IGNOU

GLOSSARY

of terms commonly used in

Open Distance and E-Learning

STRIDE

GLOSSARY OF TERMS COMMONLY USED IN OPEN DISTANCE & E-LEARNING

Prepared by

**Staff Training and Research Institute
Of Distance Education**

**Indira Gandhi National Open University
Maidan Garhi, New Delhi, India.**

GLOSSARY OF TERMS   COMMONLY USED IN OPEN DISTANCE & E–LEARNING

(Second Revised version of the 'Glossary of Terms Commonly used in Distance Education')

Contributors

Original Version (1993)		*First Revised Version (1997)*
B.N.Koul	V.Ranga	S.P.Mullick
P.R.Ramanujam	S.V.S.Chaudhary	Sanjaya Mishra
CRK.Murthy	T.R.Srinivasan	
Basanti Pradhan		

Second Revised Version (2003)

Redesign & contribution of additional terms
by

G. Mythili
Prabir Biswas

Overall Supervision:
P.R.Ramanujam

PREFACE TO 1ˢᵗ REVISION (1997)

The essence of a subject could be understood and explained by studying and using the specialized language/terminologies developed and used in its own domain of knowledge, theories and philosophies. In fact, terminologies are the basis for (i) ordering of scientific concepts; (ii) transfer of knowledge through teaching and training; (iii) transmission of knowledge from one language into another by language mediators; (iv) formulation and condensation of scientific and professional information; and (v) provision for storage and retrieval of information of the subject concerned.

In 1993, Staff Training and Research Institute of Distance Education (STRIDE) issued a Glossary of Terms commonly used in Distance Education. It contained 133 terms which were mainly in the areas of course development, evaluation, student support services and communication technology which most of IGNOU staff members – academic, non-academic, technical and other academic professionals are concerned. It was decided to revise it to make it more useful and relevant to the work being done by the staff members of IGNOU as well as those working in distance education institutes and other open universities. The glossary was circulated amongst various distance educationists to obtain their comments on the existing terms and suggestions pertaining to new terms which may be included in this glossary. As a result many comments and suggestions were received. My colleagues Prof. S.P.Mullick and Sanjaya Mishra have worked on those suggestions as well as those given by other academic staff members of STRIDE. As a result a few terms included in the first edition have been revised and 81 new terms have been added. It is hoped that this second edition of glossary will be found more useful than the first edition. The discipline of distance education is growing very fast. Hence you may suggest more terms as well as modifications in the terms presented here in order to improve this glossary further.

V.S.Prasad
Director (STRIDE)

PREFACE TO ORIGINAL VERSION (1993)

Distance Education has emerged as a distinct field of activity having its own terminology like open education, flexibility, study centre, academic counselling, student support services, credit system, etc. However, many other terms are being adopted from related disciplines like education, psychology, sociology, management and applied disciplines like educational and communication technologies. These terms are being used by distance educators quite often in their programmes/workshops/seminars/conferences/training courses and have come to have specific denotations and connotations peculiar to their work in the field of distance education.

Staff Training and Research Institute of Distance Education (STRIDE), engaged in disseminating information about distance education philosophy, methods and materials, identified those terms which are most often used in Distance Education Institutes in India and abroad in general and at Indira Gandhi National Open University in particular. They are mainly in the areas of course development, evaluation, student support services and communication technology.

The academic staff of STRIDE and Sh. T.R.Srinivasan and Dr. S.V.S.Chaudhary of the former Division of Distance Education, IGNOU were assigned various terms/words/expressions to write their working definitions as they are used in the context of Distance Education. These definitions were then discussed in the staff meetings and finalized in the form they are presented in this glossary. It may be noted that most of these terms are IGNOU specific and there is need to include many more terms which are used in other institutes as well. We shall take up this task in due course of time.

The purpose of developing this glossary is that it may be useful for the staff of IGNOU and other Distance Education Institutes in the country as well as part-time staff like coordinators, academic-counsellors and course writers who are engaged from time to time by Distance Education Institutes and Open Universities.

This glossary is being issued as a first draft only for circulation amongst experts in this area. You are requested to suggest more terms as well as modifications in the terms presented here in order to extend and improve upon this first version.

B.N.Koul
PVC (STRIDE)

A

Academic Calendar: It is the schedule of academic events that an institution or university proposes for a year. It usually starts in the month of May/June. At IGNOU the academic calendar starts in January.

Academic Counselling: It encompasses all types of teacher-learner interaction that are aimed at facilitating learning. Such interaction may mainly be tutorial in nature with various aspects of counselling featuring in between. However, sometimes interaction may exclusively be in the nature of counselling. Such counselling may be at (i) the pre-enrolment or pre-entry stage, (ii) the stage of induction into a programme, (iii) the stage of submitting the first assignment, (iv) the stage of initiation into any new activity such as a lab-course, a hands-on experience in a computer programme, preparation of a project-proposal etc., (v) the pre-exam stage and (vi) the post-programme stage.

While tutorial interaction is subject-centered (centering around presentation, exposition, explanation, illustration, demonstration, and other pedagogical activities related to the course-content), counselling is learner-centered seeking to help learners identify their individual problems, the causes behind such problems and the means and ways of overcoming or circumventing such problems so as to enhance the possibilities of effective learning.

Academic counselling may be provided in face-to-face situation, through tutor-comments on assignment-responses, through correspondence or over telephone and interact where possible.

Academic Counsellor: Academic counsellors are mediators between the learners and the university. They are expected to offer support to the students through counselling and tutorial services. In addition, they evaluate the learners' assignments responses and provide feedback to the learner through tutor comments. In some cases assignment responses may be evaluated by academics who are not engaged in counselling.

Access Devices: They are used in self-instructional materials to help the learners locate concepts and ideas in any part of the material. They make the contents of learning text more accessible. Examples of access devices are: structure, objectives, introduction, advance organisers, summary, glossary, etc.

Access Time: The amount of time a computer or a keyboard device takes to access information on an optical storage disc and display the information on a monitor.

Accessibility: A characteristic of technology that enables people with disabilities to use it. For example, accessible Websites can be navigated by people with visual, hearing, motor, or cognitive impairments.

Accreditation: It is a process by which an institution or a specialized unit of education periodically evaluates its educational activities and seeks an independent judgment by the experts in the area as to whether it achieves substantially its own educational objectives and meets the established standards of a body from which it seeks accreditation. Normally the accreditation process involves (a) a clear statement of the institution's objectives; (b) a self-study evaluation by the institution in relation to its objectives; (c) an on-site evaluation by a selected group of peers which reports to the accreditating body; and (d) a decision by this independent body that the institution or unit does or does not meet its standards for accreditation.

Action Verbs: Action verbs are used in writing learning objectives in self-learning materials. These verbs state expectations of learner behaviour as an action to be performed, which distance learners and teachers can evaluate as having been performed.

Activities: These are things that can be used to ask the learners to do and involve in active learning apart from reading of self-learning materials and watching or listening to audio-video programmes. These are questions or tasks designed to help the learners think for themselves and understand better. These also help to apply learning to do practical problems.

Adaptive Instructional System: An instructional system which can adjust itself to varying student behaviour by, for example, giving simpler learning tasks if the student has not been successful, or more difficult learning tasks when the student is successful.

ADSL (Asymmetric Digital Subscriber Loop): A version of the new technology that will allow users to see the quality motion of a picture on their computer screen.

Advance Organiser: It is the introductory material presented before the actual learning tasks in study materials. It is pitched at a higher level of abstraction and inclusiveness than the learning tasks themselves. Its purpose is to explain, integrate and interrelate the material in the learning tasks with the previously learned material and/or behaviour and also to help the learner discriminate the new material from the previously learned material.

Agent: It is a programme which performs some tasks for a computer user e.g., filtering e-mail, finding web sites etc., according to the users interests. It is also called an 'expert' or 'intelligent agent'.

Analog Signals: These signals vary continuously by amplitude or frequency. These are subject to interference. Older transmission systems, like the telephone service, is the example of analog system. Analog signals transmit information by modulating a continuous signal e.g. radio wave.

Animation: It is the process of creating an illusion of movement on a monitor/screen. For example, frame-by-frame shooting of progressively changing graphics, stills, models or puppets.

Annotation: Available to the other learners – who are also able to add their notes or comments.

Application Service Provider (ASP): Internet hosting service provider. A company that hosts a programme on behalf of its clients. Many training programmes and learning management systems are now offered on an ASP platform.

Artificial Intelligence: The capability of a computer directed device to perform functions, that are normally associated with human intelligence, such as reasoning, learning and self-improvement.

Aspect Ratio: It represents the ratio of the height and width of the television screen which is three units in height and four units in width (3:4). All TV graphics must, therefore, fit into the aspect ratio of 3:4.

Assessment: It is the process of quantifying and/or qualifying the performance of an individual, group, institution, device or material.

Assignment: A learning task (consisting of essay-type questions, or short answer questions, or an activity, or a project, etc.) that a distance learner undertakes during his/her studies. At IGNOU, besides being used as a means of didactic communication, it is used as an instrument of continuous assessment that carries 20-30 per cent of the weightage of final scores. Assignments can be of two types: Tutor-Marked Assignments (TMAs) and Computer-Market Assignments (CMAs). Obviously, assignments are used for two purposes: to provide guidance through tutor-comments, and to assess learner achievement through grading/marking.

