

ON-LINE METHOD



Definition and meaning of this method - Selection of web resources - Organization of materials - Show -discussion - Recording Topics to be selected for collection of web resources

Computers are the extraordinary invention of the twentieth century. The internet is another development achieved from the computers. Now-a-days almost every institution like business, academic, government etc are using the internet and web resources in various forms. Now the usage of computers is increasing in the faculties of education in administration, academic achievement, enhancement of learning and teaching.

Traditional classroom teaching has given way to e-learning. That is the need of the day. The concept of a teacher, delivering a lecture in an adult classroom has changed to a more learner centric education. What primarily began as an experiment has evolved as a concrete practice. E-learning is nascent in its status yet gaining grounds fast. This e-learning primarily requires computers and its extensions such as internet, web resources etc.,



The findings of the research on 'enhancement of Educational technology for effective teaching and learning skills' by the California Lutheran University expresses that the usage of internet and online method in teaching gives teachers a vast of new information and additional academic achievements in their profession.

A Professor collected more than 5000 historical illustrations, maps, pictures from the internet and prepared a Compact Disc with the Audio and video illustrations to teach the 'South Asian Architecture'. He gained the enhancement of better teaching experience with and better achievements from his students. A professor of Teacher Education has also achieved better teaching and learning experience when he has used the various methods of teaching with the help of audio-visual illustrations and online resources.

Likewise many research findings prove that the online method of teaching enhances the learning experiences and provides a better resources and information for the students. Also this internet (online method) approach has its own objectives, procedure and evaluation methods.

So there will be effective teaching is assured and better learning experiences can be yielded from the teaching of Social Sciences by online method. The following paragraphs illustrate how a teacher student can administer their teaching using the internet approach i.e. online method and web resources in an effective way.

Unit modules

- 1.1 Internet & Online method & definition
- 1.2 Significance of online method
- 1.3 Internet and Social science
- 1.4 Steps in Online method
- 1.5 Merits of online method
- 1.6 Information from web resources
- 1.7 Conclusion
- 1.8 References

Learning Activities

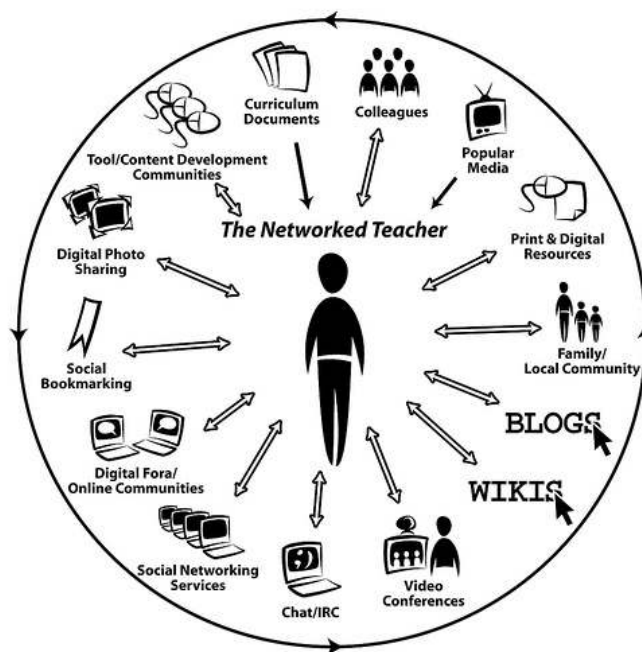
Sl. No.	Modules	Practical exercises provided	Information required	Venues of Data collection	
				School	Other places
1	Importance of Internet approach	discussion report	Web resources are important for the education development		Govt.'s educational programmes, statistics, library, internet, etc.,
2	Various web resources	Software development	Preparation of a compact disk using internet approach for any one of skills required for upper primary level students	Text books for the std. 6, 7, and 8.	Internet

1.1 Internet – Online method - Definition

Internet

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a *network of networks* that consists of millions of private and public, academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies.

Today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. Physically, the Internet uses a portion of the total resources of the currently existing public telecommunication networks. We can avail the required data and information from the internet. The online method provides, retrieves or disseminates the desired data or information at any point to any point in all times.



