# UNIT 16   EMAIL, MAILING LISTS, DISCUSSION GROUPS, RSS FEED

*Structure*

## 16.0   INTRODUCTION

The Internet and its World Wide Web (Web or WWW for short) have normally been static and non-interactive communication technologies. However, in this block we are going to discuss about interactive delivery methods on the web. In this unit, you will learn about the features of email, mailing lists, discussion forum and RSS feeds as interactive tools in teaching and learning. Interaction between teacher and student and student and student have been touted as the most important aspects of teaching and learning, and especially distance education has been criticized due to absence of or poor interaction features. However, with the introduction of more and more interactive elements on the web, distance education can provide high quality interaction of all the three types identified by Moore (1994): Learner-content, Learner-Learner, and Learner-Teacher. In Unit 15, you have already studied about the web and how to create pages. You may like to re-call and review unit 15 before working on this unit.

## 16.1   LEARNING OUTCOMES

*After working through this unit, you are expected to be able to:*

*   *Identify* content delivery tools on the web;
*   *Describe* advantages and limitations of different methods and tools;
*   *Discuss* models of teaching and learning using these tools; and
*   *Use* these tools for teaching and learning.

## 16.2  ELECTRONIC MAIL

Electronic mail or in short "email" is one of the most popular and useful features of the Internet. By definition, it is mail delivered through electronic means. However, while tracing the development of email communication Tao and Reinking (1996) identified at lest three definitions of email:

1)  It is mail being transmitted electronically. This definition embraces fax and telex.

2)  It is only communication through computers but would include graphics as well as texts as appropriate email communication.

3)  It is only text being transmitted through computers between senders and receivers.

Today, email is primarily known as communication from one person to another or many others through the use of computer and networks.

Email addresses have standard three part format: userid@host.domain. The userid is the name identifying the user; @ [at] sign follow account name; and the host of the email account (such as Hotmail, Yahoo or any other webserver), and the domain (such as .in, .org, .com, .net, etc.). Some important characteristics of email are as follows:

*   It is text-based, and requires literacy skills. Language is the major means by which the email communication is done.
*   A mail once typed can be sent to multiple persons/locations without duplicating efforts.
*   It is asynchronous in nature, and can overcome problems posed by geographical time zones.
*   Messages sent and received as email can be stored and organized in a way that can facilitate easy retrieval.
*   It is a cost and time saving technology. It also reduces the use of paper (environmental friendly).

### 16.2.1  Educational Use of Email

It is the use of email that makes e-Learning possible. In most e-Learning programme the basic need is to have an email account. Sometimes, a whole course is offered through email as well. So, the use of email is enormous in education. Primarily, email has two main applications in education: in research and in teaching. Email is used as a research tool, and also as a carrier of research tools (such as questionnaire and interview schedule). However, in the instructional settings email is used for communication and interaction between student and students, and student and teachers. Email provides the advantage of speed, and information and announcements about a schedule/reschedule of classes can reach the learners before they travel to the classroom/study centre. Learners with special needs (hearing impaired) can interact with the teachers using email, while visually impaired students can use email with other text-to-speech readers. In a conventional classroom, a student may feel intimidated to talk and raise questions/doubts, but can choose to interact though email. Email can be used for delivering of lessons, and teachers can develop email groups to discuss topics related to the curriculum (Dorman, 1998). Kramaski (2002) reported that email conversation was useful in construction and interpretation of graphs using EXCEL, and it enriched mathematical discourse. Kim (2008) through a

review of literature identified the following **advantages** of email use that contributes to academic achievement:

- Enabling immediate, frequent support for individual needs; learner-centred context; individualized instruction; exchange of resources and information.
- Fostering psychological comport; intimacy; expression of personal ideas; opinions, and emotions; informal conversations; social content exchanges; interpersonal contexts.
- Building interpersonal skills, collegiality; awareness of others' attitude; insights into others' perspectives; close relationships.
- Developing thoughtfulness; cognitive task structuring; careful analysis; critical thinking; reflection; planning.
- Encouraging interest; enthusiasm; motivation; self-esteem; self-confidence; change in personal values; active participation.
- Permitting authentic but convenient context; gap reduction between knowledge and practice; real-world anxiety decrease.

