

## **7.1 Introduction**

Internet and associated new technologies are becoming part of lives of students. Youngsters and especially students now using internet everywhere not in homes, institutions they used in classes as well. College students are now using internet in educations purpose.

Lot of websites, web based educational technologies are designed to promote education. Emails, OLIVE, Blogs, MOOCs, YouTube, OER, online learning communities are latest internet technologies developed for education purpose.

## **7.2 Objectives**

After reading and studying this unit, you will be able to:

1. Explain internet and emails for education purpose.
2. Explain Open Learning Institute of Virtual Education.
3. Explain online libraries in education.
4. Describe blogs in education.
5. Explain YouTube in education.
6. Explain Massive Open Online Courses (MOOC) in education
7. Explain Online Education Resources (OER) in education.
8. Explain Online Learning Communities.

## **7.3 Use of Internet & Email for Education Purpose**

The Internet and new technologies plays a most important role in the lives of students. Most students take on online activities almost everywhere. Mostly young students use the Internet to search any kind of information but sometime, they chat with friends, play online games or use available material to create assignments and take notes.

Internet has big advantage to learn any kind of topic including language, technology, science, math or social subjects. Many students use internet to improve their proficiencies of foreign language.

Many teachers use the Internet to find useful teaching material as internet is priceless source of information but some teachers worry about the reliability of

online information. They are not sure the information provided in the internet is appropriate, authentic and according to their curriculum, but of course internet is big source of free information.

Internet provides big support of learning of science process skills. Students can use science processes outside the classroom. Students can learn how to search and use of desirable information from data bases and applies the information to ensure the transfer of process skills.

Discussed in above and previous units, ICT is very helpful in education, especially learners are far from any institution got knowledge from any course material and interact with teacher. Student can interact with teacher mostly using Electronic Mail (Email) to send and receive assignments, exams material, notes as well get help for any topic.

#### **7.4 Open Learning Institute of Virtual Education (OLIVE)**

OLIVE is acronyms of Open Learning Institute of Virtual Education and was consider as futurist structure for ICT intervention. The main focus point objectives for ICT based education planning are as:

- 1) To provide high quality and equality of learning in education,
- 2) To provide education to outreach students specially those girl at home
- 3) To support research oriented higher from abroad faculties.

It is necessary to integrate online teaching and learning, research, operational and management activities which are required when admissions of students will grow in future. High quality multimedia courseware development will essential to provide quality education.

Allama Iqbal Open University used OLIVE model for students. Reason is that increasing number of students and enhancing its nationwide courage. This continuously increase in enrolment caused some operational and academic problems.

Some problems is discussed here:

**No Access of Laboratories:** Large number of students required better facilities. Some study centers have provided lectures and laboratories accessibility to large number of students in multiple timings. To facilitate these students new OPEN laboratory system was established. Moreover Library facility for those students was also enhanced.

**Shortage of Qualified Faculty:** In some places many teachers were teaching many courses so the standard of teaching was going down. Students could not contact to their teacher after the class at some study centers. There was no better solution to this problem because shortage of teachers in the area.

**Faculty Variation:** Shortage of teaching disgraces the quality of education. Due to this shortage of specialists teachers some irrelevant persons teaching those subjects which they have no proper education or have little knowledge. So teaching standards degrades in the country. The standards of AIOU students were also affected in some areas where monitoring system was weak.

**Decentralized Teaching:** When the teaching was decentralized, many teachers in different areas were teaching the similar subject. The teaching style, coverage of curriculum or problem solving approach of the same curriculum was varying, so the result of students in the centralized examinations system was not the same.

**Slight out of Class Support:** If the student missed the lecture were left behind and could not cover the course material at home. There was no way of teacher to provide out of class support to those students who failed to attend the class. This increased failure ratio of students in early semesters.

Mostly these students live in villages and far flung townships. There is not better Internet and computing facilities available to these areas but some students learned through video conferencing, through online and through multimedia compact disks where internet facility is not available.

