the system administrators, while others declared that

any and all user activities were subject to examination by the system administrators. Three policies declared network storage areas as analogous to school lockers—that is, the network administrator could review files to maintain the system integrity and to ensure that users were using the system responsibly. Most of the policies stated that the system administrator must have good cause to make these examinations; however, two policies stated that the examinations could be made with or without good cause, and could be made in any form that the district deemed appropriate. According to the wording found in the policies examined in this study, the privacy of user activities on these educational network systems was not guaranteed.

The fourth general descriptive area of key issues and concerns addressed in AUPs was the content of materials and information on the Internet. Again, the issues and concerns were two-fold: the content of material generated by the individual school/district system user and the content of material available on the Internet for the user to access. Only four policies specifically mentioned the Internet users' right to freedom of speech and the right of access to information. Those four policies qualified those rights for users of the network system by stating that those rights would be honored within reason or with the supervision/guidance of faculty and staff. Illegal content of materials was specifically prohibited in 10 of the AUPs examined. Those 10 policies declared that any activity that involved the transmission of illegal materials as stated in local, state, or federal laws was prohibited. The term "illegal" was not further defined in the policies.

Various vocabulary and terminologies were utilized to describe and define inappropriate content in materials generated by the users and materials

available on the Internet. The transmission of inappropriate content was prohibited in all 24 of the policies examined in this study. The vocabulary and terminology utilized to define or describe inappropriate content included the following: profane, abusive, sexually offensive, adult-oriented, offensive to an average person, prohibited by law, defamatory, inaccurate, obscene, sexually oriented, racially offensive, threatening, hateful, pornographic, and degrading to others. All of these words were used to describe and define inappropriate content of materials on the Internet. The language utilized in the policies to describe inappropriate content and behavior was varied and often not clearly defined; however, analysis of data from the survey indicated that most educators felt that AUPs were well written with little technical language in them. Analysis of data from the content analysis process identified a number of key issues and concerns addressed in the policies within the following categories: liability, online behavior, system integrity, and content of materials on the Internet.

Table 8

Answers to Survey Question 5^a by Frequency and Percent

Response Options	Frequency	Percent
<u>(n = 118)</u>		
American Library Association publications	20	16.9
Other K-12 school AUPs	69	58.5

Table 8 continued

Response Options	Frequency	Percent
(n = 118)		
District/school policies concerning freedom of information, censorship, etc.	12	10.2
Other	17	14.4

^a What sources, if any, were used in developing the policy?

Research Question Four

What reference sources do education policy makers utilize to gather the tools and information needed to develop an AUP? Question number five on the Acceptable Use Policy Survey was "What sources, if any, were used in developing the policy?" with instructions to check all that apply from the following options: American Library Association publications; other K-12 school AUPs; district/school policies concerning freedom of information, censorship, etc.; and other, please explain. Respondents selected 118 sources: (a) 69 indicating other schools' AUPs as a source, (b) 20 indicated American Library Association publications, (c) 17 indicated other sources and (d) 12 indicated district/school policies as sources utilized in developing their

AUPs. The explanations of other sources cited ranged from "I don't know" in survey number two, to "policies found on the Internet" in survey number 31. (see Table eight, page 53)

The content analysis confirmed the findings of the survey data concerning the reference sources utilized to develop AUPs. Policy makers utilized a variety of resources to develop AUPs. Some resources noted in the AUPs examined were the National Science Foundation Network policy; policies of the other larger systems that provided access to the Internet for that school/district; local, state, and federal laws; the school/district conduct and disciplinary policies already in place; the American Library Association "Library Bill of Rights"; school board policies; state department of education policies; as well as specific laws such as the California Computer Crime Bill of 1979, the Copyright Act of 1976, the Family Educational Rights and Privacy Act, and the Individuals with Disabilities Education Act. The most prevalent resources utilized by policy writers were local, state, and federal laws; followed in frequency by the policies of the larger systems that provided the school/district access to the Internet. One policy did cite a publication as a reference source: "Child Safety on the Information Highway," by Magid. The content analysis of 24 AUPs and analysis of the survey data indicated that policy writers utilized a number of sources for reference in developing AUPs.

Table 9

Answers to Survey Questions 11^a, 14^b, and 15^c by Frequency and Percent

Question Number	Response Options	Frequency	Percent
11 (<u>n</u> = 99)	Yes	62	62.6
	No	37	37.4
<u>Required curriculum areas</u>			
	Social studies	52	52.5
	Language arts	50	50.5
	Mathematics	21	21.2
	Arts	20	20.2
	Foreign language	17	17.2
	Other content areas	20	20.2
<u>Access frequency</u>			
14 (<u>n</u> = 20)	Varies by grade level	8	40.0
	Daily	5	25.0
	Once a week	3	15.0
	Other	4	20.0
<u>Access locations</u>			
15 (<u>n</u> = 100)	Classroom	76	76.0
	Computer lab	81	81.0

Table 9 continued

Question Number	Response Options	Frequency	Percent
<u>Access locations</u>			
15 (<u>n</u> = 100)	Classroom	76	76.0
	Computer lab	81	81.0
	Library	73	73.0
	Other	5	5.0

^aAre students required to access the Internet as a part of their curriculum?

^bHow often do students have access to Internet at school?

^cWhere do students have access to Internet at school?

Research Question Five

How much access to Internet is available to students in K-12 schools, and where is the Internet accessible in the schools? Four questions on the Acceptable Use Policy Survey provided data to answer this question. (see Table nine on page 56) Question 14 was "How often do students have access to Internet at school?" with instructions for respondents to check all of the following options that apply: varies by grade level, once a week, daily, every other week, and other please explain. Twenty respondents answered this question. Eight indicated that access varies by grade level, five indicated daily access, three indicated access once a week, and four indicated access by other. There were three explanations given for other access. The

explanations indicated that access was dependent upon the wishes of the instructor and/or the content of the curriculum. For example, a respondent from New Jersey, on survey number 62, explained, "It varies more by discipline and teacher inclination than grade level." A respondent from Illinois, on survey 28, said, "Some teachers use it daily while others seldom use it. Lots of teachers don't feel comfortable using it yet."

Question 15 was "Where do students have access to Internet at school?" with instructions to check all that apply from the following options: classroom, computer lab, library, and other please explain. There were 235 responses to this question. Eighty-one respondents indicated access in computer labs, 76 respondents indicated access in classrooms, 73 respondents indicated access in libraries, and five indicated access in other areas. The other areas explanations were from schools where access was indicated to be throughout the school with access available on a need-to basis. For example, a respondent from New Jersey, on survey number 61, replied "students can have daily access if they need it for research" while a respondent from Wisconsin, on survey number 96, said "as necessary for classes. May access on free time."

Question 12 was "Has parental permission for access to the Internet ever been denied?" with instructions for respondents to select "yes" or "no." The follow-up question was "If yes, how was it handled?" with instructions to check all that apply from the following options: on an individual basis, alternative assignment(s) given, student excused from assignment(s), and other please explain. Ninety-one respondents answered this question with 37 responding "yes" and 54 responding "no." The responses to the follow-up

question were 29 indicated that the situation was handled on an individual basis, 16 indicated that students were given an alternative assignment, seven indicated that students were excused from assignments, and eight indicated that other action was taken. No explanations were given by the eight respondents who indicated that other action was taken when a parent denied permission for a student to access the Internet.