### 16.2.2 Using Email

While it is almost redundant here to talk of the technology of email, as it is almost pervasive in higher education institutions. Nevertheless, you need to have an email account to teach and your students should have email accounts to take advantage of this technology. Either you can use the *free web-based email services* (that provide abundant space these days) or you can have *a client-based email system* in your institution that may use mail delivery software like the Eudora, Outlook, and others. However, it is most important to consider the *pedagogic issues* related to use of email in teaching-learning. In this context, we proffer the following guidelines:

- Analyze the individual and group needs, specially in the context of cognitive and no-cognitive support.
- Consider the skill level of your target group, and their familiarity with the use of email. Provide a short hands-on training and/or distribute a short printed guide for ready reference.
- Indicate email response time from the perspective of both the student and the teacher in the beginning of the course.
- Plan and develop templates for routine kinds of queries for use during the teaching process.
- Consider a theoretical foundation for your teaching approach by using various models available. Once such model that could be effectively uses is Keller's ARCS model. Attention enhancing mail can be sent in the beginning of the course, and when required to stimulate a sense of inquiry and curiosity in the student. Message that relate the content of the study to the learners present/future needs can be categorized as relevance enhancing message. Confidence-enhanced messages are utilized to convince the learners that after carefully reading and undertaking the tasks, they would be able to achieve their goals. Satisfaction related mails provide information on what the students would get after accepting and using the strategies given to them. So, while, using mail to provide instructions, you need to consider the purpose and use appropriate language to that effect.
- It is also important to be precise, without being too lengthy. You may avoid non-relevant message to the learners. But, you should check regularly about learner's progress through mail/phone.

- Reply to students' mail as quick as possible, but should not be delayed more than the promised time in the beginning of the course.
- Provide working weblinks in your mail.
- While using email as a discussion forum amongst the students on a specific topic, summarize the discussion every day/week/month. You may assign this task to specific student volunteers during the course. Consider giving weight to their involvement in such discussion in the final grade/credits.
- Ask students to submit assignments on due date; give sufficient alerts before the due date. Let them know the consequence of non-submission of assignments on time.
- Consider personal emails received from students as private, and do not share these with the group unless otherwise stated by the writer.
- Reply to emails carefully, and not in haste. Do a spell check before pushing the send button.
- Never promote spam/junk mail or chain mail forwarding amongst students/teachers.
- Ask students to use appropriate etiquette associated with the email. Use of capital letter in email is considered to be rude.

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**Check Your Progress 16.1**

**Notes:** a) *Write your answers in the space given below.*

b) *Compare your answers with those given at the end of this unit.*

1) Write three characteristics of Email.

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2) Write in 100 words the advantages of email for educational purposes.

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## 16.3 MAILING LISTS

So long as e-mail remains a major form of communication, mailing lists will provide a convenient means of message distribution. Mailing lists go by various names such as discussion lists or e-mail forums, which give a clearer idea of their nature or purpose. The providers of free mailing lists such as Google and Yahoo call them groups, which emphasize their role in maintaining topic-based communities.

A one of the earliest forms of ICT or communication through the Internet, mailing lists have also proven abidingly useful for educational purposes, including for information sharing and professional development among educators. Easy interfaces between e-mail and the Web have meant that the typical mailing list message links to a new entry on the vast WWW that is relevant to the list topic and expected to be of interest to list subscribers.

Mailing lists offer many flexible options depending on the needs of the user. Messages can be exchanged through e-mail client programs, through a Web interface, or most recently from hand-held devices such as mobile phones that have an Internet connection. The convenience of e-mail in most ways applies to lists as well, such as automatically forwarding messages. The ultimate convenience of e-mail or mailing lists lies in the fact that messages are *pushed* to the user automatically and effortlessly. Blogs and social networking sites purportedly superseding mailing lists have suffered from the drawback that the user must go to the Websites and *pull* the information from them. One may visit a Website only to find to find nothing new, which discourages one from returning to check again. RSS feeds have come along partly to fill this need of a preview of contents available (More on this later).

On the other hand, the very convenience and immediacy of e-mail tends to present the mailing list subscriber with information overload, although the unending problem of spam has seemed to affect mailing lists relatively little. The subscribers who can post to a list are under the control of a list owner with nearly absolute gatekeeping powers. Web archives can be set to be available to subscribers only or on the open Web and searchable. Subscribers for their part can set their subscription to a daily or other periodic digest of posts compiled in one message. They can set their subscription to no mail during busy periods, or just check the Web archives occasionally if they are available. Subscribers are free to either move from list to list according to their evolving interests or to stay in communities sustained by mailing lists.

