

Dissemination of Special Education Information on the Internet: Issues for Consideration

Akira Watanabe, Fumie Oshiba, Masashi Hayasaka, Yutaka Katsuma,
Masahiro Watanabe and Hitoshi Nakamura

*Division of Research and Development
Information Center of Special Education*

Abstract : This study examines problems related to the utilization of the Internet in the field of special education. First, problems concerning the following three aspects are examined: (1) the creation of Web pages to relay information concerning special education to the community; (2) the collection of information through the Internet, and (3) information exchange using e-mail. Second, current trends in these areas are outlined: (1) protection of personal information; (2) protection of copyright, and (3) implementation of measures designed to guard against the dissemination of undesirable information. Finally, future issues in each of these key areas are discussed.

Key Words : Special education, Internet, personal information, copyright, undesirable information

The rapid spread of the Internet is contributing to the diffusion and use of information related to special education through the Internet. At the same time, a variety of problematic issues have arisen. The purpose of this study is to examine the following: (1) what issues exist regarding the distribution of special education information through the Internet? and (2) what measures are required to deal with these issues in the future?

The Internet and Special Education

The rapid spread of the Internet has contributed to many problematic issues concerning its use in special education activities.

Internet Use in Special Schools

This section presents an overview of the present use of the Internet in special education facilities in Japan.

The Ministry of Education conducted a survey on "Joho Kyouiku" (information education, or education of computer literacy) (Ministry of Education, Science, Sports & Culture, 1998b). The results of this survey showed that the number of schools linked to the Internet that year as follows: 6,499 elementary schools (27.4% of all elementary schools), 4,461 lower secondary schools (42.8%), 2,651 upper secondary schools (63.7%), and 334 special schools (36.3%). In special education schools, 28 schools for the blind (41.2% of such schools), 46 schools for the deaf (44.2%), and 260 other special education facilities (34.8%) were linked. Thus, nearly half of special education schools

in Japan were connected to the Internet in 1998.

The survey also found how many schools had homepages. The numbers were as follows: 1,908 elementary schools (29.4% of the elementary schools connected to the Internet), 1,290 lower secondary schools (28.9% of the lower secondary schools connected to the Internet), 1,465 upper secondary schools (55.3% of the upper secondary schools connected to the Internet), and 179 special schools (53.6% of the special schools connected to the Internet). In special schools, 17 schools for the blind (60.7%), 28 schools for the deaf (60.9%), and 134 other special schools (51.5%) had homepages. As these findings demonstrate, there has been considerable penetration of the Internet into special education schools in Japan.

Moreover, the use of the Internet is expected to increase in the future. The Ministry of Education has announced that all public schools would have access to the Internet by 2001 (Ministry of Education, Science, Sports & Culture, 1999a), and new standards for educational curricula to be implemented after 2002 emphasize the importance of "information education" (Ministry of Education, Science, Sports & Culture, 1999b). Based on this, an examination of the issues concerning Internet use from the perspective of special education is warranted.

The Expansion of the Internet and Special Education

This issue is investigated from the following three aspects: (1) the creation of Web pages; (2) the collection of information via the Internet, and (3) the use of e-mail.

Web pages

It is important to introduce special education activities and study results on Web pages to promote the distribution of special education information. However, the following potential problematic issues arise in the creation of Web pages:

- i. Issues related to personal information.
- ii. Issues related to personal photographs.
- iii. Issue related to copyright.
- iv. Issues related to appropriateness of descriptions.

Issue (1) concerns the publication of descriptions of students on Web pages. For example, there are problems concerning how much concrete information can actually be published when introducing educational practice. Issue (2) relates to the publication of a given person's portrait on a Web page. For example, photographs may be needed to provide concrete information about educational activities. In this case, the publication of an individual's portrait is problematic. Issue (3) relates to copyright. In this case, there is a problem of the copyright attached to pictures or poetry. Finally, Issue (4) relates to appropriateness of descriptions. These have the potential to make some people feel uncomfortable, especially when they are published on the Web. Therefore, there are a number of issues that need to be addressed when designing Web pages to publish special education information.

Collection of Information via the Internet

It appears that a common usage of the Internet in schools is to explore Web pages with the purpose of collecting information, but there are a variety of potential problems that arise. In this respect, the following issues need to be considered:

- i. The possibility of viewing inappropriate information from an educational viewpoint.
- ii. The possibility of viewing illegal information.
- iii. The possibility of accepting low reliability information as the truth.
- iv. The possibility of divulging personal information when prompted to do so by Web pages.
- v. The possibility of writing slanderous information on community message boards.