Question 11 does not directly answer research question five, but it does address student access to the Internet while at school. Question 11 was "Are students required to access the Internet as a part of their curriculum?" with instructions to select either "yes" or "no" and that if the answer was "yes" to check all that apply from the options: social studies, language arts, mathematics, foreign language, arts, other. Sixty-two respondents indicated that Internet access was required as a part of the curriculum, and 37 indicated that Internet access was not required as a part of the curriculum. The areas in which Internet access was required were reported as 52 in social studies, 50 in language arts, 21 in mathematics, 20 in arts, 17 in foreign language, and 20 in other content areas. The most common content area listed under other was science. Other curriculum content areas reported included computer literacy, career exploration, and research skills. (see Table nine on page 56)

The content analysis revealed information about the processes needed for students to establish accounts on the network system and the various forms of supervision of student access to the network facilities. Most of the policies indicated that the students would be monitored during access to the Internet; however, the six policies that required a sponsoring teachers' signature on the application forms stated that the teacher was responsible for reading and

discussing the AUP with the student but was not responsible for the online behavior of the student. Two policies further stated that the students must agree to monitor their own behavior while online. Several of the policies stated that training was required before access would be granted to students. One policy detailed the training sessions and the degree of competency that must be attained on written tests before students would be granted access to the network system. Two policies reported that students in grades five and below would not be granted individual accounts but would have access to the Internet if the classroom teacher applied for a class account and agreed to provide supervision for the students in the class while they were online. Other strategies designed to encourage self-monitoring by students were students were required to sign in when entering the computer facilities, and students were required to keep a log of all connections made while online with the Internet. Two policies allowed independent use of the Internet to students who had submitted the appropriate signed permission forms from parents and school sponsors. Eighteen of the AUPs examined required a signed form from the parent and/or guardian in order for the student to be allowed access to the Internet. Almost all of those forms declared that the parent/guardian was legally responsible for the actions of the student. Student access to the Internet in K-12 schools varies greatly from school to school, as indicated by the content analysis data and the survey data.

Table 10

Answers to Survey Question 6^a by Frequency and Percent

Response Options (<u>n</u> = 100)	Frequency	Percent
Preventive	87	87.0
Prescriptive	53	53.0
Seemed like a good idea	24	24.0
Reaction to an incident or problem	7	7.0
Other	8	8.0

^aWhy do you think the policy was developed?

Research Question Six

Why do educational leaders develop AUPs? Question six on the Acceptable Use Policy Survey was "Why do you think the policy was developed?" with instructions to check all that apply from the following options: preventive, prescriptive, seemed like a good idea, reaction to an incident or problem, and other please explain. Respondents selected 179 responses on this question. Eighty-seven indicated that the policy was developed for preventive reasons, 53 for prescriptive reasons, 24 because it seemed like a good idea, seven in reaction to an incident or problem, and eight for other reasons. The explanations of other reasons were (a) to appease the fears of the community, (b) for legal reasons, or (c) because they were required to

develop a policy. (see Table 10 on page 61) A respondent from Kentucky, on survey number 34, wrote, "Our Board of Education requires it." A respondent in South Carolina, on survey number 79, explained, "To calm any fears that parents may have about what the kids might see. We held an open house for anyone who had reservations, but few came."

The content analysis revealed that the purposes of the policies were rarely stated in the policies themselves. Two AUPs from Connecticut did state the purposes of the policies. The respondent on survey number 13 reported that the purpose of the policy was to inform all the users of the guidelines and code of conduct expected by the district and to outline the rights and responsibilities of the users. The stated purpose of the other policy, on survey number 14, was to satisfy the school board's belief that it was necessary for all persons to become aware of an acceptable use policy. All of the policies did, however, clearly state the purposes of providing access to the Internet to the school community. The goals and missions of the educational institutions to provide quality educational and research opportunities to students and staff were stated in all of the AUPs examined. Some policies noted numerous opportunities that access to the Internet would provide, such as (a) to reach out to other people; (b) to share information; (c) to learn concepts; (d) to research subjects; (e) to support, enhance, and extend the educational experience; (f) to encourage technological innovation; (g) to facilitate resource sharing; and (h) to promote educational excellence. The reasons for developing AUPs were not specifically stated in most of the policies; however, the survey data indicated that many policies were developed for preventive and/or prescriptive reasons.

Table 11

Answers to Survey Questions 9^a, 10^b, 13^c, and 16^d by Frequency and Percent

Question Number	Response Options	Frequency	Percent
<u>Policy challenges</u>			
9 (<u>n</u> = 85)	Yes	7	8.2
	No	78	91.8
<u>Policy administrators</u>			
9a (<u>n</u> = 100)	Committee	18	18.0
	School administrator	48	48.0
	Central office administrator	17	17.0
	Other	34	34.0
<u>Access denied</u>			
9b (<u>n</u> = 87)	Yes	41	47.1
	No	46	52.9
<u>Orientation required</u>			
10 (<u>n</u> = 86)	Yes	60	69.8
	No	26	30.2
<u>Orientation attendees</u>			
(<u>n</u> = 60)	Students only	13	21.7
	Teachers only	5	8.3
	Both	42	70.0

Table 11 continued

Question Number	Response Options	Frequency	Percent
<u>Functions/applications</u>			
13 ($n = 100$)	E-mail	70	70.0
	Ftp	23	23.0
	Telnet	16	16.0
	Gopher	30	30.0
	Listservs	16	16.0
	Chat groups	0	0
	Net pals	51	51.0
	Other	45	45.0
<u>Supervisors/monitors</u>			
16 ($n = 100$)	Classroom teacher	89	89.0
	Computer teacher	58	58.0
	Librarian/media specialist	72	72.0
	Other	8	8.0

^aHas the AUP been challenged for any reason?

9a: Who administers the policy?

9b:Has anyone (student/teacher) been denied access to the Internet because of infraction of policy?

^bIs orientation for students and/or teachers required prior to Internet access?

^cWhat functions/applications do students utilize on the Internet?

^dWho supervises/monitors students during Internet access?

Research Question Seven

What implementation practices are found relative to AUPs in K-12 schools across the nation? Four questions on the Acceptable Use Policy Survey were designed to address this research question. Question number nine was "Has the AUP been challenged for any reason?" with instructions to select either "yes" or "no." If the answer was "yes," the respondent was then asked "If yes, was policy followed?" with "yes" or "no" as the options. Seventy-eight respondents said that their policy had not been challenged, while seven indicated that their policy had been challenged. All seven respondents who indicated that their policy had been challenged also indicated that the policy had been followed in those instances. Follow-up question 9a was "Who administers the policy?" with instructions to check all that apply from the following options: committee, school administrator, central office administrator, and other. There were 117 responses to this question. Forty-eight respondents indicated that school administrators were responsible for addressing policy actions, 18 indicated that a committee was responsible for administration, 17 indicated that central office administrators were responsible, and 34 indicated that others were responsible for the administration of policy. Follow-up question 9b was "Has anyone (student/teacher) been denied access to the Internet due to infraction of policy?" with options "yes" or "no," and an explanation request if the answer was "yes." Eighty-seven responses were given for this question. Forty-one respondents said that access had been denied because of a policy infraction, and 46 answered "no." The reasons for denial of access were mostly either because the user went to an inappropriate site or because of inappropriate use of e-mail.

