FINDING QUALITY INFORMATION ON INTERNET FOR EDUCATIONAL USE

By

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ABSTRACT

One of the major shifts in education today under the influence of information and communication technologies is that there is an increased tendency toward the use of computers and Internet. The process of ICT integration in schools reaches a considerable level of maturity and teachers and students are optimizing the learning opportunities with the use of ICT. However it is imperative that the teachers must know how to judge the quality and suitability of information before they can introduce to the students. Some evaluation criteria indicated in the literature are, authority, accuracy, objectivity, currency, coverage and intended audience. This paper describes ways to evaluate suitability of educational websites based on the well defined set of criteria.

INTRODUCTION

In the past decades, we have witnessed the pervasive use of Information and Communication Technology in education, business, government and healthcare sectors. We are constantly reminded of effects of information explosion, knowledge based economy and the IT revolution. As citizens of the world we need to be conversant with these technologies and leverage its usefulness to increase the quality of our lives. The awareness on the implication of technologies is introduced at the early age of the school learning, so that future generation is equipped with the know-how of these technologies.

The Internet and the World Wide Web are important to a field like education. The most significant reason is that the Internet brings a massive set of information resources into the classroom and students can easily visit websites around the world (Proenzo, 1999). Internet and World Wide Web can make learning alive and teachers can find different ways to take advantages of its resources. These resources can be used as professional growth, or support materials in teaching and other classroom activities (Virginia Space Grant Consortium, 1997).

Cafolla, Kauffman and Knee (1997) indicated that with the use of World Wide Web, teachers and students now have the capacity to expand their intellectual lives to make

teaching and learning better than before.

There are many benefits of using the Internet. Barron and Ivers (1998) classified as benefits for students, teachers, administrators and community. They emphasize that the internet can provide students with new, exciting and challenging resources. It established real-world experiences, encourages higher order thinking skills and increases motivation, achievement and positive behaviour. The internet provides a natural setting for inquiry skills, including collecting information for analysis and communicating with experts. Research studies also show that computer-based communications can positively affect student attitudes and motivation.

As for the teachers the internet proves instant access to educational research, curriculum resources, lesson plans, online experts, discussion centres and teacher forums. This wealth of information open doors for collaboration, encourages alternative instructional strategies and enhances the curriculum for the benefits of both the teachers and the students.

Although the potential value of the Internet for promoting learning is indisputable, research shows that this tool is still not used nearly to its potential in our education system (DiGerrgio and Lesage, 2001).

Web Resources Evaluation

The World Wide Web offers students, teachers, parents and

researchers a great deal of information from around the world. While the web is easy to use, many users do not sufficiently look into the detailed quality of the information. This is even more critical because unlike other types of information such as printed books, almost anybody with minimum knowledge of computer and Internet is able to put any kind of information on the web.

A number of resources have been developed to help users locate quality web information, but it is imperative that web users know how to judge the quality of information they find on a web page for them. The five traditional evaluation criteria they have indicated are, authority, accuracy, objectivity, currency, and coverage and intended audience (Alexander and Tate, 1999).

Sharp, Levine and Sharp (1998) used a set of criteria for selection of web-based material. One of the important criteria is that the site contains appropriate, relevant, and timely information. The site should be organized effectively on a stable Internet location with good connectivity so that teachers and students can easily find the information they are seeking. Downloading time should be reasonable and the site is updated regularly. Information should be authoritative and reliable.

Meta-analysis of 19 sources conducted by Gurak and Bobendrier (1999) listed the Web page author's name or authorship as an important criterion. Determining whether the information was up-to-date and checking the currency was another important criterion. In determining a website's content, most of the sources suggested analyzing the site's intended audience. A statement of purpose will explain what the author's purpose is. A website's URL can also give clue to who the author is. Users are advised to consider the domain section of the URL which indicates whether it is an educational, governmental or commercial site. Other criteria included in the evaluation are accuracy and design.

A number of websites provide some basic criteria in evaluating of web resources. For example Eastern Kentucky University (2002) suggests the following areas.

Authorship --Author's name and credentials, contact information

Scope--Purpose of the site, intended audience,

relevant to research topic

Objectivity or point of view--Point of view, balanced or information overly biased or slanted, objectivity consistent with the purpose of the site, advertising

Authority--Contact information, web site of reputable organization; Best sites: .edu, .gov, .org

Accuracy--Grammar, style, tone; information accurate and verifiable, sources cited

Currency--Date of the information, date page last updated, links current and reliable, charts and graphs have dates

Some websites provides annotated bibliography on evaluation of World Wide Web sites in order to assist the information seekers (Vanderbilt, 1995; Schrock, 1998; Lycoming College, 2002).

The following are the characteristics of the websites and detailed explanations which can be considered to use as a criteria for selecting website for educational use. These are derived from the synthesis of ideas stated by the sources indicated in the references.

Purpose

A site's purpose - whether it explains, persuades or informs is relevant to teachers considering its use. Its purpose may be marketing, informational, advocacy, news or personal. The purpose and intended audience should be appropriate for the researcher's subject matter. As any one can put up any topic on the web, the question of subjectivity becomes crucial. Why is the website put up? What are the objectives, and the intentions?

Content

Users may be interested to know whether the information is factual or an opinion. Sites can be useful as information resources or as links to other information. Other aspects of content relate to whether the site contains biases and grammatical errors. The other aspect concerned whether the content is adaptable to our local curriculum.

Authorship

Authorship is one of the major factors used in evaluating website for use in education. While some sites even cite contact information, author's institution and bibliographies

in addition to author's credentials, on the other extreme end, some sites are anonymous. The user would like to know who wrote the content and what their professional background is. This would help the user to examine the critical value contained on the web.

Currency

Currency refers to the timeliness and how fresh the information is. In terms of printed books and journals, the date of publication is the indicator of the currency. Given the ease of updating information on the web, the evidence of regular updating of the website is an important requirement of an internet evaluation tool. While not all the information needs to be changed, it would be good if the website is continually updated by the author.

Visual Design

This concerns the visual appeal of the page and whether the information is easily located. Another relevant aspect concerns whether special effects, sound or animation are used appropriately.

Navigation

Navigation here means whether the navigation structure is well organized and user friendly, the presence of site map, and the ease of getting back to home page.

Access

Access can include webpage download time, any need for specific browser and the ease of remembering the URL address. Access can be an issue in education as the teacher has to ensure that not too much time is wasted to access a site as classroom time is limited.

Conclusion

Internet resources are only one type of electronic information. Other resources may include CD-ROMs. The author observed that for local teachers in the lower primary levels, there seems to be more use of CD-ROMs for teaching and learning compared with the internet. This might be due to the availability of many good and relevant CD-ROMs for those levels. In addition, the time limit in the classroom and the students' young age might be influencing factors. Teachers might not use the internet that often as young learners need more structure and internet searches can sometimes be time-consuming and not on-

task. Perhaps the use of the internet for secondary school and junior college is more prevalent as the content subjects are broader and there is more scope for the incorporation of the internet resources in project work and general paper. However, these factors need to be substantiated in a separate study.

In conclusion, how often and how effective the use of the internet for classroom learning depends more on the individual teacher. If the teacher's beliefs are that the internet is a good and relevant source of information and the teacher actually models the use of it for his or her own use, then perhaps the teacher can influence the students to use the internet more often.

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