Assignment Response: The response or answer given to an assignment question by a distance learner and submitted to the university to be evaluated (commented upon and marked/graded) by an academic counsellor or by a computer.

Asynchronous Communication: This is a type of communication which does not occur at the same time. E-mail and printed learning materials are common examples of asynchronous technologies. These allows the sender to deposit information for the future.

Attachment: An attachment is a document or file which may be appended or attached to an e-mail message. An attachment may retain the formatting of the original document if the receiver has the same or compatible software on his/her own computer that create the attachment.

ATM (asynchronous transfer mode): A network technology for high-speed transfer of data. Packets of information are relayed in fixed sizes, enabling smooth transmission. ATM supports real-time voice and video as well as data and can reach speeds of up to 10 Gbps.

Audience: Those persons who are the receivers of a message, particularly of a mass media message. Also called receivers, readers, viewers or destination.

Audiographics: Computer-based technology that permits simultaneous transmission of voice and data communication and graphic images across local telephone lines in a way that is interactive between the instructor and all participants.

Audio Tele-Conferencing: Audio tele-conferencing, using either dedicated channels or normal telephone network, is generally used for tutorial/counselling purposes. Student groups located in different places are able to converse among themselves as well as with a distance academic counsellor simultaneously in real time in an audio teleconference. Such conferences can be a distance education equivalent of real class room situations and have the potential to obviate the need for academic counselling sessions at individual study centers. However, audio tele-conferencing presupposes the existence of a highly reliable and widespread telephone system. It also needs special equipment like the audio conference bridge, etc.

Authoring Software: Software application used to produce interactive learning materials that bring together all components of a course, such as text presentation, graphics, tracking, and links.

Authoring Tool: A software application or programme that allows people to create their own e-learning courseware. Types of authoring tools include instructionally focused authoring tools, web authoring and programming tools, template-focused authoring tools, knowledge capture systems, and text and file creation.

Automatic Gain Control (AGC): Automatic gain control is a device or a control which regulates the volume of audio and video levels automatically, eliminating the need for manual adjustment for getting the desired quality of the outputs.

B

Bandwidth: A band is a portion of the electromagnetic spectrum. Bandwidth is the amount of the electromagnetic spectrum that a given signal occupies. It is usually expressed in kilohertz (thousands of hertz) or megahertz (millions of hertz).

Bandwidth also refers to the capacity of a transmission system, expressed as the amount of digital data that could be moved through it per unit time. It is usually expressed in bits per second.

Modem connection to an internet server is a typical example of a low-bandwidth connection.

An Ethernet connection within a LAN is an example of a high-bandwidth connection.

Band Rate: It is a measure of a modem's speed in terms of the amount of information the modem can transfer from one computer to another in one second. It is synonymous with bits per second (BPS)

Binary Code: It is the base 2 numbering system (0 and 1). All computers are based upon this numbering system.

Bits: A bit is the smallest unit in a computer system. Each bit is designated as either a 0 (zero) or a 1 (one).

Bitmap: A bitmap is a map of dots or pixels. (A pixel is a single dot or point of a picture or an image on a computer screen). Any picture or image we see on a web page is a bitmap. Bitmaps are available in many file formats e.g. GIF, PICT, JPEG, etc. These can be read by paint programmes and can be edited by image editors.

Block: A booklet that is based on a major thematic area and normally contains three to five study units. A few blocks combined together make a course. Usually a block presents a content worth one credit and contains around sixty A 4 size printed pages.

Bookmark: A saved link to a web page that's stored in a browser for quick and easy retrieval.

Broadcast: Any transmitted radio and television programme is called broadcast. Transferring learning content to many learners simultaneously, as in a satellite broadcast or an IP multicast. In an IP multicast, numerous learners can participate in a learning event that is broadcast over the network using the Internet Protocol from a single source.

Browser: The two most popular web browsers are Microsoft's Internet Explorer and Netscape Navigator/Communicator. A programme used to access the text, graphic, audio, video and animation elements of the Internet and Intranets. Netscape Navigator and Microsoft Internet Explorer are the most commonly used browsers. It is also called a web browser.

Bulletin Board System: A bulletin board system is a small computer system that stores information and allows the users/members to exchange messages, maintain discussion groups and download software by way of a network connection. It is an electronic equivalent to a notice board. All messages posted can be read by all users/members.

Byte: One byte represents a single computer word, generally a combination of 8 bits. Hard disk and other storage devices in a computer, RAM (Random Access Memory) are measured in (kilo bytes (thousand of bytes), megabytes (millions of bytes) or giga bytes (billions of bytes).

C

Cable Television: This term is generally used for community antenna television.

Camera Card: A written statement showing the camera shots to be taken by a particular camera or cameraman during a studio recording. A camera card comprises details such as shot numbers, their sequence, kind and description of shots and instructions such as zoom, tilt, pan etc. for the cameraman.

Camera Chain: A TV camera along with its associated electronic equipment is known as the 'camera chain'. It consists of the camera head, the camera control unit, the intermediate amplifier and the power supply unit in conventional cameras. In digitally controlled cameras, this equipment includes the camera processing unit and the remote control unit.

Camera Control Unit: Also known as CCU, this equipment is used by a video operator for adjusting camera pictures during the production of a programme. A CCU can also be used in on-line editing required for live transmission.

Camera Ready Copy: It is the processed manuscript ready for print, usually proof read, corrected and laser printed in specified dots per inch (dpi).

Camera Script: Also called 'production script', a camera script is obtained by presenting the final programme script in technical terms. It serves as a blue print or a working document for the performers, technicians, production crew and the floor staff. It gives detailed instructions for the production crew, such as shot numbers, camera numbers, camera positions and movements and kinds of shots to be taken, dialogue, commentary, sound effects, music and transition indications.

Capsuling: A term used for transferring segments or episodes from a particular programme onto a single video tape or video cassette. Capsuling is done to facilitate uninterrupted playback or transmission of longer programmes in a much shorter time-slot.

Caption: Usually, pictures or cues specially mounted on 12" x 9" black cards for use in studios. It is also called caption card, caption stand, and animated caption.

Cassette: In recording, it is a case of container for an audio and/or a video tape. In computing, it is a low cost micro computer bulk storage medium.

CD-ROM: It stands for Compact Disk Read Only Memory. It is an optical storage device with high storage capacity.

Certificate: A document given by an educational institution to a person certifying his/her having satisfactorily completed a course of study. At IGNOU a certificate

programme is worth 12-16 credits (i.e., 360-480 study hours), which can be completed in a full time equivalent of an academic half-hear. Maximum calandar time to complete a Certificate Programme is 2 years.

Channel: The means of communication through which messages flow from the source to the destination. This general term could apply equally to speech made up from word signs, or visual communication made up from image signs.

Chat: This usually refers to real-time, text based conversation between two or more individuals connected online. When one member of the chat group type something in his computer, these are displayed on the computer screen of the other member of that chat group. Some chat software also features voice-enabled chat.

Citation: Citation means a reference to a document or file from which text is quoted.

Clinical Supervisor: He/she is an expert who supervises the clinical work of learners in skill development centers and acts like a counsellor and provides necessary inputs for development of desired skills amongst learners, like counsellors in subjects like Health Sciences, etc.

Code: It is a system of signs held together by conventions. Primary codes include language speech made up from word signs, or visual communication mae up from image signs.

Codec (coder/decoder): This is an electronic device that performs the following functions: a) converts standard TV signals into compressed digital signals for transmission, b) converts incoming compressed digital signals back into viewable/standard television signals.

Cognitive domain: This domain of learning activities is related to perceiving the world and knowing or understanding it. According to this domain learning contains six levels: knowledge, comprehension, application, analysis, synthesis and evaluation.

Collaborative Learning: It means learning through the exchange and sharing of information and opinions among a peer group. Computers excel in mediating collaborative learning for geographically dispersed groups.

Command: This is an instruction given by a computer user in order to complete a certain task or operation. This instruction is given by printing at menu options on the monitor screen using a mouse or by typing a certain functions key on the keyboard.

Communication: The process of transferring information by means of various media from one point, person or device to another.

Communication Barriers: Factors in the communication process that impede communication between the source and the destination. Also called filters or noises. They exist within individuals (psychological barriers), within the sign message (semantic barriers) and within the context (mechanical barriers).

Communication Software: This is a programme that connects one computer to another computer or network in order to establish communication between two or many users.

Competence: Competence is used to mean the ability to perform in jobs according to the standards/norms required in employment. It requires a combination of knowledge and skills.

Completion Rate: It means the percentage of students completing a course programme compared with the number of students who started the course/programme.

Compressed File: A computer file that has been reduced in size by a compression software programme. The user must decompress these files before they can be viewed or used.

Compressed Video: This is a method of sending video signals using less band with than normal by transmitting only changes in moving frames rather than full motion.

Computer Aided Instruction: An instructional technique which places the student in a conversation mode with a computer with a preprogrammed study plan. The programmed course selects the next topic or phase of study according to the previous responses from the student, allowing each student to progress at a pace directly related to his/her learning capability.

Computer Assisted Assessment: It describes the use of computers to help in the assessment of students.

Computer Assisted Learning: Study of any part of the curriculum aided by some application of the computer. The use of computer to provide information to a student, that pose questions and react to the student response, by providing positive reinforcement in case of correct response and remedial information in case of incorrect response.

Computer Based Training: This is an interactive instructional approach, in which computer takes the place of an instructor. Computer provides questions to be answered and also feedback based on the students response.