Issue (1) deals with the problem students may have if they view information that is inappropriate from an educational viewpoint. For example, some Web pages may have contents depicting or describing violence and, therefore, it is necessary to prevent student access to such information. Issue (2) concerns

the problem of student access to illegal information on some Web pages. To problem of preventing access to such information needs to be addressed. Issue (3) is the problem of students accepting low validity information on the Internet at "face value." While some Web pages do provide valid information, others pages do not. Subsequently, it is important to examine what types of information can be acquired from Web pages. Issue (4) concerns the problem of divulging personal information about students over the Internet. Some Web pages require the completion of personal details such as the input of names and date of birth. There is the potential that students may input some information about themselves, or their peers, so the problem of how students deal with these requests needs to be addressed. Finally, Issue (5) deals with the posting of messages on community message boards. Certain boards, for instance bulletin boards, enable anonymous users to post material and there is the possibility that students may post slanderous material.

Thus, there are various potential problems when student browse Web pages and collect information as part of special education activities.

The Use of e-mail

In some cases, students use e-mail to exchange information as part of their special education activities. For example, they may exchange information with students in other schools. The following are the potential problems in the exchange of information via e-mail:

- i. The possibility of exchanging personal information.
- ii. The possibilities of suffering damage because of the receiving of unwelcome messages.
- iii. The possibility the e-mail may be accessed by unauthorized third parties.

Issue (1) deals with the problem of protecting personal information in e-mail. There is the possibility, for example, that students may send personal information about themselves, or their peers. While the sender may only intend the message to reach a specific person, the receiver may forward the message on to others. While forwarding and copying of e-mail is easy, there is the potential danger that information may be leaked. Issue (2) concerns the damage an individual may suffer as a result of receiving unwelcome messages. For example there is the possibility that students may receive mischief e-mail, sales e-mails, solicitation e-mails, chain e-mails, and so on.

Therefore, to take measures to safeguard against the malicious use of e-mails and to protect children from suffering their damaging effects is of importance. Issue (3) concerns privacy of e-mail communication. E-mail is liable to be intercepted, or accidentally viewed because they are sent via networks. Therefore, it is necessary to be vigilant about the contents of e-mails exchanged.

As this brief overview reveals, various issues exist regarding the use of e-mail in special education.

Areas Requiring Investigation

From analysis of the above three aspects, there needs to be consideration of the following:

- i. Protection of personal information.
- ii. Protection of copyright.
- iii. Measures to safeguard against harmful information.

The first concerns the protection of personal information in the use of the Internet. Protection of personal information is an area that requires full consideration in the creation of Web pages, or the exchange of personal information via e-mail. The second concerns the protection of copyright when using the Internet. This area is of concern when special education activities are introduced on Web pages. Third, measures taken to safeguard against harmful information in Internet use require full consideration as there is the potential that students may receive or access inappropriate information.

Current Trends

Three areas are investigated in this section: (1) international trends; (2) domestic trends, and (3) problems that affect the distribution of information about special education.

Protection of Personal Information

International trends re. protection of personal information

The protection of personal information has become an important area of international cooperation. In 1980, the Organization for Economic Cooperation and Development (OECD) advocated eight principles concerning the protection of privacy and personal information (OECD, 1980):

- i. Collection Limitation Principle
- ii. Data Quality Principle
- iii. Purpose Specification Principle

- iv. Use Limitation Principle
- v. Security Safeguards Principle
- vi. Openness Principle
- vii. Individual Participation Principle
- viii. Accountability Principle

Since the release of the OECD principles, they have had a major impact on measures dealing with the protection of personal information in each country.

Among recent international topics, the Children's Online Privacy Protection Act of October 1998 in the USA is especially important (FTC, 1998). This legislation requires operators of websites, or online services directed to children to post on the website what information is collected from children and how this information will be used. It also requires "verifiable parental consent," and prohibits the solicitation of personal information over and above what is necessary for games, prizes, and other like activities. As a result, the USA has taken legislative measures to protect the privacy of the personal details of children on the Internet.

Personal Information Protection in Japan

The Act for Protection of Computer Processed Personal Data held by Administrative Organs was passed in December 1988 (Management & Coordination Agency, 1988). This law was designed to protect the personal information processed by computers in administration. In addition, 1,407 municipal corporations (42% of all municipal corporations) had regulations concerning the protection of personal information as of April 1998 (Ministry of Home Affairs, 1998). Within these municipal corporations, 18 prefectures had regulations concerning the protection of personal information. The regulations cover records, the use of these records, their maintenance, the obligations of staff, and so on. Moreover, 556 municipal corporations have regulations whose rules prohibit the connection of computer networks to other organizations (Ministry of Home Affairs, 1998).

