
HOW DOES THE INTERNET HELP EDUCATION?

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Abstract

This paper looks into both the benefits and drawbacks of the Internet on education. From the perspectives of scholars, educationalists and psychologists worldwide, it is found that the Internet is indeed a resource for education. The Internet also makes sharing of ideas, communicating in teams and self-access learning feasible. However, some criticise that the information on the Internet is not reliable enough to be used as an educational resource. The quality of online materials is a major concern to teachers and the complicated computer commands in some online institutions' homepage can reduce students' interests in learning.

Introduction

With just a click of the mouse, the 12-year-old boy could generate dozens of Internet web pages related to 'Spider' for his school project. Articles written by scientists, biologists and researchers help him understand more about the nature of spiders, so that he can present his findings in the coming lesson. Mrs Gordon, a 45-year-old History teacher, surfs on the Internet for life data which helps her GCSE O-level History class. The speech recordings of Stalin, the photographs revealing the German Nazi invasion, and the time-chart describing the sequence of events before the Chinese 1911 Revolution all help her conduct better History lessons in the upcoming weeks. Mr. Watson, a small-scale business manager, is now doing a MBA course online. He uses the online discussion forum everyday to discuss with his classmates in Liverpool and his instructors in the Birmingham University.

It seems the Internet helps education a lot. The Internet becomes an inseparable part of education because it is informative, convenient and user-friendly. It is true to say that

education nowadays could not be without the Internet. Though the Internet delivers something good for education, its drawbacks on education should not be undermined. Therefore, it is important to look into both the benefits and the drawbacks of the Internet on education before we come to the conclusion that the Internet makes teaching and learning better.

How the Internet Helps Education

1. Loads of Information

It is true to say that the Internet itself provides billions of information to all kinds of learners. Lever-Duffy, McDonald and Mizell (2003) think that the Internet is beneficial for learners since many educational journals on various subjects are now available on the Internet, and most of these Internet publications are archived and current journal articles.

Online services and online news headlines are also valuable resources from educational perspective. Milone (1996) thinks that online services like encyclopaedia, weather and maps, together with online news headlines, educational groups and political forums, are of enormous values to teachers and students. Chadha and Kumail (2002) use the term 'real-life datasets' to describe the resources available on the Internet. Chadha and Kumail (2002) think that they are real-life datasets because the texts on the Internet are written by or collected from different non-profit making organizations, government departments, public websites and school projects. These resources help teachers and students acquire raw, authentic materials for work and projects.

As regards language learning, Morrall (1999) points out that many resources on the Internet actually help language teaching. For instance, online concordancers, online dictionaries and language learning web sites are useful for language teachers. The Internet also helps English teachers to communicate with one another through e-mails or electronic discussion boards. A concrete example of this is that teachers in Hong Kong can make use of the Teachers of English Language Education Centre computer network (TeleNex), to discuss about how to

teach effectively in class with other school teachers.

Internet search engines also help teachers and students doing research projects. Parsons (2003) cites that "Google" at www.google.com is popular for teachers who want to do basic web searches. Parsons (2003) also thinks that the Internet helps planning a lesson of a specific topic. There are some good sites like www.abcteach.com and www.teachers.net which stimulate teachers to plan a lesson. There are many homepages related to a specific topic on the Internet which help teaching as well. As mentioned by Shiroma (2000), the historical photographs and cartoons found in the some museums' homepages can be regarded as primary resources in teaching and learning history.

2. Sharing of Information

With the Internet, learners can share their views and even publish their own findings in their homepages. Collaboration results if people are willing to contribute on the Internet. Chadha and Kumail (2002:101) claim with Internet resources, learning "gets shared across a rim of audience spreading over the globe", while in traditional classrooms, it is only the ones who take part in the lesson acquire learning. Therefore, the Internet is open to everyone, even for those who cannot attend the lesson. Learning continues to be shared to everyone and new perspectives keep on being added.

In addition, according to the theory of educational psychology, ultimate learning is achieved when constant interaction and debate are taken place among people. With online chat rooms, email list groups, discussion boards, virtual classrooms and video conferencing, learning is fostered. The creation of new knowledge and idea results. (Chadha and Kumail 2002) Hence, Chadha and Kumail (2002:102) conclude that "e-learning opens avenues for people to transform the information into knowledge by collaborating with experts and peers alike".