## **7.5 Online Libraries**

Generally libraries, both traditional and online digital one have three roles in education: place for sharing reach information, maintaining ideas, and give awareness to bring together individual with learning aims. Primary purpose of each library is supporting, facilitating, and expanding formal education in mother organization. Next step is to supporting informal education. Resources in libraries are collected to support learning. Digital libraries provide instant access to large number of sources which do not exist physically, in a comparison with traditional libraries that are limited to place and time. Digital libraries without physical obstacles can provide resources via an internet connection each moment from each place. Because of these advantages, in digital libraries learning is independent process. Digital libraries provide suitable opportunities for learners, because of including updated information. Collecting multimedia resources made it possible to remote learning. Digital libraries by storing and feasible retrieve of educational resources from computer networks provided worth aid to electronic

and networked learning. Without existence of organized and retained electronic resources by digital libraries, accessibility to updated eLearning resources is impossible. Following growth and expanding of eLearning in universities and higher educational institutions, libraries' services and methods of accessibility to them faced with evolution and transformation in virtual world.

Digital library's concept which was raised in 1993 based on web advent, among librarians and educational experts have been known as best tool for providing services and delivering educational material to learners during virtual education courses.

Overall, digital library refers to a collection of digital works (e.g. Texts, images, videos) to help users community and is collection of chained techniques and services to gather, organize, and protect digital works to be used by clients. In digital libraries journals, proceedings, books, multimedia and etc. are organized for remote accessibility. Digital library is not just collection of electronic resources and involve browser interface and perhaps virtual community and space. In this technology, data are available quickly for each person every place of world via communication networks. Digital library is not solitary entity and is related to lots of resources and collections which must be managed. Digital library's resources are divided in two parts:

- a) Resources that from beginning are produced in digital form like as eBooks or e-Journals
- b) Resources and materials which are not digital at first but can be transformed to digital over time.

## **7.6 Blogs**

A blog is a small website in which topics are posted and displayed. In the blog latest post is displayed at the top of previous post. Mostly blogs are related to specific topic, for example science, literacy, food, education, politics or news. Some bloggers says that some blogs considered as online diaries. A blog contains text, images, videos, web pages or other links. Blogs firstly appeared in 1995 from there blogging has become known as a famous form of communications, taking public judgments and mass media in the world. There is lot of hosting services available for hosting of blogs. They me be hosted in special hosting servers, web hosting server or may be using special software developed for blogs.

A typical blog are includes of the following:

- Title of blog – It contains main designation or headline of the blog.
- Body of blog –It is material or content of the post.
- Comments from viewers– It contains remarks of readers or gives opinion about the topic.

- Permalink – These contains the other web addresses of the article.
- Post Date of blog – These contains date and time when the blog was posted.
- Categories of blog – These contains subjects about particular topic.
- Trackback – These contains addresses of other websites that gives the entry in a blog. These trackbacks consists of other links or blog roll of other blogs that the author of blog affiliates or reads.

### **7.6.1 Characteristics of Blog**

Blog may be considered as online magazine which may have several contributors. Most blogs have images, videos plaintext and hyperlinks. Blogs are different from usual websites and have many advantages over usual websites. These are written here:

- Creating, updating or adding new data in the blogs is slightly simple typically through an easy form containing few entries and then submitted. Any person has no technical background can create, update and post blogs. Blogs have therefore become the useful Web authoring tool.
- Blogs provides facility of Filtering of content for a variety of entries, for example by date, category, author or other attributes.
- Many platforms of blogs allow the administrator to invite other authors to add, modify or update the blog whose permissions for doing is easily managed.
- Providing a space for personal writing is easy to use, sharable and automatically archived.
- Blogs have ability to become learning communities.
- Blogs provides opportunity to serve as digital portfolios for assignments and achievements of students.
- Blogs can become full feature content management systems.

### **7.6.2 Blogs in Education**

Now blogs are vastly used for education purpose. Bloggers posts education related information such as calendars of study, specific events, assignments and other information. There are some tasks can be provides in blogs especially for education purpose are:

- Teachers posts assignments to student in particular topic so students respond on their own blogs, creating portfolio of their work or by comments.
- Teachers communicate with parents of students and parents write comments as response.
- Teachers post prompts for writing something about topic.

- Teacher provides examples, vocabulary, or grammar etc in case of language students.
- Blogs of teacher provide online readings for students to read and respond to.
- Teacher and students post, text material, images and comment on class activities.
- Teacher publishes blog and invite students to comments or postings on issues for students responds.
- Teacher publishes best work of good students which was performed in the class.
- Teacher posts show case of student art, poetry and attractive stories.
- Create article for literature, online book clubs etc.
- Teacher published blog to make use of the commenting feature for students publish messages on topics to increase language skills.
- Using the blog, teacher can ask students to create their own individual course related blogs, where they can share their own ideas, reactions and thinking.
- Teacher post project based learning tasks with students.
- Teacher can build newsletter having student written articles and photos they take.
- Teacher creates blog to link his class with other classes somewhere else in the world to create competition or shares experiences.