Problems Affecting the Distribution of Information in Special Education

This section examines issues related to the protection of personal information in the distribution of information concerning special education. First, a definition of the term "personal information" is required. Personal information is defined in the Act for Protection of Computer Processed Personal Data held by Administrative Organs (Management & Coordination Agency, 1988). It is defined as follows:

It is information on an individual that includes his name, date of birth, and other descriptions of the individual which can be identified by a number, sign, and so on. It includes information that does not enable identification based on this information alone, but can be easily compared with other information to identify an individual.

Many municipal corporations have adopted similar definitions in the regulation of personal information protection, and the above definition will be used in the present study.

A case illustration of protection of personal information involving the educational usage of the Internet has recently surfaced in Japan. An outline of the case is presented here (Yomiuri, 1996):

A teacher of an elementary school connected to the Internet through his own PC published the names, hobbies, and photographs of pupils on his Web page. The Board of Education and the Section of Information Processing notified the teacher in the district that he had violated "The Regulation of Personal information Protection," and he was directed to remove the information from his Web site. In this case, violation of the prohibition to offer personal information externally (Article 14), and violation of the prohibition to connect to external computer networks (Article 18) were highlighted in relation to the Regulation. It was the opinion of the Board of Education that the permission of the Personal Information Protection Council was required.

Thus, regarding the use of the Internet in the context of educational activities, the protection of personal information has become important.

Use of the Internet in special education activities requires full consideration be given to the protection of personal information. However, in special education, Article 18 of the Regulation of Personal Information Protection is problematic. As mentioned above, the regulations of many municipal authorities include rules prohibiting the linking of PC to external networks. Thus, it is sometimes difficult to connect school computers to the Internet. In relation to this, a final report on the promotion of information education in primary and secondary education in Japan was made in 1998 (Ministry of Education, Science Sports & Culture, 1998a). This report states:

There are some cases where schools cannot connect to the Internet because connecting to the

Internet conflicts with regulations regarding the protection of personal information in a section of a municipal corporation. Since the 1970's each municipal authority has controlled information obtained through citizen registration with the computer system, and has established rules that prohibit connection of such systems with external networks. Some municipal authorities have interpreted these regulations as applying to the connection of schools to the Internet.

Considering the difficulties this presents, it is important that municipal authorities and local Boards of Education establish clear policy guidelines concerning the educational use of the Internet. In particular, they should take into consideration the fact that Internet, as a new information technology, developed after the promulgation of the regulations.

The report highlights the need for municipal authorities to take appropriate measures to ensure that schools have access to the Internet. In addition, it stresses that guidelines concerning the educational use of the Internet are necessary in municipal corporations and Boards of Education. Some municipal authorities have already established necessary guidelines for the protection of personal information on the Internet.

In special education, the requirement to protect personal information is even more critical than in general education because special education activities are often closely related to the state of the disabilities of individual students. Therefore, if special education activities are to be introduced on Web pages, the appropriateness of such information should be critically examined in terms of its purpose and meaning in the context of special education. It is necessary to examine certain aspects when disseminating information concerning special education from the perspective of the protection of personal information.

Protection of Copyright

International trends in copyright protection

With the rising popularity of the Internet, various types of information are being distributed globally. In this context, an internationally acceptable understanding on the protection of copyright has become necessary.

The World Intellectual Property Organization (WIPO) convened in December 1996 to examine the use of copyright materials, and two new agreements were signed as a result; these were the WIPO Copyright Agreement and the WIPO Performances

and Phonograms Agreement (Bando, 1997). Up to the present, publishers, movie companies, broadcasters etc., played a major role in the distribution of copyright materials, but the rapid spread of the Internet has enabled a far wider distribution of these materials. However, the signing of the WIPO copyright agreements can be seen as a step forward in attempts to coordinate copyright laws internationally (Aizawa, 1997).

Trends in Copyright Protection in Japan

As the WIPO agreements were adopted in December 1996, the multimedia committee of the Copyright Council of the Agency for Cultural Affairs presented a Discussion Report in February 1997. Based on this report, the following revisions were presented to the Diet in May 1997 (Bando, 1997):

- i. Establishment of the rights of performing artists and record manufacturers concerning interactive transmission.
- ii. Expansion of copyright scope concerning interactive transmission.
- iii. Rights of transmission of computer programs within the same premises.
- iv. Standardization of transmission related terminology.