## 16.3.1 Working of Mailing Lists

A listserv or list-serving program in a server computer automatically maintains a subscriber list and distribution options set by the list owner and each subscriber. An e-mail sent to the e-mail address of the list is generally distributed to each subscriber who opted for individual messages or is placed in a queue for digest subscribers. Web archives of all messages can be generated if desired, often with options of viewing posted messages chronologically, topically, or alphabetically by author.

Besides the owner there can be other list administrators to screen memberships or messages. A moderated list means first that the owner selects certain controls over how to subscribe, who can subscribe, and whether attached files are transmitted or not. For example, subscribers may have to fill out a Web form first to show legitimate intentions in terms of the purpose of the list. Moderation most often means controlling what content is allowed to be distributed, by blocking messages considered irrelevant or offensive. Moderation criteria should be clarified in the welcome message to new subscribers along with the mission of the list. Moderation is particularly important where all messages are archived on the Web and accessible to search engines. Messages with inappropriate content are best prevented before distribution, because in most cases the list owner cannot eliminate individual messages from the Web archives at the server computer level.

To moderate a list also means to mediate among subscribers and active posters to control the number, length or other aspects of messages, to mitigate unproductive quarrels by persuasion, or to maintain standards of conduct. In the case of academic mailing lists, the moderation could extend to maintaining scholarly rigor and collegiality. E-moderation has become a topic of importance in books and Websites because of the need for quality of communication in mailing lists serving a vast number of interests and disciplines. While the list owner has arbitrary powers and is generally safe from legal challenges, in order to satisfy list members that the process is fair, sometimes list owners have negotiated their policies democratically with subscriber input. However, a list is generally most successful when moderation is least needed or remains invisible in the background.

### Distribution Lists

However, not all mailing lists are set to an each-to-all mode for the purpose of discussion. A one-way distribution list with a few-to-all setting can still serve a community with a common interest, but with the focus on propagating information. Rarely distributed more than once a day, they tend to be edited and concise to maximize the information that an individual may wish to receive. Major newspapers such as the *New York Times* and *Financial Times* offer free distribution lists with headlines and links to stories at their main Websites. Such distribution lists are also called mail magazines, and indeed the capabilities of e-mail messages through HTML markup, links, photos and other embedded media approach the appearance of Web pages. If there is a market for certain specialized information, such as investment advice that is perceived as economically valuable, people are sometimes willing to pay for distribution lists.

At the same time, to serve the various needs of a community for both discussion and straight information, an organization can maintain any number of discussion lists as well as distribution lists. There are few technical restraints except that a virtual organization can become scattered as members belong to different communication channels that do not intersect. That is why the topics of mailing lists need to strike a balance between being too general and too specific. Lists may need to serve specialized needs of individual members while remaining general enough to maintain an active community. Moreover, people's interests change along with current events and technological progress.

## 16.3.2 Mailing Lists for Educational Purposes

Educational mailing lists can and do run from the class level to the global level. A teacher, for example, may set up a mailing list with the campus e-mail addresses of all the students in order to reach students quickly about assignments, announcements, class changes or cancellations. In a one-way transmission mode from the teacher, the mailing list format is merely for convenience, whereas mailing lists lend themselves readily to each-to-all discussions. With sharing among peers and group self-regulation, the teacher can observe without intervening. Provided the mailing list is set to accept attachments, the list members can share multimedia files such as voice messages or videos.

A university or other educational institution often finds it useful to set up many mailing lists on the institutional listserv. They can serve as routine communication channels for departments or other divisions of the institution such as staff or administrators. Then finally there are the geographically or

topically based mailing lists that extend beyond institutions, sometimes global in scope or relevance. Academic mailing lists may evolve from generalized topics to more specialized topics over time. However, there are fields such as distance education where a wide geographical distribution continues to provide mutual benefits to subscribers.

### 16.3.3  Examples of Mailing Lists for Online Education

Online education is one of those fields that, while gradually becoming more specialized in world regions and academic disciplines, can still bring together a global membership in mailing lists or virtual organizations. There is a widespread notion that mailing lists go through a life cycle of *initial excitement*, *intense participation*, then *irritation* at the overload of messages, leading to bickering, *breakup* or apathy. But while the psychology of novelty and other aspects of human nature are involved, the life cycle could easily become a stereotype like believing that all travelers experience culture shock because certain stages are relatively common. Some mailing lists related to online education have been active since the 1990s, while subscribers cannot generally cope with dozens of messages a day, so the restraint of more considered messages is a welcome development.