### **7.6.3 Use Blogs in Teaching and Learning**

There are many uses of blogs in education, some are discussed above but some are written here.

A blog supports in a personal academic perception in the following ways:

- Create reflection on teaching experiences.
- It sorts of resources and methodologies for teaching.
- It inconsequent regarding professional confront and teaching tips for other academics.
- It creates illustration of precise technological tips for other colleagues.

Blog can support within an organizational perspective in the following ways.

- It creates online presence for related information such as calendars, events, assignments and resources etc.
- It create online area for students to post queries concerning to assessment.
- Blog can support within an educational perspective in the following ways.

Support comments related to content, readings and student responses.

- It creates dual space for students to perform as reviewers for academic materials.

Support images and manifestation related to industry placement.

- It has an online gallery space for review of works, writings etc
- It provide platform where teachers encourages reactions, reflections and ideas by comments on students'
- It developed student portfolio of work.

## **7.7 YouTube**

Teachers have always tried to create attention of students to promote learning. They used many things for this such as multimedia. In the classroom teachers teaches using the demonstration of pictures to convey ideas. This is the basic tools of academic conversation. In the digital world there are many other ways to teach in which words, pictures and numbers and many methods in which they can be supplemented and supported. In the multimedia sum up these ways including video, images, text and sound in which words, pictures and numbers can be bring for effective teaching. The technologies used to store, edit, project, and transmit the data that are the raw material of meaning.

There are many multimedia tools used in education including YouTube which is web based tool.

YouTube is web based platform that provides facility to people to upload, view and share video clips on internet. YouTube also facilitates public to short share videos across the internet through other web sites, mobile, blogs, digital cameras, computer and email etc. Very quickly YouTube become most popular and widely used resource for online videos in the world. People having internet access can watch these videos, but registered users can upload videos which is free for everyone. By the international copyright law posting of copyrighted videos and lectures on this site is banned and punishable.

### **7.7.1 YouTube in Education**

According to American research large number of students is now using YouTube based technologies in their daily life, so these students are not hesitate to use this tool in their classroom. Now YouTube is becoming free teaching resource, which is an important into consideration for educational budget. In the presentation, documents or online teaching platforms by cutting and pasting the selected address of particular video of YouTube site. Another method is used in online teaching to students of far flung rural areas where special subject teacher is not available by posting of video in YouTube of a visiting teacher for the course. If desired, uploaded YouTube video can be restricted to access of other course mate students by faculty or students.

Furthermore, some instructors create video clips of their lectures post both online and off line in class learners. For example, a teacher created 3-D animation for explaining mathematical concept and uploaded in YouTube that paying attention of more than millions views mostly of them are home base students. YouTube provides an opportunity to teachers to significantly expand their educational audiences in international locations. These teachers are not only increasing their own ability to provide online courses but also increasing the public's awareness of that subject and institute which he affiliates.

While YouTube have lot of positive features specific for teaching and learning but it has some limitations and challenges. For example, YouTube have millions of videos about all fields so searching for appropriate topic have a great challenge and time consuming, especially if the searcher does not have area of content in the mind.

One more big limitation is the correctness and reliability of the videos that are posted on the YouTube site. As with any resource, teachers should be discriminating concerning the selection of videos to be used in their course. So instructor should add a disclaimer to the YouTube which indicates the content of the video does not replicate the views of the instructor. As mentioned above that the YouTube is unrestricted platform available for everyone to upload video. Before a video post to the learners, teacher should be confident to agree, whether the content of the video is accurate and authentic, especially for medical based information. If the medical based information are not accurate or authentic can creates big loss of the health. Finally, protection of computer data or video against Spyware and viruses is significantly considerable. Using free facility of upload videos some hackers may be using this free source to upload Spyware and viruses.

## **7.8 Massive Open Online Courses (MOOC)**

MOOCs are a cluster of online classes that have a number of features. The main feature is that all contents are posted online in form of videos, text and images, slides, discussion forums or may be mixture of all. Mostly course contents are developed by highly professional and expert teachers from large and well established institutions but any teacher can develop individually a MOOC course for his students. Mostly the registration of MOOC is absolutely free and anyone can be register. But student should have slight knowledge about course in which going to register.