Question 10 was "Is orientation for students and/or teachers required prior to Internet access?" with "yes" or "no" options. The follow-up question asked the respondents who answered "yes" to the question to indicate if students only, teachers only, or both were required to attend orientation. Eighty-six respondents answered this question with 60 indicating that orientation was required prior to Internet access and 26 indicating no orientation requirements. Those respondents who indicated that orientation was required further indicated that 42 required both students and teachers to attend, 13 required students only, and five required teachers only to attend orientation. Orientation sessions for those schools were predominately one to two sessions in length. Fifty respondents indicated that orientation was one to two sessions, six indicated three to five sessions, and four indicated more than five sessions. The content of the orientation sessions was indicated to be the following: 56 covered the world wide web, 50 covered email, 47 covered browsers, 44 talked about netiquette, 48 covered logging on process, 12 discussed file transfer protocol (ftp), and 10 covered gophers, with 10 respondents indicating coverage of other topics in the orientation sessions.

Question 16 was "Who supervises/monitors students during Internet access?" with instructions to check all that apply from the following options: classroom teacher, computer teacher, librarian/media specialist, other please explain. Eighty-nine respondents indicated that classroom teachers supervised students while they accessed the Internet, 72 indicated supervision by librarians, 58 indicated computer teachers, and eight selected other as supervisors.

Question 13 was "What functions/applications do students utilize on the Internet?" with instructions to check all that apply from the options: email, ftp, telnet, gopher, listservs, chat groups, net pals, other. Seventy respondents indicated email, 51 checked net pals, 30 checked gopher, 23 checked ftp, 16 checked both telnet and listservs, and 45 listed other functions/applications. (see Table 11 on page 63)

The content analysis provided additional information about implementation practices relative to violation of AUPs in two areas: (a) who administered the policy, and (b) consequences of violations of the policy. Several policies did not offer a position or title with reference to the administration of the policy in instances of policy violations; they simply stated that the school/district would take appropriate action. Eleven policies did indicate specific positions responsible for administration of policy violation incidents. The identified responsible parties were the following: two school district/system managers, two system administrators, a school authority, a district teacher and an administrator, an assistant superintendent, a classroom teacher, a principal of a school, and two network administrators. The consequences of violations of the policy were found in all of the AUPs examined. The loss of access to the Internet was a possible consequence cited in all of the policies. The duration of loss of access to the Internet ranged from no stated time, to one or two days, to the remainder of the semester, to loss of access for the rest of the school year. Other possible consequences of inappropriate behavior included disciplinary actions, placement of limits on use of available resources, assistance to learn proper procedures, in-school suspension, financial restitution, out-of-school suspension, expulsion from

school, banned from printing privileges, and banned from scanning privileges. The possible consequences of illegal behavior on the Internet were declared subject to legal actions and possible prosecution. The power of the policy administrators to determine what constituted inappropriate behavior and the consequences thereof were varied in the policies examined. Most of the policies indicated that just cause must be shown for disciplinary actions or loss of network system privileges; however, other policies stated that disciplinary actions and/or loss of network system privileges was totally at the discretion of the system administrator and could be implemented with or without just cause. Three policies did address due process procedures for persons accused of inappropriate behavior on the network system. All three of those policies described an appeal procedure and a time limitation for resolution of the accusation and consequences. One of the policies that addressed due process procedures also listed other strategies for intervention prior to administrative action. The strategies suggested in that policy were teacher/student conference with reprimand, teacher/parent contacts, assistance in learning proper procedures, referrals and conferences involving support staff or agencies, behavioral contracts, restitution/restoration, and denial of participation in class and/or school activities. Analysis of the survey data and the content analysis data indicated that orientation sessions are often required for both students and teachers before access to the Internet is permitted, that students are usually supervised during access to the Internet, and that the most common consequence of inappropriate behavior online was loss of access privileges.

Table 12

Answers to Survey Questions 18^a and 19^b by Frequency and Percent

Question number	Response options	Frequency	Percent
<u>Access important</u>			
18 ($n = 98$)	yes	97	99.0
	no	1	1.0
<u>Have concerns</u>			
19 ($n = 99$)	yes	64	64.6
	no	35	35.4

^a In your opinion, is it important for students and teachers to have access to the Internet?

^b Do you have concerns about students and teachers using the Internet?

Research Question Eight

What are the attitudes of educators toward the presence and utilization of the Internet in K-12 schools? Two questions on the Acceptable Use Policy Survey addressed this research question. Question eighteen was "In your opinion, is it important for students and teachers to have access to the Internet?" with instructions to select either "yes" or "no" and to "briefly explain" their answer. Ninety-seven respondents answered "yes" to indicate that they thought that Internet access was important, and one respondent indicated that he/she did not think that Internet access was important. No explanation was

given for the one negative response. Seventy-five of the respondents that answered "yes" to question eighteen provided explanations. The explanations involved appreciation for the value of the Internet as (a) a source of current information, (b) for communication, (c) as a teaching/learning tool, and (d) to prepare today's students for tomorrow's workplace. For example, the response from a technology coordinator in Louisiana, on survey number 35, included all four of the areas identified in the 75 responses:

The Internet is the source of the most up to date information needed in today's classroom. It is accessible to students and teachers who may be geographically isolated, immobile due to illness or physical challenge, or needing a variety of media to address particular learning modalities. The Internet is as vital to today's schools as was the primer and slate to the schools of yesteryear. There is no other single source of information for personal enrichment, curriculum materials, and professional development than the Internet. It will never replace teachers; it will only make good teachers better; thus providing students with the education and skills necessary to succeed in the twenty-first century.

Question nineteen was "Do you have concerns about students and teachers using the Internet?" with instructions to select either "yes" or "no" and if their answer was "yes" to select all that apply from the following options: equity of access, censorship issues, freedom of information, privacy, and other please explain. Sixty-four respondents indicated that they did have concerns about students and teachers using the Internet, and 35 indicated that they did not have concerns. The issues respondents were concerned about were

reported as following: 40 indicated that they were concerned about censorship issues, 28 about equity of access, 27 about privacy, 21 about freedom of information, and 18 about other issues. Most of the explanations of other concerns about Internet access were in two areas: (a) that the time students spent on the Internet be structured and supervised, and (b) that students develop the ability to evaluate the worth or value of information found on the Internet. A computer teacher in Massachusetts, on survey number 38, expressed concern that the time students spend on the Internet be structured and supervised:

Some teachers use the Internet as a babysitter...when you finish your work, go ahead and surf, also I believe in 'structured' or supervised surfing where students have access, but within some guidelines or parameters. If they venture off into things not related to the task at hand, they should gently be brought back to focus on an activity.

Concern about students' ability to determine the worth or value of information found on the Internet was reported by a computer teacher at an elementary school in Connecticut, on survey number 31:

We need to be careful to teach our students how to discriminate between 'good,' pertinent information and sources and 'bad' or non-relevant information. There is a lot of junk out there and students need to know how to 'choose' what to use.

Question twenty was "Are there additional comments concerning the presence and use of the Internet in schools not specifically requested in this survey that you feel are pertinent to the issue?" Twenty-five respondents provided comments to this question. Three respondents indicated that teacher

training is an issue that should be addressed by school systems. For example, a respondent from an elementary school in New Mexico, on survey number 63, wrote,

“We need more hardware for teachers to use. Teachers need more experience with email and the WWW before they can competently monitor students. We need clear goals for use of the technology. I haven’t seen our policy yet, so I don’t know about the language. We will try to use Internet access as a research tool to integrate our curriculum.