The Distance Education Online Symposium DEOS-L is one example of a long-standing and active mailing list (the dash L in many mailing list addresses refers to Listserv, which is a registered trademark of L-Soft International) with subscription options and archives available for browsing at <http://lists.psu.edu/cgi-bin/wa?A0=deos-l&O=D>. DEOS-L is moderated and academically oriented, with a combination of general discussions on distance education and announcements for conferences and publications. Based in the U.S., it tends to be weighted toward North American perspectives because of the composition of subscribers, but it has also welcomed international threads in keeping with its topic and the reach of online technologies.

In the genre of free distribution lists, the OLDaily by Stephen Downes offers unconditional information about developments in online learning. Subscribers can receive a weekly digest or make comments at the Website <http://www.downes.ca/>. With no commitment necessary and little direct interaction, the community is entirely implicit but nonetheless sustained through the technologies and sources recommended as they resonate with subscribers' needs and interests.

Virtual organizations have relied upon mailing lists to keep members informed and interacting, so they may employ both discussion lists and distribution lists. Belonging to at least one of the lists is a minimum condition of membership in some virtual organizations to distinguish them from mere lists or Websites. The World Association for Online Education (WAOE) has been held together since 1998 mostly by mailing lists, moving between server bases in universities and free Web-based services such as Google Groups. However, belonging only to the WAOE general member discussion list has led some observers to believe that the list was the full extent of the organization. It was out of consideration for general members that organizational lists were separated from content lists focused on online education issues. Nevertheless, the discussion lists provide essential communication channels leading to deeper involvement in the organization along with opportunities for professional collaboration among the global membership.

## 16.3.4  Recommendations to Set up a Mailing List

Having reviewed some of the uses of mailing lists, for education and e-learning in particular, you should not hesitate to set up new lists where the purposes of discussion, information dissemination, or community-building may be served. Two widely-used, free, and easily managed Web-based mailing list services are Google Groups <http://groups.google.com/> and Yahoo Groups <http://groups.yahoo.com/>. Many of you may already have an account such as Web-based e-mail with one or both of the providers and may choose whichever seems more convenient. One generally signs up to be a list owner at one of the above Websites, or at the corresponding site in one's own country or preferred language. Then it is a matter of choosing among the available settings, such as how open the list is in terms of membership and Web archives, whether to moderate messages before release, then populating the list by generating direct invitation messages to e-mail addresses from within the group administration interface, or by publicly inviting people to visit the home page of the list.

Alternatively, mailing list software with Web archiving capability, some of which is free and open source software, can be set up on one's own institutional server. For more details see the Wikipedia entry on electronic mailing lists or e-lists: <http://en.wikipedia.org/wiki/Electronic_mailing_list>.

Even as successive technologies such as social networking or virtual worlds increasingly attract users to Web-based venues, mailing lists remain useful to reach people directly and unforgettably through their e-mail in-box. Mailing lists can complement other technologies where many choices are available, or serve as an essential communication channel in regions where online technology is most limited.

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**Check Your Progress 16.2**

***Notes:*** a) *Write your answers in the space given below.*

b) *Compare your answers with those given at the end of this unit.*

1) What is the difference between mailing list and distribution list?

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2) Give two examples of mailing lists.

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3) Give two situations for which mailing lists can be used.

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## 16.4    DISCUSSION GROUPS

Computer-mediated communication (CMC) is becoming more commonly utilized in the delivery of university curricula. There are different ways of incorporating CMC; one application that is being increasingly utilized is online discussion forum or group. As an application, the discussion group provides a limited and structured online environment for the provision, exchange and/or discussion of information between instructor and students and/or between students. A defining feature of the asynchronous discussion forum as an application is that it allows for comments to be posted and viewed at a time of convenience to the student or instructor, in other words, there is no need to be connected at a specific same time.

In order for e-educators and those utilizing a blended learning approach to achieve improved learning outcomes it is imperative that teaching and learning strategies incorporating online discussion forums are pedagogically sound. As such, the increase in usage of online discussion forums in higher education has led to the associated need to increase our understanding of how to best incorporate such applications into teaching (Stodel, Thompson, & MacDonald, 2006; Tallent-Runnels, Thomas & Lan et al., 2006).

### 16.4.1  Educational Uses of Discussion Groups

Within the e-learning environment, it is the discussion forum that commonly provides the means for considered dialogue between student and instructor as well as collaborative activities between students, without the requirement of a face-to-face encounter (Garrison, 1997; Kear & Heap, 2007).  Rudimentary use of discussion forums within the delivery of a subject is as a means to provide information or direction to students on course content or administrative matters.  Used in this way the forum offers the student right of reply often for confirmation of understanding and, perhaps more significantly, presents a lasting record of the information and ensuing dialogue for other students and instructors involved in the subject. This can contribute to a sense of a shared learning space and process involving instructors and students which can, in turn, lead to more open and productive communication around subject content and procedures.