The first revision implies that performing artists and record manufacturers be given new rights to enable interactive transmission which designates transmission through individual access from a terminal at a computer. The second means that copyright extends to data uploading, which is the stage preceding transmission. This is because individual acts of transmission are not easily monitored on the Internet. The third revision means that copyright covers the transmission of computer programmes on a network within the same premises because there are some cases in which such transmission may harm the interests of the owner of the copyright. The fourth item means that all public transmissions, including interactive transmissions through the media of cable and wireless, are covered by the term "public transmission." The revision of some parts of the copyright law was accepted in June 1997 (Bando, 1997). As a result, Japanese regulations concerning interactive transmission over the Internet now comply with the new WIPO agreements.

Problem of copyright protection in Special Education

Many special education schools have established web sites as previously mentioned. This raises a

number of copyright issues.

"The Public Transmission Right" (Article 23) applies to the transmission of information through the Internet according to the revision of the Copyright Law in 1997. Therefore, when other people's work is used on Web sites without their permission, this represents a violation of public transmission rights; for example, the use of pictures that are protected by copyright without permission of the copyright owner. Furthermore, making it possible to listen to copyright music without permission also becomes a violation of public transmission rights. It should also be noted that animation characters cannot be used without the permission of the copyright holder. This is also the case when student's poetry or pictures are put on Web pages.

Under the copyright legislation, the author is defined as "the person who creates the work" (Article 2, 1st term, 2nd). Moreover, works protected by copyright law are "things that creatively express thoughts or feeling" (Copyright Law Study Group, 1999). The term creatively used here means that the individuality of a person is reflected in the work, and neither artistic eminence, nor economic value is a factor. Therefore, if a student writes poetry, draws pictures, or plays music, these are considered to be works protected by copyright law, and the student is considered to be the author of this work. As a result, the posting of such work on Web pages requires the permission of the student. This is an important matter for consideration by teachers in the field of special education.

A further issue concerns the posting of photographs of Web pages. For example, photographs may be desirable to post in relation to special education activities. In this case, it is necessary to consider "portrait right." The right concerning personal photographs has been admitted as a right that should be protected based on the Constitution or Civil Law, although the right is not clearly defined as a "portrait right" by law. In 1969, a Supreme Court decision was handed down that the taking of a photograph of an individual's features without proper cause contradicts Article 13 of the Constitution (i.e. esteem of the right to the pursuit of life, freedom, and happiness), and stated that "everyone has the freedom not to have photographs of their features and form taken without approval and that this is one of the freedoms of individual personal life" (Sakuhana, 1995).

Therefore, when an individual's photograph is posted on Web pages, it is necessary to obtain the approval of the person portrayed. A careful examination of copyright and portrait rights is necessary

when information about special education activities are posted on Web pages.

Measures to Guard against Undesirable Information
International Trends in measures to safeguard against undesirable information

The Action Plan on Promoting Safe Use of the Internet of the European Commission states "illegal content" as content that violates the following (European Commission, 1997a):

- i. National security (i.e., instructions on the making of bombs, illegal drug production, terrorist activities).
- ii. Protection of minors (i.e., abusive forms of marketing, violence, pornography).
- iii. Protection of human dignity (i.e., the incitement to racial hatred or racial discrimination).
- iv. Economic security (i.e., fraud, instruction of pirating credit cards).
- v. Information security (i.e., malicious hacking).
- vi. Protection of privacy (i.e., unauthorised communication of personal information, electronic harassment).
- vii. Protection of reputation (i.e., libel, unlawful comparative advertising).
- viii. Intellectual property (i.e., unauthorised distribution of copyrighted materials).

On the other hand, harmful information, both illegal and harmful content, are considered to be any information that seems undesirable in a general sense (Ministry of Posts and Telecommunications, 1997), and it is this sense of the term that is implied in this paper.

The following is an overview of international trends concerning measures taken to protect against harmful information. First, in November 1997, the European Commission published a "Green Paper on the Protection of Minors and Human Dignity in Audiovisual and Information Services," in which measures were proposed regarding the protection of minors from harmful and illegal information (European Commission, 1997b). Also, in May 1996, the World Wide Web Consortium (W3C) based in the USA proposed a Platform for Internet Content Selection (PICS) (World Wide Web Consortium, 1997), and this platform has had a worldwide effect. In the United Kingdom, the R3 Safety Net plan was announced in September 1996 (The Safety Net Foundation, 1996). This plan proposes that content providers voluntarily regulate information on the Internet. In Germany, according to the "Multimedia

Act" passed in June 1996, a person who offers all information communication services that include the Internet is responsible for the information content under regulation of the common law (Deutschen Bundestage, 1997).

The trends gathered here from a few international sources are summarized in a report of the study group on the rules for the flow of information in telecommunication services announced by the Ministry of Posts and Telecommunications in 1997 (Ministry of Posts and Telecommunications, 1997).