On survey number 59, a respondent from an elementary school in New Hampshire noted, “Teachers should be trained on the proper/most beneficial uses of technology before we expose children to it. There are too many students who know more than their teachers about the technology available in their schools.” A computer teacher from Minnesota, on survey number 45, declared,

The single greatest shortcoming in Internet use is the inability of schools to take seriously the need to continually train and update their staffs on a) how to use technology and b) ways to effectively incorporate it into their curriculum.

There were four comments concerning schools utilizing some mechanism to limit access to the Internet. On survey number 84, a respondent from a middle/high school in Tennessee wrote, “I am whole-heartedly opposed to screening software,” while a Michigan respondent, on survey number 43, wrote, “Fire walls do not work; surveillance necessary ALL the time to keep students on task.” Still another respondent from Arizona, on survey number seven, suggested, “ One question might regard the implementation of a district

server 'firewall,' or the use of site-blocking software by a school/district." A respondent from Connecticut, on survey number 14, offered the following prediction, "We are currently installing a WAN which will greatly increase our Internet Access. Supervision will be a greater problem. I expect that the district will insist upon some filtering system."

The content analysis revealed an overall positive attitude of educators toward the Internet. The positive attitude was usually revealed in the introductory section of the policy in which the school/district was declared to be pleased, proud, and/or excited to offer access to the Internet to students and school personnel. For example, AUP number five described access to the Internet as an "exciting opportunity to promote educational excellence ...worldwide communication." The information available via Internet access was described as "unique resources" on AUP number four; "powerful educational resources" on AUP number seven; and "vast, diverse and unique resources" on AUP number 24. The value of the communication aspect of Internet access was expressed as a means to "open whole new worlds of learning opportunities" in AUP number 12. The communication component was apparent in AUP number eight wherein staff were encouraged to "make use of telecommunications to explore educational topics, conduct research and contact others in the educational world," and in AUP number 16 wherein users were offered the opportunity, via Internet access, to "broaden their global horizons and discover a vast scope of information and experience."

The positive attitude was somewhat tempered with the inclusion of statements in six of the AUPs (numbers 3, 4, 8, 10, 11, and 14), that the value, worth, unique resources, and diverse opportunities of Internet access far

outweighed the possible negative possibilities of such access. Most of the policies also stated that the opportunities afforded by access to the Internet also brought added responsibilities for efficient, ethical, and responsible utilization of Internet resources. One final note on the attitudes of educators toward the Internet was implied rather than implicit. Twenty-two of the policies stated that access to the Internet was a privilege, not a right. Only two policies stated that students and educators had a right to access the school/district network system. The general attitude of educators toward the Internet was found to be positive based on findings of the survey and the content analysis.

Summary

One hundred seventy-eight surveys were collected during the data collection period. One hundred surveys were purposively selected from those responses to include in the study to provide the two most complete surveys from each of the fifty states. The only fields on the Acceptable Use Policy Survey that required an answer were the demographic data fields and the check required for the participant consent statement. Not all of the participants responded to every one of the questions on the survey. Consequently, the number (n) varied for each of the questions. Some of the questions solicited multiple responses; therefore, the total number for some of the responses is greater than 100. The Acceptable Use Policy Survey had a total of 20 questions, with follow-up questions for explanation and description under some of the numbered questions. The demographic information was reported by frequency and percentage.

Twenty-four AUPs were collected during the data collection process. The policies were gathered from the pilot study, print sources, and online sources. The contents of the AUPs were analyzed to identify key words and phrases and categorized into descriptive units in an effort to answer the eight research questions and address the stated purpose of the study.

The purpose of the study and the answers to each of the eight research questions were addressed utilizing the descriptive data from the survey and the corresponding qualitative data from the content analysis of AUPs. Frequency and percent were the format utilized for reporting the survey data. The qualitative data from the content analysis of 24 AUPs was reported in narrative form.

CHAPTER V

DISCUSSION, CONCLUSION, RECOMMENDATIONS, AND IMPLICATIONS

Chapter five contains the study procedures, a discussion and conclusions based upon the study findings, recommendations, and implications for educators involved in technology policy development and implementation. A restatement of the purpose of this study will begin this chapter.

The purpose of this study was to assess the current status of AUPs and related issues, concerns, and conditions surrounding the Internet in selected K-12 schools in the United States. A nationwide online survey was conducted to collect descriptive data. The survey form was developed by the researcher, piloted in a statewide study in print format, revised for clarity, and then converted to hypertext markup language for placement on the Internet. The hypertext markup language format allowed the respondents to access the survey and then to submit their responses via the Internet. A content analysis of 24 selected AUPs was utilized to collect qualitative data. The AUPs were gathered from print sources, the pilot study, and the Internet. Data from the online surveys and the AUPs were examined within the context of the purpose of the study and the eight research questions proposed to guide the process. An attempt was made to assess the current status of AUPs in a purposively selected sample of K-12 schools with Internet access and in a sample of purposively selected policies since such information was not available in the

current literature. This assessment was made by analyzing the descriptive and qualitative data gathered in this study within the framework suggested by the review of literature.

The review of literature provided a framework for examining the findings of this study within three general categories: philosophical foundation, specific formulation guides, and related issues. The philosophical foundation literature urged educational leaders to take the initiative to develop a proactive stance in addressing the pedagogical, social, cultural, and economic impacts of technology on education (Day & Schrum, 1995; Fishman & Pea, 1994; Futoran, Schofield & Eurich-Fulcer, 1995; Kerka, 1994; Mitchell-Powell, 1995; Plotnick, 1996; Thornburg, 1995). The findings of this study confirm Plotnick's predicted trend of increased advocacy for the use of educational technology. Indeed, educational leaders are developing policies to address the impact of technology on education. The results indicated that educators are cognizant of the need for students to become technologically literate. It appears, based on the findings of the study, that schools are developing AUPs that provide structure, rationale, and related implementation practices for students to use the Internet interactively so that they are "both intelligent consumers of technology and doers of technology" (Puk, 1993, p. 29). The survey data showed that selected K-12 schools in the United States are developing policies to address the concerns and issues surrounding the new technologies of today's world. The analysis of content of AUPs utilized in this study also confirmed that AUPs are being developed for pedagogical, social, cultural, and/or economic imperatives; that is, to prepare students to be successful in today's and tomorrow's world (Day & Schrum).

The formulation guide literature provided educational policy writers with a wealth of information and guidance to develop AUPs for their school districts (Day & Schrum, 1995; Dyrli, 1996; Fishman & Pea, 1994; NARMC, 1995; NSBA, 1995; Perkins, 1993; Pitsco, 1997; Wentworth Worldwide Media, 1995). The results of the study confirm that educational policy writers utilized numerous sources to gather the information and ideas needed to develop AUPs. The survey data revealed that policy writers utilized the online sources, such as those available on Wolf's (1994) web site and the Wentworth Worldwide Media web site, for guidance and as models to develop their own AUPs. The print sources identified in the survey and the content analysis were not the comprehensive publications by professional educational organizations such as the National Association of Regional Media Centers and the National School Boards Association, that were cited in Chapter two. Instead, the survey data revealed that the sources most often utilized to develop AUPs were AUPs of other schools/districts, which may or may not have been in print format. The content analysis revealed that the resources most often cited in the AUPs were local, state, and federal laws; followed in frequency of citations by the policies of the larger systems that provided the school/district access to the Internet. Fishman and Pea's suggestion that the Internet was analogous to a library was confirmed by the 20 survey respondents who reported utilizing American Library Association publications in the development of their AUP. An analogy for the Internet that was not found in the literature reviewed for this study, but was noted in the study findings, was the school locker analogy. The content analysis revealed three AUPs in which the network storage area was

deemed analogous to school lockers that could be reviewed by the system administrator for network security reasons.