A more advanced and increasingly used application of the discussion forum within education is as an online environment for subject content discussion, akin to a tutorial.  A relatively straightforward approach to this is for the instructor to set a question or topic with students encouraged or required to respond to the content related topic and have on-going discussions with their peers on this topic (Johnson, 2006). This conception of the online discussion forum manifests in a question and answer format with the instructor posing the question, students required or invited to provide an answer and the instructor positioned to confirm, refute or provide the "right" or model response.  Used in this way, the nature of asynchronous online discussion forums (messages and postings can be viewed when convenient for participants) offers students the time to reflect on the topic or discussion and thereby encourages a more in depth, academic and constructive dialogue (Sandor & Harris, 2008, Garrison, 1997; Johnson 2006). This is the real advantage of asynchronous discussion forums over more fancied synchronous applications such as real-time or synchronous audio, visual or even text only on-line classrooms or more informal and rapid dialogue applications such as blogs, wikis and chat rooms.

## 16.4.2  Using Discussion Groups

Teaching a course or even components of a course online is distinctly different from a face-to-face mode of delivery (Kelly, Ponton, & Rovai, 2007). Applications such as asynchronous online discussion forums permit greater flexibility for participants who can be studying almost anywhere at anytime (Dixson et al., 2006; Leh, 2002). From the instructor's perspective, this convenience for the student generates an onus upon the instructor to be regularly, if not near continuously, online to field questions, reply to postings and generally be an active leader of the dialogue within the discussion forums. Furthermore, to be absent or off-line for any significant length of time carries the risk of being viewed by course participants as unresponsive and uninterested which, in turn, leads to participants' reduced usage or withdrawal from online aspects of a course.  Not surprisingly, many instructors perceive online discussion forums to be highly time demanding with limited reward or recognition for effort (O'Quinn & Corry, 2002; Rourke & Anderson, 2002; Spector, 2005).

Much of the usage of online discussion forums in higher education is didactic in nature positioning the instructor in a traditional educational role as the provider of knowledge (Light & Cox, 2001; Margolis, 2000). While this usage can have merit, there is a need to implement more innovative approaches to the medium of discussion forum that are pedagogically sound, engaging for participants and more time effective for instructors. In this regard, the distinctive asynchronous platform of the online discussion forum can be used to promote peer learning (Harris & Sandor, 2007; Kear & Heap, 2007). Given the widely acknowledged value of student to student interaction in promoting engagement with content and deepening learning, initiatives that draw students into online learning processes and encourage them to take a more central role in their learning are of interest (Boud & Lee, 2005; Kear, 2004).

Figure 16.1 presents a model of asynchronous discussion forums as a student-centred peer e-learning environment. This framework promotes greater student involvement and ownership by positioning the student as central in the learning process. The student is situated as the content expert and facilitator on a specific topic at the centre of the learning event, shifting the focus from the instructor to the student. The instructor has been repositioned as the overseer of dialogue; remaining abreast of the discussion should support and guidance be needed. The student becomes content expert by preparing and posting a primer or short essay (approximately 1 000 words) on a specific topic (e.g. Choose a health behaviour change model and discuss it's strengths and weaknesses in understanding and addressing a health issue of your choice) giving the student greater knowledge on the topic compared to his or her peers. All other members of the forum group provide academic comment on or build upon the primer that has been posted.  As content expert, the student who posted the primer is also required to facilitate the discussion (three aspects of facilitation: content, leadership and processes) surrounding their particular topic thereby relieving the instructor of this role.

This framework has been developed and evaluated by Harris and Sandor (2009) over the last six years across a number of postgraduate and undergraduate courses delivered in both blended and online modes to combined cohorts of between 25-80 students who generally have limited experience of online discussion forums. In these courses the framework has been a central component and provided the basis for the majority of the