Online method

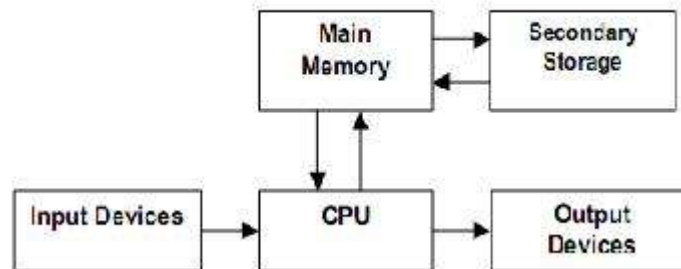
Acquiring the necessary data and information related to the subjects to be taught from the internet / web resources is known as online method. This allows teachers more opportunities to teach and is especially valuable for teaching and training.

The internet / web resources provide the teacher the ability to conduct classes with students from across multiple time zones, without having to travel. Because of this, smaller specialized classes are more likely to have enough students to be feasible.

The computers and the internet are used as a media and a tool for learning and teaching. Computer aided instruction is another form of programmed instruction.

1.1 Components of Computer

A computer is a machine that can be programmed to accept data (input), and process it into useful information (output). It also stores data for later reuse (storage). The processing is performed by the hardware. The computer hardware responsible for computing are mainly classified as follows:



Input devices

Input devices allow the user to enter the program and data and send it to the processing unit. The common input devices are keyboard, mouse and scanners. The Processor, more formally known as the central processing

Output devices

Output devices show the processed data or information or the result of processing. The devices are normally a monitor and printers.

Central Processing Unit

Central processing unit (CPU), has the electronic circuitry that manipulates input data into the information as required.

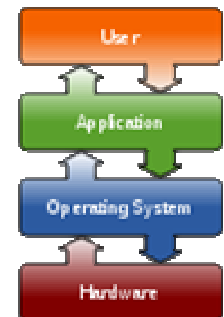
The central processing unit actually executes computer instructions. Memory from which the CPU fetches the instructions and data is called main memory. It is also called as primary memory and is volatile in nature.

Storage

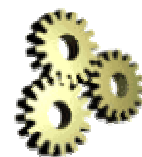
Storage usually means secondary storage, which stores data and programs. Here the data and programs are permanently stored for future use.

The hardware devices attached to the computer are called peripheral equipment. Peripheral equipment includes all input, output and secondary storage devices.

Software refers to a program that makes the computer to do something meaningful. It is the planned, step-by-step instructions required to turn data into information. Software can be classified into two categories: System Software and Application Software.



System software consists of general programs written for a computer. These programs provide the environment to run the application programs. System software comprises programs, which interact with the hardware at a very basic level. An Application Software consists of programs designed to solve a user problem. It is used to accomplish specific tasks rather than just managing a computer system.



1.2 Significance of online method

A larger amount of data and information is available in the World Wide Web. Almost all essential information has been published in the internet. Generally teachers had to collect and retrieve data and information from books and libraries. Such tiresome work has been facilitated through the online method. The knowledge of internet and its operations is an essential requirement for online teaching.

The Online method

Online teaching emphasizes the meaningful learning
Administers the knowledge than its dissemination
Insists the rigorous learning and the organization of knowledge
Emphasizes the cognition through Analysis, Synthesis and Evaluation
Encourages the active and participative learning among the students
Emphasizes the Collaborative and Cooperative learning among the students
Ensures the multiple level of interaction during the learning process
Faster and accurate information access is possible
Learner receives the required information directly and immediately.
The desired or required information or lesson content are available in various forms such as text, graphics, animations, audio, video etc.,



1.3 Internet and Social science

From the point of view of the teachers and scholars in social sciences, the Internet offers access to unimaginably large amounts of information, data, and interpretative material in a timely, cost-effective, and comfortable manner. Further, the user can easily become an active contributor to the body of knowledge on offer in the world with very little additional effort. Contributions can be made through the exchange of electronic mail with distant colleagues, through postings to the blogs, newsgroups, and to topic-particular e-mail discussion groups. Integrated with everyday work, the Internet offers an incomparable opportunity to actively participate in the accumulation and dissemination of a truly global body of professional social science knowledge, expertise, and opinion.

Using the Internet is getting easier all the time, in no small measure because of the rapid adoption of the World Wide Web as a presentation standard for all manner of digital materials including text, graphics, programmes, and even audio and video across the Internet. Use of 'the Web' is based on a 'point and click' approach in its full graphics form, and the use of the keyboard arrow keys in the less attractive text-only mode. Both methods are easy to master, hard to break, and are forgiving in the extreme for novices. And, when a resource is located, its location can be saved so that the address (or Uniform Resource Locator, the URL) need never be written down or committed to memory. The saved URL, which is stored together with a descriptive title of the user's choosing, can be easily recalled and used. The Web is a liberated zone of free and, if necessary, anonymous expression.