Computer Catalog: This is a computerized listing that enables the computer user to access the record of a particular library, information agency and so on.

Computer Conferencing: A system for real-time interactive electronic message exchange, may or may not include image of the participants on the computer screen.

Computer Delivered Assessment: It means any assessment or test taken at the computer.

Computer Managed Instruction: The use of computers to assist in the management of a student's progress through a course. The system may be fully integrated with computer assisted learning, such that the student's responses are recorded and new units are delivered according to a present curriculum and satisfactory performance in prerequisite units.

Computer Managed Learning: The use of computer to monitor, analyse and report on student's learning when on a course.

Computer Marked Assignments: It is a form of testing learner performance using a computer. The assignments usually consist of objective type questions with multiple choice answers of which only one is the 'correct' or 'best answer'. The response sheets are normally in the form of a coded sheet to be read by an Optical Mark Reader (OMR).

Computer Mediated Communication: It is the communication process that takes the help of computer and communication network. Computer mediated communication includes e-mail, reaching remote databases and computer conferencing.

Computer Network: An assemblage of computer system linked together by a common set of protocols for fast and easy flow of data.

Concept Map: It is a graphic representation of the content of text showing semantic and/or thematic relationship amongst various concepts. This provides meaningful insights into learning, recall and access in self-instructional materials.

Connect Time: This term usually refers to the amount of time that a terminal or computer has been logged on to a computer or server for particular session.

Consortium: This is an arrangement in which a number of organizations involve in formal partnership. In this kind of setup the organizations may go for joint allocation of resources. In the context of open and distance learning, various institutions may involve in joint course production, joint admission, credit transfer and so on. There must be a formal agreement among the institutions.

Continuing Education: Continuing education is generally delivered at a distance. This can be delivered on campus also. This education is usually not for earning credit as available in other formal and distance learning courses.

Continuous Evaluation: It is a process of assessment of learner performance throughout the learning period placed at regular intervals. Usually the result of continuous evaluation is formative in nature. It is done through tutor marked assignments and computer marked assignments.

Coordinator: In IGNOU, a coordinator is the administrative head of a study center. He/she may be assisted by one or more assistant coordinators and administrative or secretarial staff.

Copy right: This is a set of rights granted by a government (under the national law of copyright) to the originator of an intellectual properly to print, copy, reproduce, publish, sell and distribute the whole or part of an existing original work. For example, copy right granted to an author for his/her books, articles and so on; and copyright to an organization for its audio, video programme and so on.

Cost-benefit: Refers to economic viability of a programme assessed by calculating and comparing in monetary terms, both the cost associated with and the benefits accruing from the programme.

Counselling: It constitute three components, viz., informing, advising and counselling, where informing means giving appropriate and correct information; advising covers suggesting appropriate courses of action; and counselling means helping the learners to clarify their needs, feelings, etc. so that they can make appropriate decision for themselves.

Course: It refers to a paper in conventional set up. In distance education, a course includes a set of related topics normally developed in few blocks of self-instructional materials. In IGNOU a course is given the weightage of 4 to 8 credits and usually forms the part of a programme.

Course Aim: It means the overall purpose of a course.

Course Blueprint: This is a course planning document. It contains content/subject matter of the course, its components, costing, evaluation procedure etc.

Course Coordinator: A course coordinator is one who plans, supervises/monitors the activities of the course writers, content editors, format editors, language editors, audio and video producers, graphic artists, copy editor and printers involved in the preparation of a course. He/she is a manager responsible for the inputs from the academic and production staff involved in preparing the course, and is often an in-house faculty who specializes in an area covering the course.

Course Design: The process of systematic planning which determines the aims and objectives, instructional events, and evaluation procedures of a course. It is a composite task which involves activities such as outlining the actual content area,

selection of themes and sub-themes, division of the content into blocks and units, planning of media inputs, time frame and approximate expenses involved.

Course Development: Course development refers to the actual writing of course units and audio and video scripts. The process includes tasks such as editing (content, format and language), development of programme guides, assignments and additional reading as far as print materials are concerned, and the planning and development of audio and video scripts in the case of media materials.

Course Distribution: Course distribution involves the dispatch of course materials (programme guides, blocks, assignments and additional communication, if any) to the distance learners, either at one go or from time to time. The audio and video programmes are distributed to the study centers for use by the learners, and at times they are made available in the market at a price.

Course Maintenance: It is the process of maintaining the quality of learning materials by carrying out corrections, additions and revision in the course materials. It is a continuous process.

Course Planning: The first stage in the preparation of a course is called 'course planning'. It involves need-analysis, setting of broad objectives and goals, outlining the content areas to be converted, and the financial matters pertaining to the course.

Course Production: The final stage in the preparation of course material is the process of production. The activities at this stage are copy-editing, proof reading (in stages: galley, page proofs, etc.), printing and binding of booklets, as well as the production of audio and video materials. In the latter case it refers to actual shooting and the preparation of rushes.

Course Team: A group of experts responsible for design, development and production of learning materials for a course in an open university. A course team normally include subject experts (course writers), media experts, language editors, graphic designers, etc.

Course Transfer: Any institution can sale, lease or gift it's own course to another institution. Generally it happens in open and distance learning system.

Courseware: The actual instructional material including both the content and the instructional support provided therein.

Course Writer: This is a familiar term in open and distance learning system. It refers to the person who writes the course as a member of the course team. He/she should have the expertise in the subject matter of the course and also skills for writing in a specialized way to communicate effectively with the distance learners.

CPU (Central Processing Unit): This term usually denotes the box that contain the microprocessor, power supply, and disk drives.

Credit: Credit is a notional representation of a fixed amount of students' study hours devoted to various aspect of study: studying the text with comprehension, working on assignments, going through other course related documents, listening to the audio programmes, viewing the video programmes, attending the academic-courselling sessions, etc. Usually one credit is equivalent to 30 study hours.

Credit Transfer: It is a process by which previously acquired qualifications and learning experiences are given appropriate recognition and enable students to transfer and progress in their studies without having to repeat materials, course or level of study already successfully completed, and gain further educational qualifications and experiences without undue loss of time.

Criterion Reference Tests: They are used to assess the level of a person's performance with reference to some absolute performance criterion such as, 'does she know it', or 'can he do it', i.e., a pre-established standard or criterion. Criterion-referenced tests are built on the assumption that tests are tools that provide an accurate representation of absolute performance. Often called proficiency tests, they are used to determine which objectives a learner has acquired competency in.

Cue: A support signal to performers in a studio. Cues may be verbal (from the producer to the cameraman or floor manager through a headphone), or non-verbal (gestures from the floor manager to performers).

Curriculum: The word curriculum has been derived from the Latin verb 'currere' meaning 'to run'. From this follows an extension of the meaning to a course to be run and as a metaphor "an educational course to be taught/learned". In this sense, it is virtually synonymous with the term syllabus as is developed by expert committees or boards of studies of a university. In its broader sense the word 'curriculum' includes teaching strategies, learning activities and evaluative devices in relation to a particular syllabus. In the context of distance education, curriculum implies syllabi, multimedia course packages, self-learning processes of the student, and student support services.

Curriculum Development: It is a systematic process of designing the curriculum, which is the totality of learning experiences in an educational set up. Curriculum development includes identifying the target clientele, deciding the level of programme, objectives formulation, content decision, identification of teaching-strategies and evaluation techniques.

Cursor: This denotes the pointer on the screen whose position can be controlled by moving a mouse or other input device.

Cyberspace: This denotes the collection of computers located on multiple networks that communicate with other computers across the internet.

D

Database: A database is a collection of information organized in a computer in such a way as to enable easy retrieval of specific records with the help of an information retrieval system.

Decoding: It refers to the understanding and interpreting of signs (e.g. listening or reading with understanding).

Deep Learning: This is one type of learning through which the learner develops his/her understanding of the subject matter.

Degree: The award of certification for the successful completion of a full-fledged graduation or post graduation programme. A three-year degree programme comprises 96 credits.

Designer: This term is used to describe any member of a training project team, usually referring to creators such as writers, graphic artists, and programmers. Technically, this term should refer only to *instructional* designers, but it is often used synonymously with the term *developer*.

Desktop Publishing: The process and technique of preparing camera ready or plate ready copy for printing is called desktop publishing, which is done with the help of a computer and page making soft-wares like, page-maker, Ventura etc.

Developer: This term is used to describe a member of a training project team involved in development activities or the project team as a whole. It could refer to an instructional designer, graphic designer, writer, etc.

Developmental Testing: It refers to the field trial or pilot testing or materials, courses and teaching strategies with a view to collect feedback which can be useful for improving the quality and make it suitable for the target audience.

Digital signal: A digital signal is based on a binary code in which information is sent as a series of "on" and "off" signals. It consists of a series of discrete elements that have only one value at a time. This signal is more precise and less subject to interference than an analog signal. Most modern communication systems use digital transmission system. Compact disc (CDs) store digital music which is recorded at discrete intervals, more than 40 thousand times each second.

Digital Video Disc (DVD): Digital Video Disc Read Only Memory. Like a CD-ROM, an optical disc recorded on and read by a laser, but used to store even larger quantities of information, specifically 8.5 gigabytes.

Diploma: The award or certification for the successful completion of a one-year academic programme taken either after 12 years of schooling (i.e., diploma) or

after graduation (i.e., post graduate diploma). Usually a diploma programme at IGNOU comprises 24-32 credits.