Students benefit from sharing information over the Internet as well. With the use of the

Internet, students can contribute their discoveries and writings to the rest of the world. As students can publish their work to a larger audience on the Internet, students' motivations in studying and their quality of work improve. (Serim and Koch 1996)

Gannon (2001) shares a similar viewpoint to Serim and Koch (1996). Gannon (2001) thinks that some websites allow students to send their written work to the webmasters. If the webmasters publish the students' work on their web sites, people from all over the world can read the students' work and give them feedback and recommendations. In this way, students become better learners as their essays are reviewed by audiences worldwide.

Sharing information over the Internet also increases one's social skills. With online discussions, students who are passive in traditional classrooms will be more willing to take part, to listen to the others and speak out. (Brown and Green 2003) Brown and Green (2003) reports Brown and Duguid's (2002) observation that the use of the Internet particularly benefited minorities and women who may be too shy to speak out in classrooms.

3. Online Learning Community

Newell, Wilsman, Langenfeld and McIntosh (2002), define online learning community as a learning community involving a group of learners who have a desire to learn, a similar interest, and a willingness to share opinions and ideas.

An online learning community links students to physically dispersed experts and other students. An online learning community environment also encourages students to ask questions that they may not be able to ask in a traditional classroom. Students can also put up their views freely in an online discussion forum. (Zhang and Zhou 2003)

Porter (2001) claims that online learning communities are means of "learning within an atmosphere of trust, support, common goals, and respect for diversity". People who are not

confident enough to contribute in a discussion face-to-face will find it more easy and relieved working in online communities. An online learning community allows students who are shy to voice their opinions freely in an online meeting as they are not seeing one another face-to-face. Participants in an online learning community do not have to worry about the negative body language imposed by somebody if he/she disagrees with you.

Porter's (2001) another perspective is that online learning community helps its members build up their self-esteem. He thinks that students with different learning abilities will feel empowered through participating in online learning communities. Online learning communities provide "equal playing fields" for all members in a group to contribute.

Furthermore, online discussions can enhance students' communication skills, language skills and critical-thinking skills. Online learning communities can cultivate students' interest in thinking and composing spontaneously. (Liu, Moore, Graham and Lee 2002)

4. Helping Teachers' Professional Development

The Internet provides a valuable tool for teachers to acquire knowledge and update themselves for professional development. Teachers can take up courses from various online institutes, such as the Heritage Institute, the World Lecture Hall at the University of Texas, the Web University courses, and the Learning Applications at PacBell. (Topper 2004)

In New Zealand, there are some colleges and universities of Education beginning to use the Internet to offer professional development courses for teachers at both undergraduate and postgraduate levels. A successful example is the School of Education at the University of Otago, where the numbers of web-based postgraduate has been growing significantly since 1997. (Trewern and Kwok 2001)

In the United States, the Department of Education has given a grant to the homepage: PBS

TeacherLine. TeacherLine helps teachers to acquire the skills needed for teaching for their students in their future. TeacherLine also fosters online professional development through facilitated courses that meet national and local standards. Supportive and collaborative learning communities will be set up for teachers to share teaching ideas. Internet-based resources for teaching will also be provided by TeacherLine. (Reading Today Oct/Nov 2003, 32)

In Britain, BBC Education has launched the BBC Learning Station which aims at helping teachers access to relevant Internet materials. The BBC Learning Station provides 1,000 education websites which fit to the current British curriculum. Links are being sorted according to subjects and levels. The Station also guides teachers on how to look for relevant Internet resources, government statistical figures and government campaigns' web sites. (Education and Training 1998, 40, 2/3, 123)

5. Individual Learning Experience

Students can learn liberally by using the Internet. The content, design and delivery of an online learning material can be altered by learners, and learners can come across a more variety of learning materials instead of just a single textbook. In this way, learning becomes more independent and students become more flexible in learning. (Chadha and Kumail 2002)

Chadha and Kumail (2002:110) also think that "the Internet makes it possible for the learners to experience learning in real-time". Learners have the right to choose Internet resources which suit their ability and learning process. With the use of the Internet, learners can "define their own pace" flexibly on when they want to start their lessons. Lessons can take place at any time since Internet materials are always ready. Therefore, online education allows learners to make reference to their learning progress, and decide what and when to study.

Individual learning is also feasible over the net for secondary school students preparing for an

examination. According to Education and Training (1998, 40, 2/3, 123), the BBC Learning Station will provide educational homepages which helps students doing their revisions for public examinations. There will be an "Ask the Teacher" service, in which students can e-mail questions to online tutors for feedback.

6. Convenience

Some scholars have commented that the Internet is a convenient tool for teaching and learning.

For teaching, Serim and Koch (1996) think that with just a click on the mouse, sights, sounds and stories are brought into the classroom.