In general, the power point slides can be used to illustrate the lesson units to be taught. The animation and the animated pictures impress the learners effectively to understand the concept to be taught. Now-a-days, the Cartography is well developed through the Geographical Information System. With the use of GIS we can draw a larger number of maps in a very shorter period of time.

In Social sciences, the lively information regarding geographical facts, historical monuments etc., provide better learning experiences. For example, Google earth, wikimapia, the Bhuvan, etc., are the web resources pertaining to Geographical Information which gives vast information about a location in a map. [The Bhuvan is a satellite mapping tool similar to Google Earth and Wikimapia. It was developed by Indian Space Research Organization (ISRO). It offers resolution up to 10 metres and is considered as a rival to Google Earth and Wikimapia. A prototype (beta) of this application was launched on 12th August 2009.]

The timeline, landscapes, wonderful places, etc., can be accessed from the websites available in the internet. Such collected information can be extracted and used with the power point slides. The two-dimensional and 3-D pictures can also be used for illustration.



1.4 Steps in Online method

The online method can be executed using the following steps.

- i. Planning
- ii. Searching
- iii. Selection
- iv. Integration
- v. Preparation of lesson plan
- vi. Preparation of software
- vii. Class room teaching and learning
- viii. Evaluation
- ix. Follow up work
- x. Dissemination

i) Planning

Before starting, one should note that online teaching didn't begin with the purpose of making teaching easier and quicker but with an aim to reach out to the maximum number of people with the desired information. It is highly important for a teacher, planning the teaching session with the appropriate diagrams, animations etc., from the web resources. Example: Make a planning to teach the Sixth standard, Geography lesson Galaxy in online method.

Preparing to Teach Online

As you plan your online course, it is helpful to remember that in any environment "good teaching is good teaching" (Ragan 1998). Experienced online instructors stress that teaching online is less about the mechanics of distance education and "more

about what makes for an effective educational experience, regardless of where or when it is delivered” (Ragan 1998).

Provide guidelines to the students that detail the minimum technological requirements needed for the lesson (both in terms of hardware and technical expertise).

Describe how to seek help immediately when having trouble

Provide a tutorial on computer basics.

ii) Searching the web resources (online resources)



The planned teaching session can be done only after searching and retrieving the appropriate information regarding the lessons to be taught through the online method. The following procedure can be adopted.

You can see the icon of the Internet Service Provider (usually BSNL) in the desktop of the computer. Check the modem is in switched on and double click the icon provided by the ISP or the Browser icon (usually, the firefox, opera, safari, Chrome, internet Explorer are widely used). A window will be opened by the browser. In this browser's window you have to type the address of the website (URL). Example: <http://www.wikipedia.com/> . In this address, the http refers as hyper text transfer protocol, www is the acronym of world wide web. wikipedia is the name of the website.

Search Engines

Internet search sites can search enormous databases of Web pages, using titles, keywords or text. You can maximize the potential of search engines by learning how they work, and how to use them quickly and effectively.

The challenge is to ask your question the right way, so that you don't end up overwhelmed with too many search results, underwhelmed with too few, or simply unable to locate the material that you need. As with most skills, practice makes perfect!

Getting Started

Before doing a search, it's important to define your topic as completely and succinctly as possible. Write down exactly what information you're looking for, why you're looking for it, and what you're *not* looking for. This will help you to discover the best keywords for your search.

Keywords

With the exception of search engines such as AskJeeves.com, which will take questions in the form of actual queries, most work best if you provide them with several keywords. So how do you determine which keywords will work best?

Most users submit 1.5 keywords per search, which is not enough for an effective query - the recommended maximum is 6 to 8 carefully chosen words, preferably nouns and objects. (Search engines consider articles and pronouns clutter.) Avoid verbs, and use modifiers only when they help to define your object more precisely - as in "feta cheese" rather than just "cheese."

Now you have your keywords. How do you enter them into the search engine?

Use of Phrases

Your most powerful keyword combination is the phrase. Phrases are combinations of two or more words that must be found in the documents you're searching for in the exact order shown. You enter a phrase - such as "online method" - into a search engine, within quotation marks.

Some searches provide specific options for phrases, while others don't allow them at all; but most will allow you to enter a phrase in quotation marks. Check the "Help" files of the search engine you're using to be sure what it accepts.