Dispatcher: The person who bears the responsibility for dispatching study material to the distance learners.

Distance Education: It is a process of teaching and learning, where the learner is 'quasi-permanently' separated from the teacher and peer group, and teaching is done usually through self-instructional materials (both print and non-print) and communication technology with an emphasis on supported self-study.

Distance Learner: Distance learners are those who get enrolled in a distance teaching institution, study independently at a distance with the help of the specially designed self-instructional materials. A successful distance learner fulfils the study requirements such as submission of assignment-responses within a time frame, attendance at contact programmes (where necessary), etc. and clears the examination. It should be noted that these requirements are to be fulfilled for credit courses only.

Distance Learning Facilitators: They are generally persons identified for providing general counselling to learners on study skills and how to utilize the facilities of self-learning packages, thereby reducing the sense of isolation faced by distance learners.

Distributed Learning: This is a system that uses a variety of technologies, learning methodologies, online collaboration and instructor facilitation to achieve applied learning results in a truly flexible, anytime and anywhere fashion.

Domains of Learning: Three divisions used to classify types of learning: psychomotor (physical), cognitive (mental), and affective (emotional).

Dot Matrix Printer: A printer that forms character through patterns of dots instead of lines.

Down Link Earth Station: An earth station to receive signals beamed down from a satellite.

Drop-Out: The term 'drop-out' refers to students who discontinue their studies even before the full course-team is over. One may drop out for various reasons either at a course-initial stage, or mid-course stage or end-of-the course stage. Drop-out rate refers to the relationship between the total number of students enrolled on a course and the number of students that drop out before the course is through its full cycle. This is generally expressed in terms of a percentage.

Dry Run: A rehearsal without equipment and costumes, which enables a producer or director to work out basic actions, movements and dialogue-delivery by the artists.

Dual-Mode Institution: This type of institution offers learning opportunities in two modes using: a) conventional classroom based methods, b) distance education methods. Generally same courses are offered in both modes to two groups of learners: a) on campus and b) external learners. Usually common examination is held.

E

Earth Station: The site and the transmitting and receiving equipment used to communicate with a satellite.

Editing: Editing is the task of adapting, modifying or streamlining the course units written by the course writers. Editing can be done at different levels such as content, format, language and the copy (to be sent to the typesetter). In the case of audio/video programmes, 'editing' refers to the post-production activity in which the rushes are put together to prepare the final version of the programme.

Editing Console: Also called 'Edit Desk', this electronic equipment has a computerized switching panel with a hand wheel or joystick control and two machine-to-machine VTR editors – one as a source and the other as a recorder. It is used at the post-production stage to prepare the final usable version of a video programme.

Editor: A person in a course team (in open and distance learning situation) bears responsibilities for accuracy and clarity of the language, textual format and content presentation of the materials.

Educational Technology: It is the study and application of technologies, systems, tools and media used in the education and training. It includes both technology in education as well as technology of education. Technology in education covers the use of media, computer and communication technology, whereas, technology of education relates to techniques of enhancing effectiveness of learning.

Effectiveness: It is described as the ability to achieve the objectives set for a particular programme or course.

E-learning: This term broadly refers to technology based learning. It mainly focuses on web-based delivery methods. Typically used to describe media such as CD-ROM, Internet, Intranet, wireless and mobile learning.

Electronic Mail (E-Mail): A message obtained or sent by transferring data between a network of computers according to a data communication standard. The data are stored in a host computer for access by the receiver(s) on the network.

Encoding: It refers to the process of translating ideas, feelings and opinions into signs following the conventions of a code (e.g. speaking or writing).

End User: The person for whom a technology is designed; the individual who uses a technology for its designated purpose. In e-learning, the end user is usually the student.

Entrance Examination: Applicants to certain programmes of open universities are required to take an entrance examination or to fill a self-appraisal proforma.

Their admission to a programme is decided by the open university on the basis of their performance in the entrance examination or on the basis of the assessment of the details in their self-appraisals as the case may be.

Entry Behaviour: It refers to the knowledge, skills, attitude and relevant experience that a learner should have before starting a new lesson/unit/module/course/ programme.

E-mail Address: This is an address where an user of e-mail can send message to another user. This address has two ports which are separated by a) the portion before the @ symbol is the username or mail box name of a particular user. The portion after the @ symbol is the location address. The suffix in some cases denote the type of organization.

e.g. : i) ganesh@indiatimes.com
ii) mahadev@ignou.ac.in

Equity (in the context of instructional technology): It refers to the availability of instructional technology to all learners regardless of their age, gender, culture, race, socio-economic status, locality or region and so on.

Ethernet: This is a local area network (LAN) standard. A means of connecting computers in a local area network with high-bandwidth coaxial or optical cable connections. Sometimes called 10 baseT. This is most common network in corporate office -- considered to be high bandwidth and capable of great e-learning experiences.

Evaluation: It is a process wherein the parts, processes, or outcomes of a programme are examined to see whether they are satisfactory, particularly with reference to its stated objectives. The assessment of a programme's outcomes or results is facilitated by measurement. Such measurement is effected by means of tools such as tests, questionnaires, opinionnaires, inventories, interview schedules, scales, etc.

Examination Centres: Examination centers are centers where entrance and term-end examinations are administered. Barring a few cases, usually all study centers of IGNOU are examination centers.

Extended Contact Programme: It is a face to face programme of short duration to cultivate learning experiences that are difficult to provide at a distance.

Extranet: A local-area network (LAN) or wide-area network (WAN) using TCP/IP, HTML, SMTP, and other open Internet-based standards to transport information. An extranet is only available to people inside and certain people outside an organization, as determined by the organization.

Expert System: An artificial intelligence programme in which a decision tree is created based on an experts decision criteria. Huge potential for KM and e-learning but unfortunately provider companies are poor in all their money into sales and marketing instead of R&*D*.

F

Face-to-face Counselling: It is the predominant mode through which organized academic counselling is provided to the students of open universities. Sessions (planned and scheduled in advance) are held in study centers on weekends to facilitate interaction among students guided by academic-counsellors. These sessions are used to provide clarification of queries from students, peer group interaction, and the use of audio and video materials.

Facsimile (Fax): Transmission of text or graphic images by using a fax machine to convert them into electronic signals for transmission via the telecommunications network. The signals are reassembled in a legible form by the receiving machine at the receiving end.

Feedback: It is the process of asking response from participant about a system, process, or activity so as to improve or take correcting action, if needed. In distance education it usually refers to the comments of the tutors on assignments submitted by the students.

Field Trials: This is a method of testing learning materials after development. Generally the materials are tested on a group of 20 to 30 learners who are almost matched with the actual learners in terms of age, gender, socio- economic status and so on. This method is also called 'pilot' study.

File: This means an information (document or application etc.) is saved on a disk or other storage medium of a computer.

File Transfer Protocol (FTP): This is a method of transferring files over intranets or the Internet.

Firewell: This is a system for preventing unauthorized users from gaining access to a local network. It may use hardware, software or a combination of both.

Flexible Learning: This is a typical learning environment which have several characteristics. This is learner-centered, recognizes diversity in learning strategies and in learner's needs, uses a variety of learning resources and media, fosters lifelong learning habits and skills. In this learning environment a convergence of open and distance learning methods and class-room strategies is evident.

Flexistudy: An individualized learning system in which students are provided with learning materials for home-based study together with counselling, tutoring support and access to college facilities.

Floppy Disc: A floppy disc, coated with magnetic particles, consists of concentric circles which are called tracks. A track is divided into sectors. Sector is the smallest

space available for storage and retrieval of data. Floppy discs are widely used in computers as a back-up storage device.

Fog Index: This is an index of readability. This index is based on a formula that involves the average number of words in a sentence and the average number of syllables per word.

Font: It means a complete set of characters for one style or typeface, including all the letters, numbers and punctuation marks (e.g. Arial or Times New Roman).

Formal Assessment: This is an evaluation of learning using scheduled assignments and examinations.

Format Editing: It is the technique of putting the draft materials into self-instructional format adhering to the principles of self-instructional material design, which includes: structure, introduction, objectives, contents, self-check exercises, activities, summary, glossary, answers to self-check exercise and references.

Formative Evaluation: It is the evaluation process of an activity to give feedback to the concerned about its adequacy. In distance education the continuous evaluation acts as the formative evaluation of learners performance during a course of study.

FPS (Frames per second): It means the number of picture images displayed per second giving digital video the illusion of motion. A full motion video with no dropped frames is considered of 30 frames per second.

Fractals: The use of fractals algorithms is economic because the algorithm only changes those features of the screen that change. For example, the aspects of a talking head that change will be the lips, any movement of the head or blinking of eyes.

Frame: This is a single complete picture in a computerized movie or digital video.

Freeware: This is a software usually available via the internet which is free to download and use by the individual computer user. The software originator retains rights to the programme. The programme cannot be resold or relabelled with the consent of the originator. For example, Webshots.com is a freeware which any computer user can download.

G

Gateway: A gateway is a computer which forwards data from one segment of the Internet to another.

Geo-stationary Orbit: A special orbit that allows a satellite moving on it to remain above the equator in a fixed position in relation to the earth.

Gestation Period: The period between the beginning of a project and the first visible results/output from it. In the case of human capital formation, for instance, it refers to the time between the beginning of one's education and the returns from it by way of one's securing a job or self-employment.

GB (gigabyte): Just over one billion bytes. 1,000 megabytes.