As for learning, Chadha and Kumail (2002) think that the Internet is 'convenient' to learners who are either busy or cannot afford paying an expensive classroom training course. Chadha and Kumail (2002) also believe that the Internet are valuable resources for organisations. Employees can use the Internet to obtain the latest news from the industry.

Brown and Green (2003) also have a similar view. They think that teachers from the more remote parts of a country may agree on the fact that learning on the Internet provides an "alternative to the physical travel required to attend a brick and mortar college or university".

How the Internet Does Not Help Education

However, we have to be careful that the Internet does not always help education. There are still some negative aspects about teaching and learning online. When we think about whether the Internet is ideal for education, we should consider the following arguments against using the Internet for educational purposes.

1. Unreliable Information

Atkinson (1996) thinks that the quality of the materials on the Internet as a medium for teaching and learning is a matter of concern. For instance, by searching on an Internet search engine, information from questionable sources is always being found. Therefore, teachers and students need to spend extra time screening out irrelevant and unnecessary information.

Morrall (1999) also doubts about the authenticity of some Internet resources. Morrall (1999) thinks that no quality control system is set up for Internet learning materials while there is for books and journals. Without a quality control system, teachers have to be very conscious about the Internet materials before distributing them to students. Teachers may have to spend extra time testing the online exercise themselves before giving them to students to work on. Students may also have the risk of reading vague, irrelevant or inappropriate materials from the Internet.

Brown and Green (2003) also add that courses that are made online do not receive the same scrutiny as traditional courses. This is due to the fact that some administrators, who have little or no personal experience with computers, may feel reluctant to evaluate an online course. Brown and Green (2003) also think that some Internet courses lack authority, as everyone can “create” an online institution by just knowing how to set up a few web pages. In this way, doubts about the qualification of online education arise.

2. Plagiarism

Elliot (2001) defines plagiarism as claiming the work of the others as one’s own work. Because the Internet allows users to download an entire essay, a new form of ‘wholesale’ plagiarism emerges.

Phillips and Horton (2000) cite that the number of online term paper mills has increased tremendously in recent years. Suarez and Martin (2001) elaborate on this, saying students can now download and purchase essays, reports, and term papers from profit-making web sites,

such as Research Assistance at <http://www.research-assistance.com> and A1 Term paper at <http://www.a1-term-paper.com>. Suarez and Martin (2001) report that it is estimated that there are at least 400 web sites currently available for essays to be downloaded, and 20-30 of them is running professionally.

Another big problem of online education is online examination. Read (2001) thinks that if a student is assessed over the Internet, the institution may not be able to trace whether he/she is really the one taking the examination and whether the work submitted is written entirely by him/her. Therefore, assessment cannot be done over the Internet unless there is supervision.

3. Confusion

Some researchers find the Internet actually brings confusions and frustrations to students.

Because of the complicated operational commands in online university courses, students get frustrated if they have problems in handling these complicated computer's commands. Sometimes the poor connectivity of a PC to the Internet will decrease students' motivation in learning. (Hara and Kling 1999)

Besides, problems cannot be solved over the Internet immediately unless students meet their instructors or classmates face-to-face. It is hard to communicate clearly over the Internet. Therefore, students get frustrated whenever 'ambiguities' arise. (Hara and Kling 1999)

4. Teachers' Difficulties in Using the Internet

Though software and hardware are provided for teachers to use the Internet for teaching, some teachers find it hard to apply these new skills and facilities.

According to the results of a pilot study in the Centre for Independent Language Learning of the Hong Kong Polytechnic University, many teachers in Hong Kong have difficulties in

finding useful information on the Internet. Only 20% of the teachers interviewed think they can find Internet resources easily, while 70% cannot. (Morrall 1999)

Also, the study shows 90% of the teachers interviewed have never put student project work on the Internet, and only 15% of the teachers have written their Internet home pages. (Morrall 1999)

Conclusion

Various researchers have given their views about how the strengths of using the Internet for education, and the weaknesses of using the Internet for education. It is obvious that the web does make education lively, convenient, supportive and collaborative. It is true that online tutorials can cover a larger number of students than traditional classrooms'. The Internet is also a place for sharing and discussing ideas and new perspectives. However, we have to be careful that the Internet can provide irrelevant, inappropriate and unclear resources and instructions. The Internet can also create frustrations to both students and teachers.

On the other hand, it seems that we cannot stop the tide of having web technology integrated into teaching. Therefore, much critical thinking should be applied in selecting which Internet resources are more worthy for students to learn, and how to conduct teaching effectively on the web, and administrators should strive to improve the designs of educational technology.

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