Trends in measures against harmful information in Japan

The study group for the advancement of the condition for the use of telecommunications established by the Bureau of the Ministry of Posts and Telecommunications published a report in December 1996 dealing with various problems that affect the distribution of information on the Internet (Ministry of Posts and Telecommunications, 1996). The report highlighted the importance of reinforcement of international cooperation, planning and the establishment of guidelines by providers, and the development of a filtering system. Moreover, the National Police Agency announced in April 1996 an "Intermediate Report on Security of the Information Systems" that outlined measures to be taken against Internet crime (National Police Agency, 1996). Finally, an organization called the Electronic Network Consortium published a document entitled "Rules and Manners for Internet Users" in March 1999 (Electronic Network Consortium, 1999).

Measures taken against harmful information in Special education

Measures against harmful information are an extremely important consideration in the use of the internet in special education. The report of the Bureaus of the Ministry of Posts and Telecommunications cited above (Ministry of Posts and Telecommunications, 1996), highlighted the following problematic issues:

- i. Professional job ethics of the publication, the newspaper, and the broadcasting do not work on the information content of the Internet.
- ii. Owing to the anonymity of the senders of information, irresponsible information sending and illegal acts are easy to commit psychologically.
- iii. Even if illegal content is deleted from a server, it can be easily copied and forwarded to another server.

- iv. Even if a country prohibits illegal information under Civil law, but it is not illegal in another country, this type of information can spread worldwide.
- v. Even if a given Internet provider limits access to illegal information, it is possible to access this information through another provider.

As a result of the rapid spread of the Internet, everyone is able to post information, but in many cases the content of this information is not sufficiently screened to ascertain whether or not it should be posted. There are many cases of individuals sending harmful information carelessly, or putting personal information on Web pages without sufficient consideration of the effect of doing so. Therefore, it is necessary to consider measures to be taken against harmful information in education. Recently, a filtering mechanism has been developed to prevent access to harmful information. There are two methods whereby information can be blocked or filtered, and they are referred to as the white and the black list method (Kubo and Takiguchi, 1997). The white list method is a method listing authorised information. Any information not listed is prohibited. In contrast, the black list method authorizes information that is not prohibited. Under this method, information listed is prohibited and other information is permitted.

Both methods have their merits and demerits. In the white list method, if the list is appropriately compiled, information that should be prohibited does not pass through the filter. However, because any information not listed is prohibited, the chance of obtaining useful new information is limited. The black list method, on the other hand, allows the possibility of harmful information not listed to pass through. Nevertheless, the black list method has the advantage of allowing greater access to new and useful information.

Although technologies that block the flow of harmful information are progressing, it seems that the judgement of the Internet user is still a very important determinant of the harmfulness or otherwise of information accessed.

A report of the Research Cooperation Conference of the Ministry of Education published in August 1998 (Ministry of Education, Science, Sports and Culture, 1998a) on the measures to be taken against harmful information in the context of education states:

There is a large amount of information that is improper for children (so-called harmful

information) on the Internet. Filtering technology is in general use at this time to block improper information that may thwart the healthy development of children from reaching those children.

Filtering of information has both benefits and deficits depending on where the control is exerted, whether at individual terminals in schools, servers in schools, or at education centres, and it is also dependent on the method of filtering technology used (whether the black list or the white list method). There are innumerable Web sites on the Internet with frequently changing addresses, and new Web sites appear continually. Therefore, filter lists must be often updated. From an economical and technological perspective, it is more efficient to do this at a central location such as an education centre, rather than at individual schools.

At the same time, there are no definitive measures to protect against improper information in the context of education. At present, it is important to supply information concerning the current state of research on filtering technology and illustrations of applied practice to boards of education and to schools.

Concerning the issue of filtering, it is the opinion of some that access to harmful sites can be prevented as long as students use the Internet under the proper guidance of teachers. Many others believe that harmful content, slander and personal attacks through e-mail or electronic bulletin boards are the problem.

Thus, the report highlights the importance of popularising information about measures to protect students from harmful information. In addition, it stresses the possibility that students may inadvertently disseminate slanderous information.

Slander is becoming a major social issue. The slanderous acts mentioned here refer to actions that contribute to the lower social evaluation of an individual, and acts of slander fall under Civil and Criminal law (Yamashita, 1997). If the social evaluation of a person is threatened, under Civil Law (Article 709), this is considered to be an act of slander. Therefore, the publishing of messages that damage another person's reputation on Web pages contributes to damaging that reputation in public, and is considered to be slander. In this case, the message can be prevented and compensation for damages claimed under Article 709 of the Civil Law. Moreover, deletion of the slanderous message can be requested of the Web master (Yamashita, 1997).