GIF: A file format, and filename extension, for graphics files for display on web pages.

Global Comments: Overall assessment of an assignment-response. It include observations on the quality and relevance of the response, its presentation and style, and comments on a student's performance in relation to his/her earlier responses or those of other students.

Gophers: A gophers is a search mechanism that is an historical part of the internet.

Grade: Grade refers to the notional value given/attached to the worth of an academic task undertaken by the learners (i.e., assignment-responses, projects, answer scripts). At IGNOU grading is done on a five-point scale, ranging from A to E, the notional correlates of which are as follows: A (excellent), B (Very Good), C (good), D (satisfactory), E (unsatisfactory).

Graphics: It refers to the presentation of information through drawings/pictures.

Graphical User Interface (GUI): This is a computer interface based on pictures rather than text. The Microsoft windows, macintosh OS, Netscape and Mosaic are examples of GUI products. A way of representing the functions, features and contents of a programme to a user by way of visual elements, such as icons, as opposed to textual elements, such as words and character strings. The Microsoft Windows operating system is the classic example of a programme with a GUI.

Graphics (Bitmap): This images are laid out in pixels, similar to dots of paints on a canvas. Bitmap objects are not independent entities, which can be singled out for manipulation, but patterned services of dots.

Graphics (Vector): These graphics consists of objects, each of which can be separately manipulated.

Graphics Accelerator: A graphics card, used in animation production or creation, that speeds the display or preview of 3D animation.

H

Handbook: This is a part of the learning or training materials package used by the open and distance learning institutes. Handbook provides basic information about a particular subject. It also provides information about other materials than print e.g., audio cassettes, video cassettes that have been developed and/or purchased or leased from other institution.

High-Bandwidth: A high-bandwidth connection, like a cable modem, will allow transmission rates in the range of Gigabits per second and allow the use of data intensive information like video, audio and complex animation.

Home Page: This is the start-up or introductory page that appears when accessing a world wide web site. Generally this page provides the table of contents to a specific website.

Home Study: This is a mode of learning which the learner can start, continue and complete without leaving his/her home.

Hosting: The verb describing the physical storage of a Web page or other Internet content. As in, "we are hosting our programme on our in-house computers."

House Style: A set of guidelines developed by an institute for the course writers, editors, graphic designers, and so on. These many include unit design, treatment of headings/sub-headings etc., typefaces to be used, size of margins, position of tables, use of colour, cover page design and so on.

HTML: Hypertext Markup Language.

Hub: This is a network device that connects communication lines together.

Hyperlink: This refers to graphics or text strings in web documents that respond to the user selection by taking the user to a different location or presenting a different web page.

Hypermedia: It implies linking and navigation through materials stored in many media: text, graphics, sound, music, video, etc. all integrated in one system.

Hypertext: This is a non-linear method of organizing information (learning material), in which information 'chunks' contain embedded pointers to other 'chunks' forming a web of connections through which the reader may take different pathways.

Hypertext Markup Language: A format language for hypertext documents with inline graphics adopted as a standard by the World Wide Web (WWW).

Hypertext Transfer Protocol: A standard for file transfer protocol adopted by WWW.

I

ICON: This is a visual symbol which resembles the thing it represents. This is used in learning materials as an indication to the learners that they are to undertake a particular activity.

Interaction: It means two-way communication between the distance teacher and learners, between the learner and learning materials, and also between two or more learners.

Interactive Radio Instruction (IRI): This is a system of educational radio broadcasts, intended for reinforcing learning, which contain instructions to teachers and learners to engage in some activity related to the broadcast and to actively respond to what they are hearing.

Interactive Television: The television broadcasts that are combined with some form of telecommunications link to enable viewers to respond to what they are watching.

Internet: It is global "network of networks" of government, academic institutions and business organizations computers. The internet originally developed out of the ARPA net which specifies that communication occurs between the source and the destination computer in small parcels of data known as Internet Protocol (IP) packets. Each computer transmitting a packet has the responsibility of addressing and delivering it to the destination computer.

In the late 1980's, the National Science Foundation (NSF),USA, established five super-computer centers and decided to link these centers using the IP protocol as a method of sharing the expensive resources. Several academic institutions connected their local networks to the central NSF network backbone. The collection of inter-connected networks became known as the internet. Today it connects almost every country in the world together. The world wide web (www) is one of the most popular internet services.

Internet Explorer (IE): The Internet Web browser developed by Microsoft, which is also the most commonly used browser today.

Internet Protocol (IP): It is the protocol which provides addresses needed to move packets of information across networks. IP addresses have two parts: a host identifier and a network identifier.

In-Text Question: These are questions and activities embedded in the text itself. These are very important in self-instructional materials to test learner's understanding of text at the stage of questioning. They provide necessary motivational inputs for learning.

Indirect Cost: This is also known as fixed cost. It refers to the cost that does not vary with the level of output. It can be changed only in the long run. Examples include costs of building, machinery, salary of officials, etc.

Induction Meeting: It is the first face-to-face counselling session at the beginning of a programme. This first session is organized with the specific purpose of introducing the open university and the programme (its structure, course requirements, etc.) to the learners, highlighting what is expected of the learners to go through the programme successfully, as also what they can expect from their academic counsellors by way of support for their studies. It is also used to get to know each other- the students, the study center staff and the academic counsellors.

Information: It refers in the first place of factual communication, including verifiable and objective facts about the world. More broadly the term can include anything which adds to our store of knowledge about the world and people. In this sense, beliefs and opinions given and received could also be described as information. In DE context it refers to details regarding examinations, assignments etc.

Information Technology: It is a term very often used to denote the convergence of computer technology and communication technology.

Instructional Design: It generally refers to planning, development, delivery and evaluation of instructional system. However, it is also used synonymously for curriculum development.

Integrated Service Digital Network: An integrated network designed for both digital voice and data, established on the existing telephone network.

Intensive Counselling: In the process of intensive counselling the number of hours prescribed for counselling for a course/programme is not spread over the entire academic year. Instead, it is completed in a short period of time, say a working week, by putting in long hours of work each day.

Interaction: If you offer a course or modules or units of a course on the internet, that is an interaction of the course.

Interactive System: An educational system which provides for reciprocal dialogue between the student and the programme, the teacher or a teaching device. A computer system capable of making quick responses to the user is an example.

Interactive Video: It refers to the interactive use of video tape or disc for learning purpose. The interactivity is usually pre-programmed by the designer in a tutorial mode.

Interactivity: It refers to reciprocal dialogue between the student and the courseware programme/teacher.

Interface: It refers to the communication channel between the user and the computer. It includes both physical and conceptual components. Physical components include input devices, such as keyboard, speech recognisers, mouse etc., and output devices such as visual displays and sound or speech synthesizers. Conceptual components include selection methods such as command languages, menus or direct manipulation and representation schemes such as screen layout and graphics/text mixes.

Intranet: This is a private network within a single organization which uses the same kinds of software as on the internet.

ISBN: This is the short form of International Standard Book Number. This is a 10 digit unique number assigned to each book published to identify the publisher, title, edition and volume.

ISDN (Integrated Services Digital Network): This is a network connection that transfers data more than 4 times faster than a 28.8k bps modem. ISDN modems connect digitally.

ISO: This is the short form of international standards organization.

J

Java: This is a programming language developed by Sun Microsystems that creates code for interactive applications that is executable on web pages by web browsers.

Java Applets: These are small programmes written in Java that produce various special effects, which are embedded right into the web pages.

Java Script: This is a web scripting language developed by Netscape. Though Java Script shares selected attributes and data structures with the Java programming language, it was developed separately. Java Script works within an HTML page.

Journal: A periodical publication that contains scholarly and research articles written by scholars, educationists, researchers, professionals and other experts in a particular field. It may also contain review of books related to that particular field.

JPEG: A popular file format for photographs intended for display on web pages. The file extension is JPG.

Just-in-Time: One of the most appropriate uses of the internet is to deliver educational and training material as the learner needs it, or just-in-time. This delivery may be just after the learner needs it.

K

KB (kilobyte): 1,024 bytes, often generically applied to 1,000 bytes as well.

Key Frame: It is a complete video frame which contains all the image detail.

Keyword: An important identifying word from the title or content of a particular document which can describe a subject under which entries for all documents or publications on the subject are filled in a catalog or electronic resource.

Kill File: The kill file is used by the bozo filter in the users e-mail or newsreader software to screen incoming messages and reject those the user does not wish to receive.

Knowledge: It can be described in various ways: a) familiarity with a particular subject of learning, b) acquaintance with facts or principles as the result of investigation or study, c) a level of learning activities that involves recalling previously learned material, d) comprehension or understanding of a body of facts.

L

LAN (Local Area Network): A LAN usually refers to a network in one building or campus. In this network several computers and other peripheral devices are connected to a file server for the purpose of sharing resources, such as files, software applications and services.

Laser: Stands for Light Amplification by Stimulated Emission of Radiation.

Laser Printer: A printer using a process similar to that of a photocopier, the digitized image being transferred to the photo conducting drum by a laser beam.

LCD (Liquid Crystal Display): This is a popular presentation technology in flat panel display systems which is used in conjunction with overhead projectors. This is also used in laptop computer screens, video and data projectors.

Learner-Centered Education: This is a philosophical concept in which the integrity and freedom of the learner is primary.

Learning Centre: This center is situated in an institute which is established and maintained by the open university/distance learning institute in order to provide support services to the distance learners.

