

Subject Area: Social Science

Grade Level(s): K-12

Title of Method: Web-based Learning

Description of Method:

Web-based instruction is teaching and learning supported by the attributes and resources of the Internet (Khan, 1997; Relan & Gillami, 1997).

Resources:

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- Murray, K.R. and W. E. Moen (2003). Understanding resource discovery design requirements for a statewide virtual library: Application of a technology adoption indicator *Proceedings of the American Society for Information Science and Technology*, 40 (1): 529 – 530.
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- Reigeluth, C. and R. Garfinkle. 1994. *Systemic change in education*. Englewood Cliffs, NJ: Educational Technology Publications.
- Rogers, E. M. 1995. *Diffusion of innovations (4th ed.)*. New York: The Free Press.
- Saba, F. and J. R. Young. 2001. Professor says distance education will flop unless universities revamp themselves. *Chronicle of Higher Education* June 29 A33.
- Stockdill, S. H. and D. L. Morehouse. 1992. Critical factors in successful adoption of technology: A checklist of TDC findings. *Educational Technology*, no.1, 57-58.
- Surry, D. W. 2002. A model for integrating instructional technology into higher education. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April.
- Surry, D.W., and D. P. Ely. 2001. Adoption, diffusion, implementation, and institutionalization of educational innovations. In *Trends & Issues in Instructional Design and Technology*, ed R. Reiser and J. V. Dempsey. Upper Saddle River, NJ: Prentice-Hall.
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- Young, J.R. 2004. Will colleges miss the next big thing? *Chronicle of Higher Education* 50 (33).

“How-To” Information:

In order for web-based instruction to work in the classroom, students must have the ability to understand how a computer works and have access to the Internet. Along

with all of this, students must understand all of the necessary components of the program they are using. This would include: understanding how to obtain their program, what exactly all the icons mean when they have accessed the program, how to e-mail the teacher with questions and also how to discuss amongst themselves via the Internet.

Teachers also have a great deal of responsibility when using web-based instruction. Teachers must have time to periodically check their e-mail every so often to address students' needs. This is because students can access the program at all different times. Teachers are also responsible to obtain knowledge about the program and how to set up the screen page so that students can properly understand what is expected of them. Another responsibility of the teacher is to obtain the knowledge of computer and Internet usage so that they can properly instruct their students on how to use the Web CT program. Knowledge of the computer, Internet, and other programs are vital because the students will be looking towards the teacher for information and questions that they have about the Web CT program. Overall, the teacher is the guide; the Internet program is an aide to the learning process of the student.

The Condition(s) Under which each approach was successful – factors to consider (ie. With whom, where, when)

In an article entitled, “A Comparison Between a Traditional and an Online Environmental Education Program”, written by Aivazidis, Lazaridou, and Hellden, which “compared traditional and Web-based versions of an environmental education program in terms of their effectiveness.” The study consisted of two hundred and ninety-seven students that were thirteen and fourteen years old. The students were chosen from four different junior high schools in Thessaloniki, Greece. This study took place during the

summer of 2006. The study found that CAI (computer assisted instruction) was actually more effective than the traditional educational program.

Implications for Practice:

Pros

A.) Web-based instruction allows for a comparative education. This means that the students have the opportunity to share and discuss their ideas, opinions, and class work. This is done by using e-mail, electronic discussion boards, and computer based chats. Web-based instruction also allows for the students to participate in all of this outside of the school setting.

B.) Web-based instruction allows for students to explore and have access to more of a variety of documents on a specific subject matter. Through web-based instruction students can review, edit, and perform Internet exercises.

C.) Web-based instruction allows for students and teachers to virtually travel to places that are being taught and discussed in the classroom. By traveling to destinations, via the Internet, students can get a better grasp on the subject at hand. This is done by chatting with travelers and citizens of that country, viewing videos, and watching live broadcasts from that place (country, city, etc.).

Cons

A.) Web-based instruction is costly. Funding for computers, computer programs and Internet connections may be a problem for some schools

and/or districts. Web-based instruction requires the use of at least one computer in the classroom and the computer needs to be able to access the Internet.

B.) Web-based instruction may involve teachers taking computer and web-based classes prior to using web-based instruction.

Examples

An example of web-based instruction is a learning program such as, Web CT. This web-based instruction allows students to learn from their access to the Internet. Students are allowed to access the program and converse with their teachers and discuss concepts of the class with other peers. Students can also mentor and question peers and also have professional debates amongst one another. Students are able to monitor their grades and test scores also through this program.

Another example of web-based instruction is geared towards preschoolers; this would include websites such as www.nickjr.com. This website allows preschoolers to learn through interaction on the web. Preschoolers can learn their shapes, colors, numbers, etc...

Links From:

<http://www.edtechmag.com/k12/index.html>

<http://www.edtech.neu.edu/>

<http://groups.google.com/group/bit.listserv.edtech/topics>

- Teaching and Learning Activities for the Web
- Teaching and Learning on the Internet
- The Web: Its Uses as a Teaching Tool
- Pedagogy of Online Teaching and Learning
- Universities in the Digital Age
- Educational Possibilities Offered by the Web
- WebQuest Model of Online Teaching

- Teaching with Electronic Technology
- Affordances and Constraints of the Internet for Learning

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