Under Criminal Law, the acts of slander (Article

230 of the Criminal Law) and the act of insult (Article 231 of the Criminal Law) are provided for separately. It is assumed that an act that lowers social evaluation by pointing out facts is slander, and that an act that lowers social evaluation by only showing evaluation and judgement is an insult. Article 230 of the Criminal Law prescribes "the person who damages a person's honour publicly is sentenced to penal servitude of three years or a penalty of 500,000-yen or less, regardless of the presence of the fact" (Yamashita, 1997). On the other hand, Article 231 of the Criminal Law prescribes "even if the fact is not pointed out, the person who publicly insults a person is sentenced to detention or penalty" (Yamashita, 1997).

For acts of slander and insult on the Internet, a common international accord has been reached that "What is illegal offline remains illegal online." (Ministry of Posts and Telecommunications, 1997) Therefore, it is important to promote student understanding concerning the responsibilities and risks involved in use of the Internet in the context of special education. It is necessary to make students understand that information gathered from the Internet could contain information with low validity, or is illegal, and students should carefully consider the value and meaning of any information. Also, it is important that students do not suffer damage from harmful information when the Internet is used in special education activities, and it is important for students to exercise care when using the Internet to avoid inadvertently disseminating harmful information.

Progress in Establishing Guidelines

Thus far the problem has been investigated in three areas: (1) protection of personal information; (2) protection of copyright, and (3) measures to safeguard against harmful information. It is believed that guidelines regarding the use of the Internet in educational activities are important in each of these areas. Therefore, the guidelines for Internet use are examined in the following section.

Guidelines for Internet Use in Special Education

First, a general view of the guidelines concerning Internet use is examined. According to the Ministry of Education (Ministry of Education, Science, Sports and Culture, 1998b), guidelines have been established in 2,316 elementary schools (35.6% of the elementary schools connected to the Internet), 1,497 lower secondary schools (33.6% of the lower secondary schools

connected to the Internet), 1,210 upper secondary schools (45.6% of the upper secondary schools connected to the Internet), and 184 special schools (55.1% of the special schools connected to the Internet). Of the special education schools, 14 (50%) of schools for the blind, 26 (56.5%) of schools for the deaf, and 144 (55.4%) "other" special schools have established guidelines. This is more than one half of such schools.

In addition, the Board of Education in some municipal corporations has established guidelines for use of the Internet in the context of education. The advantage of this is that this establishes common recognition between schools over which boards of education have jurisdiction. Moreover, the formulation of the guidelines is important in that it relates to the regulation of personal information protection enacted by municipal authorities. Municipal authority guidelines are examined in the following section in terms of: (1) protection of personal information; (2) protection of copyright, and (3) measures to safeguard against harmful information.

Protection of Personal Information

The Yokohama City Board of Education established "Guidelines for the Use of the Internet" in April 1998 (Yokohama City Board of Education, 1998). In Yokohama the guidelines are planned with the assent of the Yokohama City Personal Information Protection Council as a common set of rules to be applied by all municipal schools concerning the use of the Internet. The protection of personal information is described as follows:

It is preferable not to post student's personal information on public Web pages from the viewpoint of the student's human rights and student's safety insofar as possible. However, if it is thought that the posting of information is necessary to introduce school events, the work of students, and the results of activities, for promoting educational activities, one can post information in the following ranges based on consideration of the purpose, the educational effect, and the danger of the posting. In this case, it is necessary to obtain the consent of the student, parent or guardian after the liabilities of posting such information have been fully explained.

a) Name: As a rule, personal information is not posted when student's work is posted to a Web page. However, if it is necessary to post personal information for the purpose of the article, the range of the posting shall be limited to name, school year, and the subject.

- b) Photographs: If it is necessary to post student's photographs on Web pages, group photographs should be used with care taken so those individuals may not be specified from the photograph. When a photograph in which individual can be recognized is posted to a Web page, it should be posted in such a manner that it is not likely to coincide with the name after the photograph is shown to the student and the guardian, and the consent for posting is obtained.
- c) Other personal Information: Information concerning individual lives, such as nationality, registered domicile, address, telephone number, date of birth, family composition, etc., must not be posted on public Web pages.

In summary, the guidelines state that personal information should not be posted on school Web sites insofar as possible, and the purpose and educational effect, and the danger of posting personal information should be fully taken into consideration. Moreover, the range of posting when names and photographs are posted to Web pages is described in concrete terms in the document. In addition, the guidelines oblige schools to obtain the consent of students, parents and guardians and that the liabilities of posting this material be fully explained.