Learning Pace: It refers to the speed at which a learner learns/completes a programme.

Learning Styles: They refer to the ways in which the learner approaches what is to be learned. It has implication on preparation of self-instructional materials as to how the content has to be presented. It has significant relationship with individual differences of learners.

Lifelong Learning: This is a philosophical concept in which learning is viewed as a continuous process throughout the life of any human being.

Link: This refers to a connection from one place or medium to another. Using this connection a user can have access to another website or page on the internet.

Listserv: This is a powerful software programme that automatically sends messages to all subscribers on specific mailing lists or discussion groups on a computer network or the internet.

Logo: This is not a reference to the computer programme developed to introduce. For example, links between people: e-mail, links between people and information and the links between the learner and the learning process need to be explicit so that the learner is informed of the sanctioned learning and expected outcomes.

Log Off: This is the process of terminating a connection to a network or computer.

Log On: This is the process of establishing a connection over a network with the remote computer.

M

Master: The original print, audio or video recording, as opposed to a dub or copy.

Mainframe Computer: A large computer system with high storage and fast and vast processing capabilities. It can collect and send information from and to the terminals on its network.

Mass Communication: It is the general term for means of communication which operate on a large scale, i.e. in terms of the geographical area reached, the number of people reached, the number of the pieces of communication which are reproduced.

Manuscript: This is the handwritten or typed text submitted to go through the process of print material production.

MB (megabyte): 1,048,576 bytes, often generically applied to 1,000,000 bytes as well.

Media/Medium: A channel or means of communication. A medium usually allows more than one form of communication. The word 'media' has now come to refer to mass media.

Media Literacy: It aims to provide learners with the ability to (i) create media and multimedia products for specific purposes, (ii) conduct an analysis of images, sounds, special effects and text that accompany them.

Mediation: It refers to the process of selection and interpretation which transforms the material passing through a medium.

Mentoring: This refers to information and advice given to learners/trainees.

Menu: This is the key consideration to facilitate learner's access to the materials. The menu form part of home page.

Message: A unit of information, whether of fact, or opinion, or value judgment passed via a channel. It is the content of a piece of communication.

Microcomputer: This is a stand alone computer system but uses a micro processor as its processing unit. The smallest and cheapest computer available, a micro-computer is somewhat akin to a minicomputer in function and structure. The difference lies in the price, size, speed of execution and computing power.

Microwave: This is high frequency radio waves used for audio, video and data transmission.

Minicomputer: A system generally between a mainframe and a microcomputer in terms of size, price and performance.

M-Learning: Stands for "mobile learning" and refers to the usage of training programmes on wireless devices like cell phones, PDAs, or other such devices.

Mobile Study Centre: It is a van fitted with audio-video equipments, cassettes, books, and folding furniture, which can go to remote places in a particular area on appointed days and timing with respective counsellros to provide counselling support to learners at their door step.

Modem: Abbreviated version of modulator demodulator. A hardware device for translating between digital computer and analog telephone signals.

Module: A module is an independent set of related themes and/or courses based on a broader area of study. One module is independent of the other, though they may be linked to lead one to a diploma, degree, etc. The academic programmes of a distance teaching institution are usually modular in nature.

Monitor: A video display unit. This is a device that is connected to a computer or television set. Monitor is used to display text and graphics.

Monitoring: It refers to activities performed by Regional Centres to check the regularity, adequacy and effectiveness of counselling sessions arranged for various programmes at the study centers. It requires a constant check on the flow and turn around time of assignment responses as well as the quality, adequacy and appropriacy of tutor comments and the fairness of grades awarded. In certain cases monitoring is taken up at the headquarters too.

Mouse: This is a pointing and input device that allows the user of a computer to control the movement of the cursor to any area of the monitor screen.

Multimedia: Refers to an integrated system that can handle video, audio, text, graphics, animation, picture, etc.

Multimedia Learning Centres: These are places having facilities of multi-media learning such as satellite receiver, television, video cassette recorder, tape recorder, computer audio and video cassettes, CD-ROMs, etc. to facilitate learning through the use of multiple media.

Multi-media Package: A course package that usually consists of the self-instructional units (i.e., in the form of blocks), assignments (TMAs and CMAs), audio and video programmes, academic counselling sessions, and if necessary extended contact programmes, workshops, lab experiments, home kits and projects.

N

Navigate: It means to move around on the world wide web by following hypertext paths from document to document on different computers linked the www and the internet.

Network: It refers to the interconnection of two or more computers in some fashion so that the users can share files and devices like, printers, servers and storage devices.

Need Analysis: This is a process for identifying the learning and training needs of a specific group or population.

Non-Formal Education: This is a system of education outside the formal education system i.e. face-to-face classroom situation. This education may take place on either a regular or on intermittent basis.

Norm Referenced Test: It is a standardized test that evaluates a learner's performance by comparing it with that of a well defined group of learners. It is used to assess the relative level of person's performance on a 'test' administered in a group situation.

O

Objectives: Usually of a study unit and expressed in behavioural terms, objectives are the statements made to indicate the expected academic outcome of a learning exercise (i.e., in cognitive, psychomotor and affective domains). Both the learners and the evaluator/teacher use objectives (intended outcomes) to match them with the actual outcomes to plan further work.

Objective Assessment: This is an assessment which is designed to exclude the learner's subjectivity. Here, the learner has to answer a number of factual questions using one word/letter/or by giving a tick (✓) mark only. There is no need to organize or re-organise the material to answer.

ODBC (Open Database Connectivity): An application programme interface to access information from numerous types of databases, including Access, dbase, DB2, and so forth.

On-Line: It refers to interactive processing, retrival and communication in which a user enters commands and data on a terminal linked to a central computer with results being displayed on screen instantaneously.

On-Line Catalog: This is a computerized listing that enables users to access the record of holdings of a particular library, library network or information services.

Online: The state in which a computer is connected to another computer or server via a network. A computer communicating with another computer.

Open Education: It is a system of education that does not operate through the traditional conventions which are essentially restrictive in nature, e.g. admission restrictions or the period of time to be devoted to a course, or restrictions on the number of examinations in a year, etc.

Operating System: A computer programme that controls the components of a computer system and facilitates the operation of applications. Windows Me, Windows XP, Linux, and MacOS are common operating systems.

Orientation Programmes: They are organized by the Regional Centres under directions from the headquarters for the academic counsellors recruited for various courses. Orientation programmes are intended as part of the staff development programme and attempt to acquaint the academic counsellors with their special responsibilities and train them in carrying out these responsibilities effectively. Orientation programmes are also conducted for other part time functionaries of the open university.

P

Packet: It means a bundle of data transmitted over a network. Packets have no set size, they can range from one character to hundreds of characters.

Password: This is a secret combination of letters, numbers or other symbols needed to log in to a computer system.

PDF: It refers to the Adobe Acrobat file format for online documents.

Personal Digital Assistant (PDA): A small, handheld computer currently limited in functionality (e.g., calendar, rolodex, to do list). PDA's are expanding in their capabilities to include wireless e-mail and Internet access, thus opening opportunities for mobile learning and support (m-learning).

Pixel: It refers to a single dot or point or an image on a computer and TV screen. Pixel is a contraction of the words "picture elements".

Plug-in: A small piece of software that works in conjunction with a web browsers to add additional functionality, like streaming audio or video.

Post-production Editing: Editing of the rushes which are shot on location or in the studio. Sequencing of shots, cuts and modifications to visuals and sound effects, incorporating special effects, captions, etc. are done during this process.

Practical Kits: These are assembled units of instruments used for doing practical laboratory work at ones own place of study.

Pre-enrolment Counselling/Pre-entry Guidance: It centers around providing information to the *prospective* students about the university and the various possibilities of the studies which the university offers. It may also enable prospective students to identify the course of study that might suit them most, taking into account their present qualifications, aptitude and needs.

Production Crew: Members of the production team, namely the producer, the production assistant, the floor manager and his assistants, the cameraman, the lighting assistant and technical operators, who are responsible for actual production in the studio or on location.

Production Script: It is the script used for the production of audio/video programmes, usually developed jointly by the scriptwriter and the producer.

Programme: As a superordinate term, it refers to either a certificate, diploma or degree programme that consists of a few courses (the number of which differs from

programme to programme). Example: MBA programme, BDP programme, PGDDE programme, etc.

Programme Brief: It is a note relating to production of audio/video programme, which includes brief descriptions of the target group, working title, objectives, format and style, content outline, etc. This forms the beginning of audio/video production.

Programme Evaluation: It consists of all those activities undertaken to judge the worth or utility of a programme in improving some specified aspect of an educational system.

Programme Study Centre: This is a place where minimum required infrastructure facilities are provided for delivery of a professional/technical programme.

Programmed Instruction: Instruction imparted through the programmed learning materials based on either one or more than one styles, viz. linear, branching, etc. Such instructions can also be imparted with the help of teaching machines. In this process learning material is presented in small steps in a sequence for learning to take place in a predetermined order with the help of immediate feedback at each and every learning step.

Programmed Learning Material: Refers to the type of self-instructional material that has been developed on the basis of the principles of the behaviourist learning theories. The material is presented in small steps, followed by self-tests and immediate feedback to reinforce learning.

Project Work: the term project work is used to denote an independent piece of work (guided or unguided) done by a learner to complete a programme of study. A project work is normally given the weightage of a course or 6 credits, i.e., 180 hours of learner engaged time for study.