The literature revealed that educators were aware of and concerned about a number of related issues that need to be addressed to ensure safe appropriate use of the Internet (Allison & Baxter, 1995; American Library Association, 1990; Center for Democracy and Technology and People for the American Way, 1995; Futoran, Schofield & Eurich-Fulcer, 1995; Jensen, 1995; Kadie, 1997; McKenzie, 1995; Mazur, 1995a; Mazur, 1995b; Sanchez, 1996; Willard, 1996). The literature indicated that some schools were addressing Internet issues and concerns by incorporating technology policy into school board policies (McKenzie). The survey data indicated that ten point six percent of the AUPs were developed by school boards. The concern about students accessing inappropriate materials available on the Internet noted in the literature review was confirmed by the survey and content analysis data. The survey findings indicated that educators are developing policies that clearly discourage users from accessing inappropriate materials by (a) describing what is considered inappropriate material and (b) describing the negative consequences of accessing such material.

The strategy of limiting access found in the literature review (Allison & Baxter, 1995) was not revealed by the findings of the study. Only two surveys, number 71 from Oklahoma and number 80 from South Carolina, specifically mentioned limiting access to the Internet. The respondent from Oklahoma reported that the school utilized "Surf Watch," a software program to limit access; and the respondent from South Carolina reported that the school used a lockout mechanism to limit access to the Internet. It is possible that schools

are not utilizing mechanisms to limit access to the Internet because of concerns about the possible violation of the freedom of information rights of users (Kadie, 1997) and because the mechanisms to limit access to the Internet offer little security at a relatively high cost for acquisition and maintenance (Willard, 1996).

The issues identified in the literature included limiting access, controversial materials, equal access, district liability, copyright, censorship, and freedom of information. The findings of the study showed that most educators were addressing the issues of controversial materials, district liability, and copyright in the AUPs. However, the issues of limiting access, equal access, censorship, and freedom of information were not found to be universally addressed in the AUPs. The survey data indicated that these issues were important to educators, but the content analysis revealed that equal access, limiting access, censorship and freedom of information were not often addressed in the AUPs.

Online survey responses from 100 K-12 schools were purposively selected as the sample for this study. Criteria for selection were two-fold: to secure at least two survey responses from each of the fifty states; and if more than two responses were received from any state, the two most complete survey responses were selected. A total of 178 survey responses were received via the Internet, with at least two responses from each of the fifty states. There were 20 questions on the online survey. Analysis of the survey data was presented by frequency and percent for each of the 20 questions.

The content analysis process involved identifying key words and phrases, as well as development of categories and subcategories to describe

the contents of the policies. The qualitative data generated by the content analysis of 24 AUPs were presented in narrative form. The eight research questions were addressed by using descriptive and qualitative data analysis procedures of frequency, percent, development of categories and subcategories of policy content, and identification of key words and phrases in the policies. The data from the two sources were then examined for comparison to validate and confirm further the findings of the study.

Discussion

The results of the data analysis in this study were used to determine the status of AUPs in selected K-12 schools in the United States. The demographic survey data were used to ensure data collection from each of the fifty states and to identify the respondents by position; to identify the type of institution (school, district, or system) by size of student body and faculty, grade levels, and number of Internet connections. The descriptive survey data were used to address the purpose of the study and to answer the eight research questions. Since respondents to the survey were not required to answer all of the questions on the survey, the "n" varied for responses to each of the 20 questions. The only restricted fields on the survey were the fields for demographic data and the box checked to indicate an understanding of the study and voluntary participation in the study. The survey results represented a nationwide sample of 12,687 faculty, 177,789 students, and 10,792 Internet connections in 55 elementary schools, 17 middle schools, 6 systems/districts, 27 high schools, 8 K-12 schools, 2 combination middle/high schools, and 3 combination elementary/middle schools. The positions of the survey respondents were 23 computer teachers, 14 librarians, four principals, one

assistant principal, and 58 others. The survey data indicated that ninety-five percent of the sample schools either had an AUP or were in the process of developing one. The most common reference source utilized by policy writers to develop AUPs was the AUPs of other schools and school districts. The survey data further indicated that the policies were available in printed format in forty point three percent of the sample and were presented orally in seventeen percent of the sample. The ample number of AUPs available for this study clearly suggested that K-12 schools in the United States were utilizing AUPs. The survey data and the content analysis data both confirmed the presence of AUPs in selected K-12 schools in the United States.

Survey results indicated that seventy-two point nine percent of AUPs were developed by committees and sixteen point five percent were developed by one person. The content analysis data indicated that fifty-eight point three percent of the policies were developed at the district level, with only thirty-three point three percent developed at the individual school level. Both sources indicated that AUPs were developed by various personnel mostly in groups and at the district level.

Survey respondents indicated that AUPs were relatively free of technical language. Only five point seven percent of the respondents reported "a lot" of technical language in the policies; with forty-eight point nine percent indicating very little technical language, and forty-four point three percent indicating some technical language in the policies. This was confirmed in the content analysis of the sample AUPs. Very little technical language was present in the AUPs examined in this study. These findings clearly indicated that the AUPs were understandable and written with a minimum of technical

terminology. The key issues and concerns identified by the content analysis data were categorized into four general descriptive areas: (a) liability, (b) online behavior, (c) system integrity, and (d) content of materials on the Internet. The liability issues and concerns were further categorized into three areas: (a) services, (b) damages and/or costs incurred by users, and (c) quality and/or accuracy of the content of materials on the Internet. The online behavior issues and concerns present in the policies were directed toward the user as well as unidentified others on the Internet. Inappropriate online behaviors were identified as the following: (a) violation of copyright laws; (b) utilization of the system for commercial, political, or religious purposes; (c) violation of the rights and/or privacy of others; (d) utilization of the system for non-academic purposes; (e) subscriptions to listservs and/or chat groups without prior approval from the system administrator; (f) activity involving content that might be pornographic, profane, sexually oriented, offensive, objectionable, defamatory, inaccurate, abusive, obscene, threatening, racially offensive, illegal, or otherwise inappropriate.

Access to the Internet was found to vary from school to school and district to district. The number of Internet connections in the 100 sites surveyed ranged from one in an individual school to 1,500 in a school district. According to the survey data, eighty-one percent of the schools have Internet connections located in computer labs, with seventy-six percent located in classrooms and seventy-three percent located in libraries. Survey data indicated that over sixty-two percent of the schools require students to access the Internet as part of the curriculum. The two curriculum areas in which Internet was utilized most were social studies and language arts. The

frequency of access to Internet connections by students largely depended upon the grade level and the teacher.

According to the survey data, the major reason schools developed AUPs was for preventive purposes; that is, to take a proactive stance to avoid problems that might occur in the future. The content analysis indicated that policies were written to inform the community about the presence and value of the Internet for educational purposes, relieve any fears that parents might have about possible dangers of the Internet, and protect the school from liability problems.

Examination of implementation practices indicated that few AUPs have been challenged. Most of the administrators of AUPs were found to be personnel at the school site level. Most of the supervision of students while they accessed the Internet was reported to be by classroom teachers, and e-mail was determined to be the most used application of the Internet by students. Loss of access to the Internet was the most cited consequence of inappropriate behavior on the Internet. Orientation for both students and teachers was required in over half of the schools surveyed.