In May 1998, Kawasaki City published a set of guidelines called "Guidelines for Internet Use at School" (Kawasaki City, 1998). The guidelines describe the posting of personal information. The following consideration is necessary for the personal information of students and school personnel:

Personal information such as name, opinions, photographs, etc., based upon which an individual might be identified, should not be posted to Web pages unless the agreement of the guardian or student (Format 6) is submitted to the school principal and permission is received.

However, information concerning the individual's life such as address, telephone number, date of birth, nationality, registered domicile, thoughts, religion, etc., must not be posted to Web pages.

In the guidelines of Kawasaki City, the format for the agreement of guardians and students is concretely shown when the information is posted.

In addition, guidelines for the posting of personal information in the Meguro Ward of Tokyo entitled "Outline concerning the Use of the Internet in Meguro Ward Elementary and Lower Secondary Schools" (Meguro Ward, 1999) describes:

- i. The posting of the personal information of the student to Web pages is limited only to cases when the school principal recognizes the necessity of such posting for the educational activities of the school. If personal information is posted, it is necessary to consider measures that protect students from damages arising from the posting of personal information.
- ii. When student's personal information is posted to Web pages, such posting must be done with the guidance of the teacher after the outline and the liabilities of posting such personal information have been explained to the students and the guardians, and agreement is obtained for posting.
- iii. It is necessary to take appropriate measures promptly when the correction and deletion of personal information posted on the school's Web site is requested from the student or guardian.

Thus, the item concerning the measure when the correction and the deletion are requested from the student or the guardian is included in the guidelines of the Meguro Ward.

Moreover, at the Hyogo Prefecture Internet Use Promotion Conference held in March 1999, "Guidelines for Internet Use" were written for individual users; that is, the child, the student, school personnel, and administrators. The contents include simple to understand explanations for the protection of personal information using concrete illustrations such as "e-mail" and "Making a Web Page." (Hyogo Prefecture Internet Use Promotion Conference, 1999)

As mentioned above, guidelines concerning the educational use of the Internet have already been formulated, and policy for the protection of personal information has already been established by some municipal authorities. It is important that more municipal authorities become involved in this process in the future.

Protection of Copyright

The guidelines formulated by Yokohama City concerning copyright are as follows (Yokohama City Board of Education, 1998):

It is necessary to consider the copyright of such information as writings, paintings, photographs, and music, etc., which is posted to school Web pages. Therefore, when information is posted to school Web pages, the principle is that the person who made the information posts the information that was made for the web page. If other persons prepare the information, or the information relates

to other persons, it is necessary to obtain the agreement for the posting and accept the instructions for such posting.

In addition, there are guidelines relating to the protection of copyright in Kawasaki City (Kawasaki City, 1998):

When work with copyright is posted on school Web pages, it is necessary to obtain the permission of the author. Moreover, when a student's work is posted to school Web pages, it is necessary to obtain the agreement of the student or guardian. For information collected through the Internet, the user must make proper use according to copyright law and regulations.

That is, the copyright of student's work is referred to here in these guidelines.

The issue of the copyright of student work was also addressed at the Hyogo Prefecture Internet Use Promotion Conference. For example, the chapter for school personnel describes the protection of copyright as follows (Hyogo Prefecture Internet Use Promotion Conference, 1999):

Protection of student's copyright

There is a copyright, also, in student's work, please obtain the consent of the student or guardian when you post work on Web pages.

Thus, the guidelines of some municipal authorities include items concerning the protection of copyright, although their descriptive expressions differ.

Measures Taken Against Harmful Information

These are the following measures adopted by Yokohama City against harmful information (Yokohama City Board of education, 1998).

All information which is posted on school Web pages has to be approved by the school principal, and school personnel and the student should be aware that it is information for the educational purposes of a public organization. The school principal must note the following content should not be posted when approval is given for such posting:

- i. Content which violates the law.
- ii. Content with the aim of the pursuit of profit.
- iii. Content that violates copyright and other rights.
- iv. Content that slanders others or is discriminative.
- v. Content judged improper to post information

to the public from a school.

In addition, there are the following descriptions as a consideration matter in the use of the student (Yokohama City Board of education, 1998):

- i. Guidance when students use the Internet: When students post information on school Web pages, school personnel should pay attention to the following; the problem of slander, the protection of copyright, portrait rights, intellectual property rights, and protection of privacy of personal information, etc. Moreover, teachers should guide their students in the basic ethics and manners in using the Internet, and promote student understanding and consciousness concerning the responsibility for the posting. When students receive information that contains unpleasant content or slanderous content by e-mail, school personnel must promptly take appropriate measures.
- ii. Consideration of information that disturbs the healthy development of students: When a PC is connected to the Internet, it is necessary to consider that students do not access information that disturbs their healthy development.