assessment. Discussion forums run weekly with students being assigned to write a primer on a set topic corresponding to course content. Students are then assessed on their primer, the facilitation and their postings in all discussion forums (70% of total assessment: 30% primer, 30% postings, 10% facilitation). To compress the discussion and keep the momentum within the dialogue, forums are only accessible for two weeks. Student feedback on the approach has been very supportive and highlighted the value of the approach for engagement with subject content and personal learning.
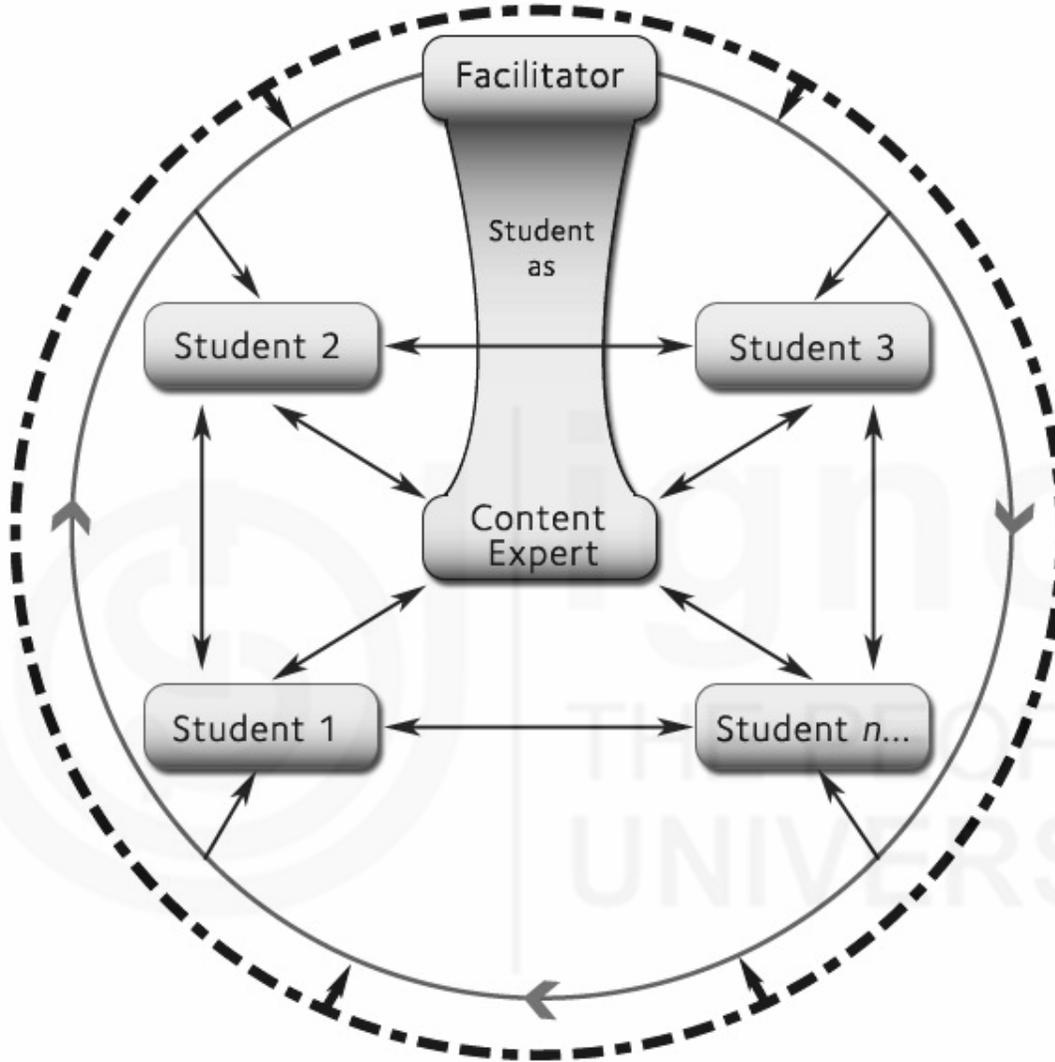


——— Student–student interaction
–––––Instructor– student interaction (overseer of dialogue)

**Figure 16.1: Online discussion forum as a student centred peer e-learning
          environment**

With respect to applying the model of asynchronous discussion forums as a student centred peer e-learning environment there are a few key learning to be considered:

• *Assess forum participation*: A significant portion of the subject marks accorded to forum participation increases the student interest in participation. All three components - primer, postings and facilitation - should be separately assessed;

- *Participation as a requirement not an option*: Students are required to participate in each weekly forum with marks deducted for any forum missed by the student;

- *Limit the length of time the forum is open* (one to two weeks): This compresses the dialogue and promotes greater and more coherent interaction between students. If you are running a series of forums across the semester, this strategy will require students to engage with subject material on a weekly basis;

- *Limit participant numbers in a discussion group*: Too few and too many participants in a forum becomes counterproductive. Ideally between 10 and 25 participants in a group. Many less than 10 participants and there is not sufficient numbers to sustain a discussion, more than 25 and the forum becomes too busy with those who are less confident of their standing in the group fading out of the discussion; and

- *Set topics and assign students*: The forums must have an established set topic that is directly linked with the subject being studied - ideally supported with resources such as a lecture, topic notes, references, and web links. Students must be assigned to topics (primer and facilitation role) early in semester.