According to survey data, educators have a positive attitude toward the Internet. The content analysis indicated a positive attitude by educators toward the Internet carefully balanced with concerns about possible negative experiences on the Internet.

Conclusion

This study indicated that educators are currently developing and utilizing AUPs to address effectively the issues and concerns surrounding the Internet in K-12 schools in the United States. This conclusion is based on the

survey results of 100 school sites across the nation and the content analysis results of 24 AUPs.

As the role of technology in education continues to evolve, it will remain a challenge for educators to accommodate the educational environment in a way that best meets the needs of students today and tomorrow. Educators need the tools to develop effective policies to address the dynamic, powerful impact of technology on the educational community. Effective technology-related policies should be based on sound pedagogical, social, cultural, political, and economic imperatives that reflect the needs of a technological society.

Research Recommendations

Based upon the data analysis conducted in this study, the following research recommendations are made.

1. Revise the survey to require data in the field requesting information about the position of the respondents if they indicate "other." Over half of the respondents to the survey in this study indicated "other" as their position without further explanation. It would be helpful to have a clearer indication of the positions of the survey respondents.
2. Administer the survey to samples of educators at elementary, middle, and high school levels to determine if there is a difference in Internet policies and implementation practices at different grade level sites.
3. Investigate the legal aspects of AUPs. The rights and responsibilities of individuals and educational institutions with regard to Internet access will continue to be key issues. Documentation of legal precedents concerning

these issues as they are addressed in current laws and in the courts would be useful to educators.

4. Add questions to the survey requesting information on the use of limiting mechanisms, how well they work, and the level of satisfaction with the results. It would be helpful for educators to know what limiting mechanisms are currently being used and how successfully those products and/or services are ensuring safe and effective use of the Internet in K-12 schools.

5. Conduct interviews with educators utilizing the questions on the survey as a structure for the interview. This would provide a third source of data to validate and confirm further the findings of this study. It would also provide rich qualitative data that was not available in the surveys and the documents utilized in this study.

Implications for Educators

The major implication of this study, based upon the data analysis, was that technology has a tremendous impact on education. Awareness of the social, political, cultural, pedagogical, and economic implications of Internet access in K-12 schools and how educators are currently addressing the impact of Internet access could provide educators a framework for developing sound policies and practices relevant to today's information-based technological society.

Educational policy writers should consider the development and implementation of Internet policies that accurately reflect the needs of students in today's society. Today's perception of access to the Internet as a privilege may, in the not too distant future, take a dramatic change. Though only two policies examined in this study declared access to the Internet a right rather

than a privilege, that perception may become more prevalent as more schools are connected to the Internet and educators develop greater technology awareness and expertise. The predicted shift from viewing Internet access as a right rather than a privilege will dramatically alter the policies and practices needed to address the surrounding issues and concerns. A comprehensive understanding of the tremendous impact technology has had and will continue to have on education is necessary to meet the challenges of providing quality education for students today and in the years to come.

APPENDIX

ACCEPTABLE USE POLICY SURVEY

Acceptable Use Policy Survey

Internet Acceptable Use Policies (AUPs) are being implemented by many schools to address the issues and concerns surrounding the use of Internet by students and teachers. The policies range from a brief paragraph to several pages in length and vary greatly in content and stated purpose. The purpose of this survey is to determine the scope, content and practical value of Acceptable Use Policies currently used by K-12 schools to address student and faculty access to the Internet.

For detailed information concerning the study, see Project Description.

PARTICIPANT CONSENT STATEMENT: My response via Internet to this survey indicates my willingness to participate in the research described in the Project Description. I attest with an "X" in the box that I have read and understand the description of this study and its purposes and methods. I understand that my participation in this research is strictly voluntary. Further, I understand that I may refuse to answer any questions without penalty. upon completion of the study, I understand that the results will be freely accessible only to the principal investigator, myself or a legally appointed representative. I have not been requested to waive, nor do I waive any of my rights related to participating in this study.

☐ Please check here to indicate you have read and understand the Project Description and are willing to participate.

Demographics

Name of School State

Number of Students Number of Faculty

Grade Levels Number of Internet Connections

Position of Respondent (select one)

☒ Principal ☐

Select/check appropriate answer(s) and/or write brief response(s) to the following questions:

I. Policy Origins/Availability

1. Do you have an AUP? (select one) ☐ Yes ☐ No ☐ In process of developing

If **yes**, proceed to question #2.

If **no**, how does your school address issues and concerns surrounding Internet access?

Do not have Internet access; therefore not an issue. ☐ Yes ☐ No

In accordance with school/district policies already in place. ☐ Yes ☐ No

Do not feel the need for a policy that specifically addresses Internet access and utilization. ☐ Yes ☐ No

Other Strategies

	11
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NOTE: If your school/system does not have an AUP, please answer questions 11 - 16, 18-20 only.

If you are **in the process of developing** an AUP, who is involved in the process? (check all that apply)

☐ Committee (indicate positions of members)

	12
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☐ One person (position of that person)

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☐ Technology Coordinator

☐ Computer Teacher

☐ Librarian/Media Specialist

☐ Other

	13
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NOTE: If your school/system is currently working on an AUP please answer questions 5, 6, 11, 12, 13, 15, 16, 17 and 18 only.

2. Is your school AUP available on-line? (select one) ☐ Yes ☐ No

If yes, where can it be found? (e.g. web address, gopher)

3. In what year was your AUP written? 19

4. Who developed the policy? (select one)

☐ Committee (Positions of members)

☐ One person (position of person)

☐ School Board

☐ Other

5. What sources, if any, were used in developing the policy? (check all that apply)

☐ American Library Association publications

☐ Other K-12 school AUPs

☐ District/school policies concerning freedom of information, censorship, etc.

☐ Other, please explain

6. Why do you think the policy was developed? (check all that apply)

☐ Preventive (to avoid problems)

☐ Prescriptive (confront concerns and issues)

☐ Seemed like a good idea

☐ Reaction to an incident or problem

☐ Other, please explain

7. In what format(s) is/are your AUP available? (check all that apply)

☐ Printed

☐ On-line

☐ Hand-outs in orientation

☐ Presented orally in orientation sessions

☐ Other, please explain

8. Has the policy been revised/updated since the original policy was written? (select one)

☐ Yes ☐ No

If yes, explain

II. Implementation and Utilization of Policy

9. Has the AUP been challenged for any reason? (select one) ☐ Yes ☐ No

If yes, was policy followed? ☐ Yes ☐ No

9a. Who administers the policy? (check all that apply)

☐ Committee

☐ School Administrator

☐ Central Office Administrator

☐ Other

9b. Has anyone (student/teacher) been denied access to the Internet due to infraction of policy?

☐ Yes ☐ No

If yes, explain

10. Is orientation for students and/or teachers required prior to Internet access?

☐ Yes ☐ No

If yes, who attends?

☐ Students only ☐ Teachers only ☐ Both

If yes, what is the requirement in terms of time and content of session(s)?