Related issues in the guidelines of Kawasaki City have also been described (Kawasaki City, 1998):

Before opening Web pages to the public, one should check whether they contain contents that violate the law such as slanderous material, and the use of character without permission at the Network Proper Use Committee.

Moreover, guidelines describe teacher guidance in this issue (Kawasaki City, 1998):

When students use the Internet, they should do so under the guidance of a teacher. When the internet is used, the teacher should provide the following guidance; (1) contents about privacy, personal information, and network etiquette; (2) ethics education concerning measures against harmful information that takes account of the characteristics of the internet; and (3) matters that the school principal considers necessary.

These are the guidelines proposed by the Hyogo Prefecture Internet Use Promotion Conference (Hyogo Prefecture Internet Use Promotion Conference, 1999).

Action to be taken against harmful Web pages

Please prohibit students from visiting harmful Web pages through guidance. If you find harmful Web pages that cannot be filtered, please report these to the appropriate school committee.

Removal of harmful information

Please take appropriate steps to remove harmful information, such as through the use of filtering software, or the use of an information retrieval service by which harmful information may be removed.

Moreover, the following descriptions targeting e-mail are addressed in the chapter for school personnel (Hyogo Prefecture Internet Use Promotion Conference, 1999):

Respect for Human rights

Please offer guidance so as not to violate another's human rights, please take appropriate and immediate action if you receive annoying e-mails or threatening e-mails.

Thus, measures against harmful information are referred to in the guidelines of some municipal corporations.

Internet Use and Guidelines for Municipal Corporations

As mentioned above, some municipal corporations have established guidelines for the use of the Internet in the context of education. The guidelines include descriptions concerning the protection of personal information, the protection of copyright, and measures required to safeguard against harmful information.

When the Internet is used in special schools, it is necessary to use it in accordance with the guidelines established by municipal corporations. Furthermore, the following important point should be taken into consideration in this regard. Because the work corresponding to an individual is very important to special education activities, when the educational practice is introduced on the Web pages, it is important to carefully consider the descriptions that relate to personal information. For example, it is necessary to examine points about how to describe information by what expression in the description concerning the activities to meet the unique needs of each child with a disability from the viewpoint of education.

In summary, it is believed that consideration from an educational perspective should be done concerning the use of the Internet in special education schools, in addition to observance of guidelines for its use.

Future Issues

This final section of the paper discusses the future issues that need to be addressed concerning the use of the Internet.

Guidelines for Special Education

The present task is to examine the guidelines for the educational use of the Internet from the viewpoint of special education. In the boards of education of some municipal corporations, guidelines concerning the use of the Internet in schools are available to the public. These guidelines are necessary to avoid the confusion and misunderstanding regarding Internet use in schools. There are important differences in attitude concerning the use of the Internet in special education. There are those who adopt a more conservative approach to its use, and those who want to use it more actively. It is believed that the guidelines help to clarify some of the confusion that this causes. Furthermore, it will be necessary to review the present guidelines of municipal corporations and schools at some appropriate time in the future. As the Internet is rapidly expanding, there is a need to adjust current needs and conditions in special schools to these trends.

Promotion of Student Understanding of Legal Aspects

It is important to promote student understanding of the law and how it relates to Internet use. While students may feel that legal aspects are not relevant, it is important to provide concrete guidance about the dangers that exist and the precautions students should take to avoid the damage that may be caused. In the new standard for educational curricula to be implemented in 2002, a policy to expand information education was announced (Ministry of Education, Science, Sports and Culture, 1999). It is necessary to examine content relating to legal aspects of information education in the future.

Promotion of Guardians Understanding of Legal Aspects

It is important to promote an understanding of the legal aspects of Internet use in guardians. As it is projected that students will increasingly use the Internet both at home and school, the cooperation of the school and the home is required to prevent, or ameliorate the effects of harmful information. Furthermore, there are many students who have difficulty in communication in the students who have disabilities. Therefore, the guardian and the school personnel should cooperate together so that students

who have disabilities are not at a disadvantage regarding the use of the Internet.

Inservice Training for Teachers.

The inservice training of school personnel in special education is very important to promote an understanding of students and guardians about the legal aspects of the Internet. Measures have already been adopted to address problematic issues in some areas, and there is the possibility of international agreement on various legal aspects in the future. Information about these latest trends should be made available to special education teachers.

Conclusion

The authors examined the tasks concerning the protection of personal information, the protection of copyright, and measures that need to be taken against harmful information on the Internet. As the Internet will become increasingly used in the future, it is critical that special education personnel should be fully acquainted with the problems there are and the measures that have been adopted to meet them. If this is achieved, then the use of the Internet in special education schools in Japan will be more effective.

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