Protocols: A set of fixed rules governing the procedures for transmission of computer data, used by all computer system within a network as a common communication 'language'.

Post -Test: This is a test given to learners after they complete a programme, a course, or a unit to assess what they have learned.

Pre-Test: This is a test given to learners before they start a programme, a course or a unit to check whether the learner has basic knowledge, minimum skills and attitude to undertake the programme/course/unit.

Processor: The chip or chip set that performs the operations central to a computer's functioning.

Programmer Ready Materials(PRM): The individual components that are ready for assembly by a programmer or multimedia developer. Typically, PRMs include scripts, graphics, audio and video files.

Prototype: A working model created to demonstrate crucial aspects of a programme without creating a fully detailed programme. Adding details and content incrementally to advancing stages of prototypes is one process for creating successful applications.

Psychomotor Domain: This domain of learning activities is related to acquiring physical skills, normally associated with vocational training.

Q

Quality: Quality refers to the range of characteristics which a process or product should have in order to be considered fit for the purpose.

Quality Assurance (QA): It is the totality of the arrangements and procedures by which an institution discharges its responsibility for the quality of the teaching and learning it offers by satisfying itself that its structures and mechanisms for monitoring its quality control are effective and that where appropriate they promote enhancement of the quality.

Quality Circle: A group of employees who meet to work on quality concerns.

Quality Control(QC): A planned activity which evaluates and compares the performance of processes and conformance of products to relevant specifications. The final objective is to eliminate discrepancies between the actuals and the standards.

Qualitative Analysis: It is a process of measuring subjective data about the participant's reactions to the course or programme and changes in their attitude and values. It provides a careful description of programme situations, events, people, interactions and observed behaviour.

Quantitative Analysis: It is the process of identifying the discrete components of some phenomenon and the relationships obtain between them, emphasizing entities that can be counted or measured.

R

RAM: RAM stands for Random Access Memory. It is essentially a kind of secondary memory. Any part of RAM can be accessed for reading and writing.

Readability: It is the quality of a text that grips the attention of the learners and persuade him/her to read and comprehend the text without getting bored or tired. It refers to the style and level that commensurates with the average reading ability of the target audience.

Real Time: It refers to the processing of information that returns results so rapidly that the interaction appears to be instantaneous. Telephone calls, teleconferencing, online chat are examples of real-time applications.

Recce: Short for reconnaissance – the term used for the initial visit to a location by the producer, if possible his/her assistant, and sometimes the cameraman, to enable them to work out the potential and the logistics of using that particular location for shooting etc.

Recognised Study Centres: Recognised Study Centres are those study centers which are run by voluntary organisations. Financial commitment on the part of the university in these cases is minimal, though in terms of functions, no difference is envisaged between a recognised study center and a regular study centre. A regular study centre is the one instituted by the university, while a recognised study centre is the one established by a voluntary organisation but approved and recognised by the university. Recognised study centers are sometimes referred to as sponsored study centers also.

Regional Centres: Regional Centres (RCs) are open university establishments, representing the open university, in select places. There functions are to liaise between the university on the one side and the students, study centers, the publics, the local educational institutions etc. on the other. The RCs establish, maintain and monitor the services offered through the study centers, besides assisting the university in the process of publicity, admission, course delivery and examination.

Regional Services: Besides tutorials and counselling, it includes many more services such as information services (enquiry), establishment and maintenance of Regional Centres and/or study centers to help learners get over their difficulties and complete the courses of their choice successfully.

Resource Centre: This is a center where learning materials (print and non-print) are available for use by the learners or trainees.

ROM: ROM stands for Read Only Memory. ROM allows its contents to be ready only and does not allow users to write on it. Usually ROM contains utility programmes. Contents of ROM cannot be modified.

Router: This is a hardware module and component of a network which receives transmissions and forwards them to their intended destinations.

S

Satellite Learning Centre: A place other than study center having a satellite receiver, a television set, and desirably a STD telephone line to receive tele-lessons and provide facilities for interactive learning in remote areas away from the programme up link station.

Save: It refers to storing information by transferring it from main memory (RAM) of a computer to a disk or other storage medium or device.

Scanner: This is a device that converts a printed page or image (photographs, drawings etc.) into an electronic representation that can be viewed and manipulated on computer.

Search Engine: This is a web-based software tool that enables the user to locate sites and pages on the web. The two types of search engines, the catalog and the crawler, both locate requested information on a web site or on the whole of the World Wide Web. A catalog engine compares the user request with a collection of data that it contains concerning web.

Self Assessment Questions: Broadly categoriesed under in text questions, these are questions juxtaposed among sections and sub-sections in a unit. These are aids for the learner to check his/her progress in studies and can be of a variety of types.

Self-Instructional Materials: These are the basic and essential components of a distance education system which enable the learners to develop knowledge, skills, and attitudes in specific area of study according to their own pace and time. These are specially designed to impart measurable educational outcomes keeping in mind the target group of learners.

Self Servers: This is a central computer with large storage devices on a network that store files and software which can be shared by the users on the network.

Self-Study: It means study on one's own. The learner learns from study materials occasionally supposed by a tutor, in contrast to attending a lecture or working in a classroom situation.

Self-Study Group/Self-Help Groups: These are formed when a number of distance learners (of a course/programme) meet regularly to discuss their studies. It facilitates peer group interaction in order to support learning, discuss academic problems, assignments as well as emotional issues like examination phobia, anxiety, etc.

Server: This is a central computer with special software that provides services to other computers on a network.

SGML: Standard Generalised Markup Language recognized methodology of electronically marking up documents so that they are machine readable.

Shared Study Centres: These are centers where facilities/services are shared between two distance teaching institutions e.g. IGNOU and State Open University/ Correspondence Course Institute.

Simulation: A programme that mimics real life situations. It is used for purposes of training.

Skill Development Centre: This is a place where the students can practise specialized skills under the supervision of an expert so as to acquire those skills. In IGNOU skill development centers for health science programmes are usually district hospitals/first referral units/private hospitals/nursing homes. Work centers are also a kind of skill development centers.

Software: A set of programmes, documents, procedures and routines associated with the operations of computer systems.

Source: The source is where the message comes from.

Source code: Programme instructions written by a software developer and later translated (usually by a compiler) into machine language that a computer can understand.

Special Study Centre: It caters to the learning needs of disadvantaged group such as women, disabled persons, etc. They are otherwise similar to study center and may be established as a sub-study center.

Specific Comments: Specific comments are those written on the margin of an assignment-response, reacting to a specific point in the learners' response.

Spoofing: This is a surrogate site enabling people to access at the local level in their internet access.

SQL: Language for accessing information in a database and updating entries.

Staff Development: It is the help given to people in an organization to improve their knowledge and skills related to work achieved through on the job training, workshops, seminars, deputation to regular courses, training through distance education mode, open learning packages, etc.

Still Frame: This refers to a single frame of video information.

Storage Device: This is an equipment, like a hard disk drive, in which digital information (voice, data and video) can be recorded and stored for future use.

Structure: It is an intemised list of the components of the content (sections, sub-sections) of a unit presented in the beginning of the unit itself. The sequencing in self-instructional materials, including concept mapping.

Student Assessment: It is the measurement of learners' performance in terms of knowledge, skills and attitude in a particular course. It includes formative and summative evaluation. It helps to define the outcome of learning and also improves the process of learning.

Study Objective: This is a description of the purpose of a course/unit in terms of the outcomes which the learners have achieved on completion.

Study Skills: These are the strategies used by a learner to derive the maximum possible benefit from activities like listening, speaking, reading and writing.

Student Support Services: It is a broad term which includes in its purview all activities of an open university that intend to help its learners through the system. Student Support Service (SSS) may include within its fold such activities as admissions, regional services, course delivery services, examinations and certification. However, these activities being common for both conventional and open universities, SSS is used more often to refer to regional services in the context of open universities. SSS is distinguished from Academic Support Service (ASS) which includes such support functions as help to the academics in designing and development of programmes, course and instructional means. Such services are offered by educational technologists, media experts, graphic experts and printing technologists.

Studio: A large sound proof area where the action which is to be recorded takes place. It houses many of the necessary facilities (e.g. cameras, microphones, lights and scenery) which are used in conjunction with the artists to make the programme.

Study Centers: Study Centers (SCs) are locations where most of the face-to-face interaction between teachers (tutors/academic-counsellors) and learners of an open university takes place. Apart from organizing the face-to-face sessions, SCs provide library, audio-video and classroom support, besides the necessary information services to the learners and to the public as and when required. SCs are generally part time establishments located generally in full fledged existing conventional institutions.

Study Guide: It denotes the special guidance given to the learner on how to read and understand a unit/block usually placed in the beginning of the unit/block.

Sub-Study Centres: Sub-study centers are established in either or both of the following situations – (i) where the jurisdiction or a study center is too large or inaccessibly spread out to cater to the needs of its students and where no other institution satisfying the requirements of university for running another study center is available; (ii) if a considerable number of students of a given programme are located at a place away from the study centre.

The functions of sub-study centre are restricted as compared to those of a study centre. They are mostly used as meeting place for students to exchange notes and view or listen to video or audio programmes. Limited face-to-face counselling is also organized. Functions such as collecting assignment responses and arraning for their evaluation, administration of examinations, etc. are not performed by sub-study centers. Sub-study centers work under the immediate administrative supervision of the study centers concerned.