Time: (select one)

- ☐ 1-2 orientation sessions
☐ 3-5 orientation sessions
☐ more than 5 sessions

Content: (check all that apply)

☐ E-mail ☐ gopher ☐ netiquette ☐ www

☐ browsers ☐ ftp ☐ process for logging on

☐ other

III. Student Access/Utilization

11. Are students required to access the Internet as a part of their curriculum?(select one)

☐ Yes ☐ No

If yes, in what areas(s)? (check all that apply)

- ☐ Social Studies
☐ Language Arts
☐ Mathematics
☐ Foreign Language
☐ Arts

☐ Other

12. Has parental permission for access to the Internet ever been denied?(select one)

☐ Yes ☐ No

If yes, how was it handled? (check all that apply)

- ☐ On an individual basis
☐ Alternative assignment(s) given
☐ Student excused from assignment(s)

☐ Other(please explain)

13. What functions/applications do students utilize on the Internet?(check all that apply)

☐ e-mail ☐ ftp ☐ telnet ☐ gopher ☐ listservs ☐ chat groups ☐ netpals

☐ other

14. How often do students have access to Internet at school? (check all that apply)

☐ Varies by grade level (please explain)

☐ Once a week

☐ Daily

☐ Every other week

☐ Other (please explain)

15. Where do students have access to Internet at school? (check all that apply)

☐ Classroom ☐ Computer lab ☐ Library

☐ Other (please explain)

16. Who supervises/monitors students during Internet access? (check all that apply)

☐ Classroom teacher ☐ Computer teacher ☐ Librarian/Media Specialist

☐ Other (please explain)

IV. Personal Opinions and Comments

17. In your opinion, how much "techno" language is present in the AUP? (select one)

☐ None ☐ Very little ☐ Some ☐ A lot ☐ Too much

18. In your opinion, is it important for students and teachers to have access to the Internet?

(select one) ☐ Yes ☐ No

Briefly explain

19. Do you have concerns about students and teachers using the Internet?(select one)

☐ Yes ☐ No

If yes, please select all that apply:

☐ Equity of access ☐ Censorship issues ☐ Freedom of information ☐ Privacy

☐ Other, please explain

If no, please explain

20. Are there additional comments concerning the presence and use of the Internet in schools not specifically requested in this survey that you feel are pertinent to the issue?

Thank you for your participation

Project Description

TITLE: Analysis of Acceptable Use Policies (AUPs) Regarding the Internet in Selected K-12 Schools

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PURPOSE OF STUDY: Determine the origin(s), purpose(s), content, style, utilization and attitude(s) toward acceptable use policies developed to address concerns and issues surrounding Internet access in K-12 schools in the United States.

SUBJECTS: A national survey of K-12 schools that have Internet access. At least two schools from each state will be included in the study.

PROCEDURE: The subjects will be contacted via Internet to complete an online survey to determine if they have an acceptable use policy and if so, to provide information about the policy, and its utilization. Basic demographic information about the school and the respondent are requested. Also, personal opinion comments about AUPs are solicited on the form. The responses will be sent back electronically via Internet.

INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY:

A researcher-developed survey will be used to gather the information. The instrument was piloted with 22 schools in Louisiana, with modifications made to correct ambiguous and/or nonproductive questions. In order to protect the confidentiality of participants, the data collected will be stored on a server-based password-protected account. Due to the nature of the Internet, complete confidentiality cannot be guaranteed.

RISKS: There are no risks associated with this study.

BENEFITS/COMPENSATION: None

SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING: This study involves no treatment or physical contact.

Return to Survey

BIBLIOGRAPHY

- Allison, L. & Baxter, R. (1995). Protecting our innocents [Online]. Available: <http://www.cs.monash.edu.au/publications/ftp/1995/TR224/1995.224.html>
- American Library Association Council (1990). An interpretation of the Library Bill of Rights [Online]. Available: <gopher://riceinfo.rice.edu:1170/00/More/Acceptable/alapolicy>
- Ary, D., Jacobs, L. C., & Razavieh, A. (1990). Introduction to research in education (4th ed.). Orlando, Florida: Harcourt Brace College Publishers.
- Barrow, W. C. (1994). An analysis of the policies and practices that govern the selection and acquisition of information technology at selected mid-sized public universities. Dissertation Abstracts International, 55(12A), 3818.
- Berelson, B. (1952). Content analysis in communication research. Glencoe, Illinois: The Free Press.
- Bogdan, R. C. & Bilkin, S. K. (1992). Qualitative research for education: An introduction to theory and method (2nd ed.). Boston: Allyn & Bacon.
- Borg, W., & Gall, M. (1983). Educational research: An introduction. (4th ed.). New York: Longman.
- Center for Academic Freedom (no date). Academic Computing Policy Statements [Online]. Available: <http://www.eff.org.pub/CAF/policies/>
- Center for Democracy and Technology and People for the American Way (1995). Constitutional analysis of "Communications Decency Act"

[Online]. Available: gopher://gopher.eff.org.70/00/Cens..._Decency_act/cdt_pfaw_cda.analysis

Cusack, T. F. (1996). An analysis of components and characteristics developed in selected school district strategic plans. Dissertation Abstracts International, 57(07A), 2758.

Day, K., & Schrum, L. (1995). The Internet and acceptable use policies: What schools need to know. The ERIC Review, 4(1), 9-11.

Dyrli, O. E. (1996). Does your school have an acceptable use policy? Technology and Learning, 16(4), 18.

Dyrli, O. E., & Kinnaman, D. F. (1996). The changing face of telecommunications: What's next for schools? Technology and Learning, 16(7), 56-61.

Fishman, B. J., & Pea, R. D. (1994). The internetworked school: A policy for the future. Technos, 3(1), 22-26.

Frieberger, J. (1996). Precautions for using the Internet in your school. Enhance, E3-E5.

Futoran, G. C., Schofield, J. W., & Eurich-Fulcer, R. (1995). The internet as a k-12 educational resource: Emerging issues of information access and freedom. Computers in Education, 24(3), 229-236.

Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches. San Francisco: Jossey-Bass.

Hanson, E. M. (1996). Educational administration and organizational behavior. (4th ed.). Boston: Allyn & Bacon.

Hendry, A. (1997). K-12 schools and the Internet [Online]. Available: gopher.oise.on.ca

Hunt, J. L. (1995). How do local school districts formulate educational technology policy (local education). Dissertation Abstracts International, 57(01A), 179.

Institute for the Transfer of Technology to Education (1995). James: Education leaders need to 'grow a new fin' :What's new at Electronic School on the web. [Online]. Available: <http://www.access.digex.net/~nsbamags/itte95k1.html>

Institute for the Transfer of Technology to Education (1995). Bradbury: Teach reading and reach for the stars:What's new at Electronic School on the web. [Online]. Available: <http://www.access.digex.net/~nsbamags/itte95k2.html>

Isaac, S., & Michael, W. B. (1981). Handbook in research and evaluation: A collection of principles, methods, and strategies useful in planning, design, and evaluation of studies in education and behavioral sciences (2nd ed.). San Diego: EdITS.

Jensen, M. B. (1995). Computer connectivity creating copyright conundrum. School Business Affairs, 61(4), 35-38.

Kadie, C. (1993). The Academic Freedom Model: A paper from the Third Conference on Computers, Freedom, and Privacy, in Burlingame, California [Online]. Available: gopher://gopher.eff.org:70/00/CAF/statements/cfp_93.
Kadie. Page 4

Kadie, C. (1997). Sex, censorship, and the Internet [Online]. Available: <http://www.eff.org/CAF/cafuuiuc.html>

Kerka, S. (1994). Life and work in a technological society. ERIC Digest No. 147 [Online], 13 paragraphs. Available: http://www.ed.gov/databases/ERIC_Digests/ed368892.html

Lincoln, Y. S. & Guba. E. G. (1985). Naturalistic Inquiry. Beverly Hills, CA: Sage.