Teachers can host their own MOOCs, hosted at a server of special service provider that manages the user registration, content, assessment, discussion forums and additional more services. Teachers furthermore required to create and



update the course contents regularly from time to time but the user management have responsibility of MOOC service provider.

There are a lot of advantages of MOOC education. Its format is user friendly and contents are honestly posted that considered as incredible educational resource is available to anyone to learn.

MOOCs provide opportunity to those people which have not facility get traditional education.

Thousands of students can be registered free in the MOOC at once and taking lectures but unfortunately few of them complete the course. Many of them never even start the course after registering or leave after few lectures. After the survey of MOOCs administrations, an average completion rate of the course is below 10% even most of the students complete their work, there is no guarantees they have effectively understand the course as students of regular colleges. Some advantages of MOOC are here:

- Advantage of MOOCs, is that it may radically change in long-suffering patient education about disease. Patients should be advised to watch online videos or study lectures in MOOC before visiting doctor; this will be helpful for them to explain their disease rather than asking question. One more advantage is that developing of MOOCs for medical patient education, the content creates standardization that how patients are being educated and removing dissimilarities among different physicians.
- Another advantage of developing MOOCs for medical patient education is that it becomes a big source of supporting community. If any patient wants to get awareness about his disease MOOCs discussion board can allows finding support from others in their stare group.
- MOOCs can be helpful opportunity for updating latest situation of patient about continuing research and educate him.

## **7.9 Open Education Resources (OER)**

The Open Educational Resources (OER) describes curriculum, course materials, books, videos, multimedia applications and many more resources that have designed for education. These resources are license free accessible for teachers and students.

The term Open Educational Resources is mainly identical with any other term which is Open Course Ware (OCW). Albeit the OCW may be refer to a precise or more structured division of OER.

OCW association defines an Open Course Ware is “a free and open digital publication of high quality university-level educational materials. These materials are organized as courses, and often include course planning materials and evaluation tools as well as thematic content”.

OER has become grand prospective to support educational revolutions. The idea of OER has its educational value using the resources as essential method of communication. When digitized these resources tried to make them easy and posted in the Internet. License is the only difference between OER and other educational resource. The OER are the resources of education that are free from license can be reuse, have adaptation without permission from the copyright holder.

OER can support open learning education. Making of ‘open education’ a priority has considerably larger implication than committing to releasing these resources open for educational programmes. OER requires efficient assessment and certification systems, student supports and curriculum frameworks in order to determine the scope to which they increase openness. Open learning provides opportunity in education that removes all unnecessary hurdles to learning. Its aim is to provide a possibility of sweeping in an education and guidance system.

It has more than a few most important principles:

- Learning opportunity must become lifeline and should cover both education and training.
- Students should be core in the learning process; this process creates critical thinking, build their experience in the learner.
- Students can autonomously choose where, when, what and how they want to learn so learning process should be flexible.
- Previous learning, experiences or competencies should be accepted so that student should not unreasonably disqualify from opportunity of education by the short of proper prerequisite qualifications.
- Students may be capable to collect credits from different learning backgrounds.
- Institute may be providing opportunities to students for fair chance of success.

Above principals states that effective use of OER might give practical expression. Some people say that ‘open license’ mean writer gives up all right to this material. It is big misconception in their minds. They are not right; actually, open licenses is necessary to protect rights of copyright holders in situation, where e-content can be simply copied and shared through the Internet without authorization.

A big question raised here that what is guaranteeing the quality of OER? Assured the quality of the contents of OER is responsibility of course coordinators or individual teacher which is incharge of education delivering. The representatives have final responsible for prescribing textbooks, choosing specific video or using lesson plan to be use in education. Thus, the quality of OER will depend on resources which are representative select. It is their responsibility to choose relevant material and integrate them into education activities of different fields.

MOOCs raise some legal issues for research libraries especially for contents that are copyrighted, while others relate to openly accessible. MOOCs raise legal objections in these areas:

- Use of contents that is protected with copyright for example online lectures or classroom teaching.
- Assignment that is protected with copyright for remotely reading is the equivalent of assigned texts and course assets.
- Copyright status of contents developed by teachers for use in courses of MOOC
- Accessibility of MOOC courses designed for disable learners.