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**Check Your Progress 16.3**

**Notes:** a) *Write your answers in the space given below.*

b) *Compare your answers with those given at the end of this unit.*

1) How does discussion group facilitate constructivist learning environment?

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2) How can you make effective use of discussion forum in e-learning?

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## 16.5   RSS FEED

RSS stands for Rich Site Summary or Real Simple Syndication. It is a type of XML document used to share news headlines and other web pages. Any web page with an RSS feed enables the user to track updates on that specific page in an automated manner through a single subscription, and without having to visit the page from time to time. "Because the data is in XML, and not a display language like HTML, RSS information can be flowed into a large number of devices. In addition to being used to create news summary web

pages, RSS can be fed into stand alone news browsers or headline readrs, PDAs, cell phones, email ticklers and even voice updates" (Downes, 2002).

A single RSS file is called a channel. It consists of two major sets of elements:

- *Channel properties:* the name of the channel, the URL and an image for the channel; and

- *Item properties:* separate items listed in the channel with specific title and link.

*Example:*

```
<?xml version="1.0" encoding="utf-8"?>
<rss version="2.0">
    <channel>
        <title>Website Feed</title>
        <description>Website Feed coded manually</description>
        <link>http://www.yourdomain.com</link>
            <item>
              <title>Title of the item</title>
              <description>Description of the item</description>
              <link>Exact link for the item in your domain</link>
            </item>
    </channel>
</rss>
```

Where, this is coded as XML version 1, and RSS version 2, with the channel name Website Feed, and having one item.

The RSS file which is in XML can be created using a plain text editor (such as Word Pad or Note Pad). However, in practice you may not require to create an RSS file manually as most blogs, wikis and LMSs provide RSS feed as an automatic feature.

Typically RSS feeds would be used through a RSS Reader (like Google Reader or Bloglines) or an Aggregator (such as FeedReader or Yahoo Pipes). It could be desktop-based or web-based, but you need to subscribe to the RSS channels from varieties of sources into your Reader/Aggregator to receive updates without visiting the specific pages. Thus, it is like receiving only relevant news items from select sources and serve it at one place.

## 16.5.1 RSS in Education

In today's fast changing world, it is important to remain up-to-date without spending much time for relevant information on the web. Pre-identification and subscription to relevant XML files can save time and efforts of searching. While using collaborative social software like wikis, it is possible to get information about group contributions without visiting the wiki. You can subscribe to student blogs in a course to monitor their progress. One of the most important aspects of RSS is that while you use it, there is no need to supply your email, and thereby reduce the chance of spam in your inbox, as it usually happens with subscription to email newsletters. RSS can be used for a variety of purpose where it is important to be up-to-date. For instance, the Athabasca University's Centre for Distance Education used RSS feed in Blogger.com to provide required updates in the Centre's website (Mason and Rennie, 2008). Thus, the faculty members while maintained their own blogs, the programmers in the computer centre maintained the website by

subscribing to the RSS feeds of individual faculty. Thus, the faculty was no more dependent on the programmers and the programmers also had enough time to think about new design issues.

## 16.5.2  Using RSS

You can use RSS readers to remain up-to-date by becoming member of free services like Google Reader, Bloglines or Netvibes. If you have a Gmail, it is pretty easy to create a Goolge Reader account. Just go to http://www.goolge.com/reader and log in with your current Gmail userid and password. Once you log in, you will find the Google reader interface with left pan for subscription and the right pan for slowing the news items. In the left pan, you have link – Add a Subscription (see Figure 16.2). By clicking to that you will get a small field to type the RSS feed that you want to subscribe. For this, you need to identify the specific newsfeed. For example, the newsfeed for the blog – TeachKnowLogist  is http://teachknowlogist.blogspot.com/feeds/posts/default. Once the same is typed/pasted in the field and click "Add"; you are subscribed to the feed, and start getting the updates as and when the blog gets a new entry!

It is also possible to embed a specific RSS feed into a web page. For this, you need to convert the RSS feed into Javascript (a simple facility is available at RSSxpress Lite on UKOLN) and embed in the web page.