Punctuation and Capitalization

Most search engines are insensitive to case: you can type your queries in uppercase, lowercase, or a mix of cases. If you use lowercase, most engines will match on both upper and lower case; so for general searches, lowercase is the safest form to use.

Not all search engines handle punctuation the same way. When in doubt, consult the "Help" file.

iii) Selection

A lot of data and information are available in the internet. Even a particular website can hold vast of information in it. Just select the information required from the websites and copy or save it in a place desired in your computer. For example; We require the information on Galaxy. The search engines like Google, bing, yahoo, altavista, ask etc., can provide umpteen information regarding our search. We need to select the appropriate one which suits our lesson and teaching such as solars system, structure of universe, earth, sun, moon and the relationship with weather and climate with solar system etc.,

iv) Integration (links)

Linking of the pictures, animations in the appropriate places with the concepts is known as integration. Utmost care should be taken for the topics and the links to be executed. The topics and the links should be relevant to the level of the learner.

v) Preparation of lesson plan

Before burning the information collected and integrated for teaching in a disc, a lesson plan should be prepared with exercises and illustrations. The activities of class room teaching such as objectives, pre test and post tests etc., must be incorporated in it. A lot of activities are available and illustrated in the internet also. We should choose the appropriate ones and incorporate them with the information collected and burn it into a compact disc.

vi) Preparation of software

The compact disc can be prepared with the information as software to be used in Personal computers. The stages and steps of lesson and illustrations should be embedded with required images and

animations, texts, audio and visual explanations. This compact disc itself be considered as a book.

This should be made to handle in offline mode also. This software must have the stand alone properties and supports a single student's manipulation with computer.

vii) Teaching and Learning

Class room teaching is an important aspect in online method. Class room teaching can be made possible using the LCD projector. The prepared software in CD can be used with computer and LCD projector. Teacher pause the operations and interact with the students and continue the teaching. This helps to build up a better learning and teaching atmosphere. Rote mechanization is avoided by this method.

viii) Evaluation

Once the program is laid down, it's the duty of the teacher to ensure that the class proceeds successfully. This is a very delicate phase. The Teacher should assess the learnability of the students and to quickly respond to student queries, answer to individual requirements, try to hold the interest of the students and build in enough communication. The evaluation can be done through the observation, interview, questionnaires, achievement tests etc., The interaction session and assessment can be done within the online method itself.

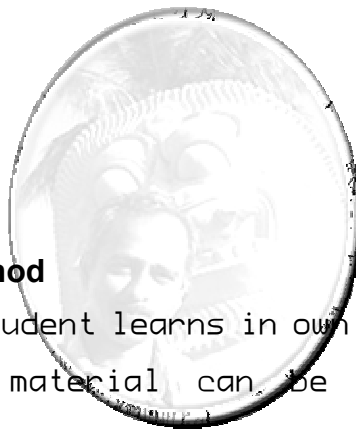
ix) Follow up work

Teacher divides the students in to small groups and provides the exercises and projects with the necessary guidelines to them. The activities and work done in group should be observed and validated by the teacher. For example: The lesson galaxy is split in to various learning modules (planets, stars, earth, moon, etc.) and each module is assigned as project to the groups. The group

can collect the data and analyse the information and compile it and produce as course work. Teacher can utilize the information in it and prepare it as compact discs.

x) Dissemination

The validate work extracted in the feed back session should be made to disseminate between the students and teachers. The dissemination of the work alone expresses the importance of online method. The dissemination of the work done and software developed can also be done through the functions, press notes and websites. This dissemination motivates the learning and teaching process.



1.5 Merits of online method

Each and every student learns in own pace and speeds.
Required study material can be provided through the internet.

The differently abled and the students have the learning disabilities can also utilize the online method effectively.