Lisensky, R. P., Pfnister, A., & Sweet, S. D. (1985). The new liberal learning: Technology and the liberal arts. Washington, DC: Council of Independent Colleges.

McDonald, F. (1994). Minnesota coalition against censorship Internet statement. [Online]. Available: <gopher://riceinfo.rice.edu:1170/00/More/Acceptable/minnaup>

McKenzie, J. (1995). Creating board policies for student use of the Internet. From Now On [Online], (5)7, 15 paragraphs. Available: <http://fromnowon.org>

Magid, L. (no date). Child safety on the information highway. [Brochure].

Mazur, J. M. (1995a). Right-of-way on the information superhighway: Access and policy issues for schools. Technos, 4(2), 14-16.

Mazur, J. M. (1995b). Warning! Slippery road ahead, Internet access and district liability. School Business Affairs, 61(7), 13-17.

Merriam, S. B. (1991). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.

Mitchell-Powell, B. (1995). More than just a pretty interface: Access, content, and relevance in computer technology. Social Studies and the Young Learner, 7(3), 11-13.

Moncur, M. (no date). Quotations page [Online]. Michael Moncur's Collection. Available: www.starlingtech.com/quotes/qsearch.cgi

Murdick, R., & Ross, J. (1971). Information systems for modern management. Englewood Cliffs, NJ: Prentice-Hall.

National Association of Regional Media Centers (1995). An anthology of Internet acceptable use policies.

National School Boards Association (1995). Plans and policies for technology in education: A compendium.

Perkins, D. (1993). Acceptable and unacceptable use of net resources [Online]. Located at Armadillo: The Texas state gopher. Available: gopher://riceinfo.rice.edu:1170/00/More/Acceptable

Pitsco (1997). Pitsco's Launch to Acceptable Use Policies. [Online]. Available: <http://www.keypals.com/pitsco/accept.html>

Plotnick, E. (1996). Trends in Education Technology 1995 [Online]. ERIC Digest. Available: www.ed.gov/databases/ERIC_Digests/ed398861.html

Puk, T. (1993). The acculturation of technology education. Technology Teacher, 52(7), 27-30.

Rice University (no date). Rice University Acceptable Use Policies [Online]. Available: <http://chico.rice.edu/armadillo/Rice/Resources/acceptable.html>

Rosengren, K. (1981). Advances in content analysis. Beverly Hills, California: Sage.

Sanchez, R. (1996). Students on the Internet: Can you ensure appropriate access? The School Administrator, 53(4), 18-22.

Sutherland, Z., Monson, D., & Arbuthnot, M. (1986). Children and Books. Glenview, Illinois: Scott Foresman.

Thornburg, D. D. (1995). Welcome to the communication age. Internet Research, 4(1), 64-70.

Vernadakis, G. (1997). School's out, so why's the web in? Inter@ctive Week, 4 (21), 56.

Weber, R. (1985). Basic content analysis. Beverly Hills, California: Sage Press.

Wentworth Worldwide Media. (1995). Acceptable use policies, defining what's allowed online, and what's not [Online]. Available: <http://wentworth.com/classroom/aup.html>

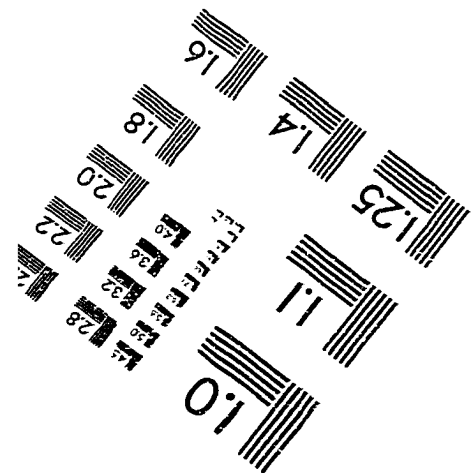
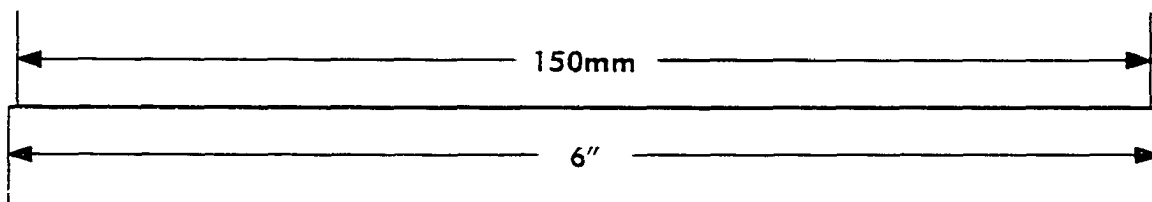
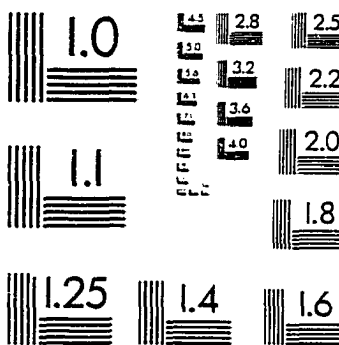
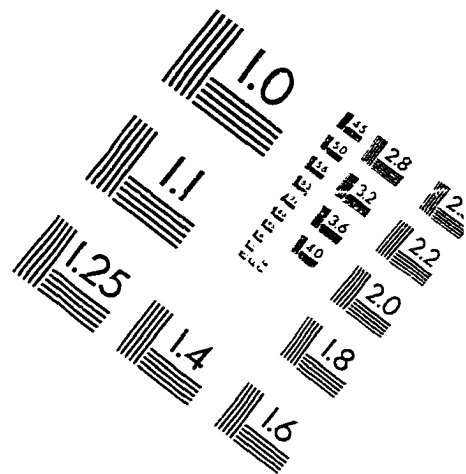
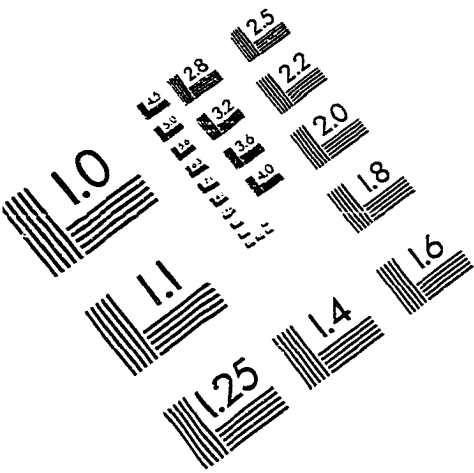
Willard, N. (1996). A legal and educational analysis of K-12 internet acceptable use policies [Online]. Available: http://www.erehwon.com/k-12aup/legal_analysis.html

Willems, E. P., & Raush, H. L. (1969). Naturalistic viewpoints in psychological research. New York: Holt, Rinehart & Winston.

Wolf, C. J. (1994). Developing a school or district "acceptable use policy" for student and staff access to the Internet [Online]. Available: gopher://inspire.ospi.wednet.edu:7...accept_Use_Policies/IN_policies.txt

Yin, R. K. (1994). Case study research: Design and methods (2nd ed.). Thousand Oaks, CA: Sage.

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