Summative Evaluation: It refers to end of the course/programme test to make some kind of formal judgement about the performance of the learner giving mark or grade. Term-end examination is a kind of summative evaluation.

Surfing: This means to browse around the web with or without a clear objective.

Symbol: It is type of sign which bears no literal relationship with what it refers to. For example, words are symbols. Pictures are generally said to be iconic because they usually resemble their subject. The word 'tiger' doesn't took like a tiger, but a picture of a tiger does.

Synchronous Communication: This is a type of communication that occurs with no time delay, allowing the participants to respond in real-time. Audio and video conferencing, online chat are common examples of synchronous communication.

Synthesizer: This is an electronic device for creating sound effects.

Systems Approach: This is the philosophy or viewpoint or activity that relates to system concept, where a system is defined as sum total of individual but interrelated and integrated parts (sub-systems) to achieve certain pre-stated objectives.

T

TCP/IP: This is short form of transmission control protocol/ Internet protocol. The set of rules and formats used when transmitting data between servers and clients over the Internet.

Technology-based Training (TBT): The term encompassing all uses of a computer in support of learning, including but not limited to tutorials, simulations, collaborative learning environments, and performance support tools. Synonyms include CBL (computer-based learning), TBL (technology-based learning), CBE (computer-based education), CBT (computer-based training), e-learning, and any number of other variations.

Telecommunication: Communication over relatively large distances by any technological means of transmission or reception of signals, signs, images or sounds.

Teleconferencing: It refers to special counselling sessions (or meeting/conference/discussion) organized with the help of advanced media technology whereby students of distance regions can interact with academic counsellors from one or more regions or among the students themselves. Such interaction is made possible by the media (audio or audio-cum-video) without the participants having to assemble at one place.

Telnet: A utility that allows a user to log onto a computer or server and access its information remotely, for example, from home or a work location in the field.

Tele-text: A system of one way transmission of pages of information from a central computerized database through the unused intervals of television broadcast without the users interaction with the medium.

Television Receive Only: An earth station capable of only receiving the satellite TV signals. It cannot transmit them.

Template: This is a predefined set of tools or forms that establishes the structure and settings necessary to quickly create content. A template could be an enquiry form or an enrolment form or it could be a format for presenting teaching and learning materials on the internet.

Terminal: A device used for communicating with a computer.

Terminal Questions: Questions based on the content and objectives of a unit and given at the end of the block/unit for the student to respond to. Working on these questions help the students in comprehending the text, writing the assignment responses and preparing for the term-end examination.

Test: It is a common type of measurement device – one that the individual completes himself as contrasted with one completed by an observer. It is used to determine changes or gains achieved by a learner from a particular experience.

Text: The medium of delivering information via words to be read and interpreted by the learner.

Total Quality Management (TQM): It is a characterized by activities such as process analysis using measurement, objective setting, problem solving and team work. TQM is an approach to improving the competitiveness, effectiveness and flexibility of a whole organisation. In TQM quality improvement is achieved by focusing on customer needs and streamlining the production process to eliminate defects and waste.

Transponder: This is a satellite transmitter and receiver that receives and amplifies a signal prior to retransmission to an earth station.

Tutor Comments: They are comments written by a tutor (academic counsellor) on the assignment-responses submitted by a student. These comments are to bridge the gap in learning as evidenced through the students' response and the targeted learning, to direct learners' efforts for further learning, to sustain their interest to help them in overcoming the barriers identified in the path of their learning; and also to provide learners with an assessment of their performance.

Tutor comments may be broadly categorized as 'helpful' and 'harmful'. Helpful comments may include comments on personal and pedagogical grounds promoting learning and motivation and encouraging and inviting further interaction. Harmful comments may include all negative, non-teaching comments which are likely to discourage learners and put them off their learning pursuits.

Tutor-Marked Assignments: These are assignments submitted by learners for evaluation (marking/grading) by a tutor/counsellor.   The tutor marked assignments are extremely important individual teaching learning opportunity in open learning system. These are an important part of continuous evaluation.

U

Unicasting: Communication between a sender and a single receiver over a network. For example, an email message sent from one person to another person.

Uniform Resource Locator(URL): More commonly referred to as URL. The standard address for a web page on the Internet or on an Intranet.

Unit: Comparable to a conventional lesson or chapter, a unit consists of abroad theme/concept or a set of connected themes/concepts, and is a self-contained portion of a course or module. A unit typically consists of structure, objectives, sections and sub-sections, self-assessment questions, summary, answers to SAQs, glossary and key words, and suggested reading. A few units together form a block, a few blocks together form a course, and few courses form a programme.

Uplink: An earth station used to transmit signals to a satellite and also the process of transmission from the earth to a satellite.

Upload: To send a file from one computer or server to another.

Usability: The measure of how effectively, efficiently, and easily a person can navigate an interface, find information on it, and achieve his or her goals.

User Interface: The components of a computer system employed by a user to communicate with the computer. These include the equipment, such as a keyboard or mouse, and the software environment, such as the desktop of Windows or the programme lines of DOS.

V

Video: A term applied to all visual aspects of television signals, equipment, etc. It also refers to video-recording or for any machine that can be used to record and/or play back such recordings (video cassette recorders, video tape recorders, etc.).

Video Conferencing: The use of voice and video in combination for interactive conversation through a network. Desktop videoconferencing may add the sharing of text and graphics between participants.

Video Disc: A disc imprinted with video signals generated by a laser beam.

Video Switcher/Vision Mixer: An electronic service with a panel of buttons located near the producer/director's position in the control room or on the outdoor broadcast van usually operated by the technical director, the video switcher or vision mixer is capable of shifting or changing one video source to another during the live recording or outdoor-broadcast transmission by using a variety of transitional devices and special electronic effects, wipes, etc.

Videotext: The format of a system in which pages of information are linked in a hierarchical menu for display on a TV type terminal accessible through a simple hand held numeric keypad to select pages of choice, popularly known as 'Viewdata' systems.

Virtual: It means not concrete or physical. For instance, a completely virtual university does not have actual buildings but instead holds classes over the Internet.

Virtual Classroom: It refers to the online learning space where students and teachers/ instructors interact.

Virus: A destructive type of computer programme that attempts to disrupt the normal operation of a computer, rewrite or delete information from storage devices, and in some cases, cause physical damage to the computer.

Virus Detection Programme: A software programme to detect, diagnose, and destroy computer viruses.

W

WAN (wide-area network): A computer network that spans a relatively large area. Usually made up of two or more local area networks. The Internet is a WAN.

WAP (wireless application protocol): Specification that allows Internet content to be read by wireless devices. The technical specifications required to communicate and display content on wireless devices, such as WAP-enabled cell phones. Relevant for m-learning.

WBT (Web-based training)/ Web-based learning: Delivery of educational content via a Web browser over the public Internet, a private intranet, or an extranet. Web-based training often provides links to other learning resources such as references, email, bulletin boards, and discussion groups. WBT also may include a facilitator who can provide course guidelines, manage discussion boards, deliver lectures, and so forth. When used with a facilitator, WBT offers some advantages of instructor-led training while also retaining the advantages of computer-based training.

Webpage: A document on the World Wide Web that's viewed with a browser such as Internet Explorer or Netscape Navigator.

Website: A set of files stored on the World Wide Web and viewed with a browser such as Internet Explorer or Netscape Navigator. A Website may consist of one or more Webpages.

Whiteboard: An electronic version of a dry-erase board that enables learners in a virtual classroom to view what an instructor, presenter, or fellow learner writes or draws. Also called a smartboard or electronic whiteboard.

WML (Wireless Markup Language): XML-based language that allows a reduced version of Webpages' text to be displayed on cellular phones and personal digital assistants.

Work-Centres: These are programme specific study centers established by an open university to conduct practicals related to the programme for development of skills associated with a programme.

Work Place: It is normally the place where the student works. For the health science programmes in IGNOU, this may be a Primary Health Centre or a Private Clinic.

Workstation: A device, often a microcomputer, that serves as an interface between a user and a file server or host computer. A computer or a computer terminal.

World Wide Web: A network of interconnected hypertext pages built on top of the internet. The pages are examined and traversed using a hypertext browser such as Mosaic, Netscape, etc.

Worm: A computer virus that replicates itself many times over for the purpose of consuming system resources, eventually shutting down a computer or server. This type of virus is most often directed at mail servers such as Microsoft Exchange and is usually unleashed when an unsuspecting user opens an email attachment.

WORM (write once, read many): A type of data storage disk that allows information to be saved to it only once, archiving permanent data. WORM disks must be read by the same kind of drive that wrote them, thus making it more useful for hindering widespread acceptance of this technology.

X

XML (Extensible Markup Language): The next-generation Webpage coding language that allows site designers to programme their own markup commands, which can then be used as if they were standard HTML commands.

XSL (eXtensible Stylesheet Language or eXtensible Style Language): A Webpage design language that creates style sheets for XML pages, which separate style from content so that developers can specify how and where information is displayed on the page.

Z

Zip file: 1) A file that has been compressed, often with the .ZIP format originated by PKWARE. 2) A file on a Zip disk, not necessarily compressed. 3) A compressed file with the .EXE extension that is self-extracting (can be unzipped simply by opening it).

Zip drive: An external data storage device that reads Zip disks.

Zip disk: Portable storage disk that can hold 100 or 250 MB of information, manufactured by the Iomega corporation. Used in a Zip drive, Zip disks can archive or back up large amounts of data.

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