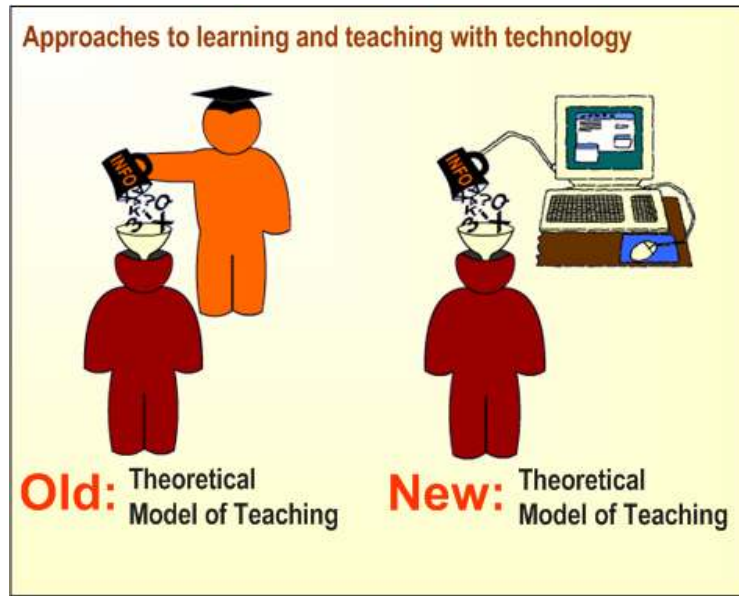
It gives better motivation and interest in learning.

It helps the students to understand the social science concepts through the 3-D pictures and animations.

Preparation of Maps is made easier.

Gives direct experiences

Facilitate the class room activities in all subjects too.



1.6 Information from Web resources

The students as well as teacher can avail the umpteen of information from the various web resources. The following types of information can be accessed in online method and from web resources.

- ❖ Course information
- ❖ Assignment and assessment
- ❖ Materials covered in the class room
- ❖ Demonstration, Animation, Audio and video illustration
- ❖ Bibliographic information
- ❖ Reference materials

Internet references (some Examples)

<http://n.wikipedia.org>

<http://www.webopedia.com>

<http://www.97.intel.com/education/teds>

<http://www.winona.edu/21stcentury/success.html>

<http://www.21stcenturyskills.org>

<http://www.97.intel.com/education/teach/essentialcourse.asp>

<http://psychology.wictita.edu>

<http://www.bic.org>

<http://fcit.usf.edu/distance/clap3.htm>.
<http://en.wikipedia.org/wiki/digital-library>
<http://www.sofweb.vic.edu.au/internet/research.html>.
www.yahoo.com
www.altavista.com
[National Geographic.com](http://NationalGeographic.com)

Meanings of Internet Domain Extensions mentioned above

- ✎ **.com** represents the word "commercial," and is the most widely used extension in the world. Most businesses prefer a .com domain name because it is a highly recognized symbol for having a business presence on the Internet.
- ✎ **.net** represents the word "network," and is most commonly used by Internet service providers, Web-hosting companies or other businesses that are directly involved in the infrastructure of the Internet. Additionally, some businesses choose domain names with a .net extension for their intranet Websites.
- ✎ **.org** represents the word "organization," and is primarily used by non-profits groups or trade associations.
- ✎ **.biz** is used for small business Web sites.
- ✎ **.info** is for credible resource Web sites and signifies a "resource" web site. It's the most popular extension beyond .com, .net and .org.
- ✎ **.mobi** (short for "mobile") is reserved for Web sites built for easy viewing on mobile devices.
- ✎ **.in** is for Indian Web sites and is the newest extension.
- ✎ **.us** is for American Web sites and is the newest extension.
- ✎ **.co.in** is the country code for India. The .co portion of the extension indicates the domain name is for commercial purposes (similar to a standard .com extension).

1.7 Conclusion

Online method in Education is becoming a curricular concern. It is appeared to be the importance of teacher is reduced by online method in education. Also it can create a mirage that the web resources appeared as alternative to the teachers. But, in a keen sense, the teacher alone assists in the role in online method of education. A teacher has the key role in broadcasting of information to their students. His presence is indispensable in online method. The importance of teacher has not diminished in developed countries too. So, the online method teaching media cannot be an alternative to the teachers.

The online environment aids in some of the more sensitive areas of classroom administration. Online assignment posting areas provides a secure and time documented avenue for turning in assignments. Servers that retain chat session and newsgroup documentation provide indisputable records of class participation for both volume and quality. This reduces the hassles associated with learning difficulties.

1.8 References

- 1 இனி எல்லாம்...இன்டர் நெட்!
ட. லெனின் - சிக்ஸ்த் சென்ஸ் பப்ளிகேசன்ஸ், சென்னை.
- 2 Making the Network for schools.
Online Research Modules - Jamie Mckenzie Vol (No 1) Sep. 1997.
- 3 தமிழ் கம்ப்யூட்டர் - இதழ்கள்
- 4 இன்டர்நெட் எனும் இனிய நண்பன் - ஜெகதூ, 2002

end.