### **7.10 Online Learning Community**

Learning community is considered a group of students who linked together for a course. During the last few years some higher education institutions have started learning communities specially to deliver curricula to students. The movement of learning community has developed largely because of the direction and support of the Washington Center for Undergraduate Education at Evergreen State College. This movement was started in 1985. The Washington Center extended its support for learning communities countrywide after 1996 with support from the Fund for the Improvement of Postsecondary Education (FIPSE) and the Pew Charitable Trusts. According to report in 31<sup>st</sup> August, 2005, more than 245 learning communities were included in the online directory of the National Learning Commission.

The learning communities varied in capacity and direction, all types have few characteristics which are given herewith:

- It organizing of students and teachers into smaller groups,
- It integrates the curriculum,
- Help the students to set up educational and social support networks,
- Taking group of faculty in more significant ways,
- Teaching staff and students are focusing on learning outcomes,
- Setting up for community based education programs,
- Setting up a critically discussion forum for examining the first year experience.

Misconception in minds of some people, they suppose Online Learning Community and Online Community is same thing but actually Online Learning Community (OLC) and Online Community (OC) are different from each other. Learning can be an unambiguous activity depends on each single student or collection of students. The main reason to learn something is creating good impression in members of Online Learning Community.

How to correspond in a text based settings is also learning activity in Online Community. Learning is an activity may be based on some other activities whether it exists in Online Learning Community or Online Community. Swedish online community is a best example of an Online Community which is planned for those people who just wants to make new friends as well as wants to contact with each other. These Online Communities shares a common curiosity in social networks with others.

Some communities in the internet are depends on social networks. Online and Virtual are different in meaning by each other that must be in consideration in the research areas concerning Online Learning Community. Some researchers' imaginary used virtual for online learning communities. The uses of online resources are reachable of every member for communication. Few latest technologies that are used in Online Learning Community are not supported to virtual environment.

#### **7.10.1 Challenges of Creating Distance Learning Community**

The first challenge is to create distance learning community, all contributors agreed with a common definition for a distance education course is that “why should learning community build”.

The second challenge is for contributors to consider that development of online learning community is possible and to see them the advantages of build this community. Some students may not agree to join in this discussion if the purpose of community is only building of relationship instead of academic and education. That is, student will not take part in this discussion if this discussion does not openly contribute to their grades. Some other students are not agreeing to take part in this discussion that is very necessary to get the grades because they do not identify the benefit of appointments in this course.

The third challenge is the prejudice in online learning environment in which it is possible to build kind relationships between students and teacher, when students and teacher does not have the opportunity of face to face meetings and the communication facility. So they destitute by benefits of such face to face communication meeting which are voice articulation, facial expressions, gestures and body language.

In a virtual classroom, students heard the voice through the written word and reflections mostly recorded in a discussion thread. Course mate students and teacher identify each other by name, may be by their writing style and continuity of judgments.

The conventional characteristics that endear students to those who are in physically close are lacking. Moreover those students who have poor writing skills may be overcome in a threaded discussion environment where all confabulates are in written form. This is an alarming confront in online learning but may one can be overcome.

At the end those students who have not computer skills, distance learning environment challenging for them. To conquer this situation online learning programs to those students the special course and training programs must provide them. So these students will aware to properly use all of the features of the course rooms and resources. In addition, distance learning teacher's needs special training in technology as well as in confronts of online teaching. Studies that conducted for online learning show that online education is more time consuming than regular institutional learning programs.

### **7.11 Activities Self-Assessment Questions**

1. How students can learn by email and internet? Describe with some suitable examples.
2. Explain that how online libraries enhanced the education?
3. Can YouTube used in blogs that can helpful in education?
4. What is MOOC? Explain advantages are MOOC in education.
5. What is difference between Online Education Resources and Online Learning Communities?

### **7.12 Bibliography**

1. Using audio and video for educational purposes. *Prepared by the Deakin Learning futures Teaching Development Team.*
2. Using YouTube Videos in Education by *Andy Mann Ed Tech consultant, CISD.*
3. The MOOC Model for Digital Practice by *Alexander McAuley, Bonnie Stewart, George Siemens and Dave Cormier*
4. Digital Libraries in Education by *H. Witten* (University of Waikato, new Zealand) – Coordinating editor  
*David Bainbridge* (University of Waikato, New Zealand)  
*David M. Nichols* (University of Waikato, New Zealand)