**Figure 16.2: Example of RSS Reader**

**Suggestions**

- If you write a blog or engage in a collaborative wiki, you can use the RSS effectively to save your time and that of your students.
- You can encourage students to create their own Google Reader or Yahoo Pipes account on topics of interest to remain up-to-date.
- You can create news feed on select keywords through different search engines. For example, a search through Google News on "web 2.0" can provide a RSS feed such as http://news.google.com/news?pz=1&ned=us&hl=en&q=web+2.0&output=rss that can provide regular feeds to your RSS reader.
- You can subscribe to social bookmarking sites to know what other users are marking and tagging. For Example the RSS feed for the user 'missan' at Delicious is http://feeds.delicious.com/v2/rss/missan?count=15

**Check Your Progress 16.4**

*Notes:* a) *Write your answer in the space given below.*

b) *Compare your answer with the one given at the end of this unit.*

What are the advantages of RSS use in education?

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## 16.6 LET US SUM UP

In this unit you studied the educational usage of email, mailing list, discussion forum and RSS feeds on web pages. While we emphasized the importance of interaction, these technology tools provide easy way to teachers to create the interactive environment in online settings. We highlighted the advantages of email such as ease of technology, psychological comfort, building interpersonal skills, developing critical thinking and motivating the learners. We also provided a set of guidelines on how to use email for teaching-learning. Mailing lists as an extension of email that is group based was also discussed in this unit. While its use was discussed, two specific examples (such as DEOS-L and WAOE list) were also given as illustration. Furthering the use of technology for group learning, we introduced the discussion groups in this unit. We discussed online forums as an asynchronous tool that encourages dialogue, in-depth communication and constructivist learning. You also studied a framework for use of discussion forum in online and blended learning situation. In the next section, we discussed the use of Really Simple Syndication (RSS) that is Extensible Markup Language (XML) based to push information/updates to the learners. We also described the use of Google Reader to remain up-to-date in an interactive manner.

## 16.7 KEYWORDS

**Email**: is short form of electronic mail. It is mail delivered through electronic means.

**Mailing lists**: is a collection of names and addresses used by an individual or an organization to send material to multiple recipients through an electronic system such as *Listserv*.

**RSS**: commonly expanded as Really Simple Syndication is a family of web feed formats used to publish frequently updated works.

**XML**: is short from of Extensible Markup Language. It is a set of rules for encoding documents in machine-readable form.

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# 16.9 FEEDBACK TO CHECK YOUR PROGRESS QUESTIONS

## Check Your Progress 16.1

1) Three characteristics of emails are:
   i) Email is asynchronous in nature;
   ii) Messages sent and received can be stored, organized and retrieved easily; and
   iii) Messages types once can be sent to more than one user/recipient.

2) Email has a number of advantages for use in teaching and learning. It fosters psychological comfort, intimacy, expression of ideas and informal discussions. As such it helps in building interpersonal skills, collegiality and develops higher order thinking skills. Being instantly delivered to the end user, it motivates the learner and encourages active participation.

## Check Your Progress 16.2

1) Mailing list is a group mail system that maintains a subscriber list to distribute message when one of the members post message to it. By sending email to a given email address of the group, it relays the same to all the members automatically. Mailing lists are operated using web-based systems like Yahoogroups, and GoogelGroups or specialized software like Listserv. Listproc, etc. Mailing lists maintain threads on the web for record as well. It is a two way interactive system, whereas, distribution list are only one way, as it sends mails regularly to the subscribers with no mail reply function as in free magazines and newspapers.

2) To examples of Mailing List are: DEOS-L, and WAOE List

3) Mailing list can be used to broadcast programme related information and updates regularly to distance learners. It can also be used to provide interactions and training to the learners in small chunks and discuss issues of common interests.

## Check Your Progress 16.3

1) Discussion groups can be used as a constructivist learning tool, where the learner can discuss a topic in an online group (with or without moderation), ask questions, answer questions asked by others, debate and construct meaning in context. Discussion groups are dialogic environment to foster constructive learning.

2) For effective use of discussion group in e-learning, the following can be considered:

- Student participation in discussion forum to be assessed
- Participation should be a requirement to complete a course and not an option
- Each discussion group should be available for one or two weeks
- Involvement of student as moderators and leader to discuss topic
- Topics for discussion given in advance

## Check Your Progress 16.4

Using RSS in education helps the learner to save time. Students need not visit the institutional website for updates, as RSS feed of the page can reach directly the RSS reader of the learner. RSS can also help learners to remain up-to-date on specific topics of their interest.