A Conceptual Framework for Study on Perception and Awareness about ODL System of Education in India among the Students

Sarda Prasad[1] & Ali Asgar[2]

[1]Assistant Professor, SOEDS, IGNOU, Maidan Garhi, New Delhi
[2]Associate Professor, STRIDE, IGNOU, Maidan Garhi, New Delhi

Correspondence: sardaprasad@ignou.ac.in & aliasgar@ignou.ac.in

Abstract

A conceptual framework identifies the direct and indirect relationships that are present in understanding a research issue. In the conceptual framework we have explained relationship between variables. Conceptual framework for the study shows the path of research and establishing relationship among the study variables. Open and Distance Learning (ODL) is the platform for higher education or up scaling knowledge of those, who are dropouts or outreached learners. ODL may be panacea for outreached learners especially working or poor learners beyond the boundary of educational institution.

Key Wards: Perception, Knowledge, Students, Variables, Study Materials

Introduction

Open and Distance Learning (ODL) has showed its importance in education system (Teaching and Learning process) across the world during the Covid-19 pandemic. Learning and teaching are the process of development of human resources either informal way, formal way or non formal way. Learning is the process by which an individual, through one's own efforts and abilities changes the behaviour, while teaching the process of arranging situations in which the important things to be learned. Leaning involves acquisition of knowledge, skill, attitudes, etc. Learning should be purposeful, engagement of learners with maximum numbers of senses, challenging and satisfying, and should be functional understanding. Informal education is the lifelong process of learning from home, family, workplace, etc.; formal education is organized process of learning within boundary of schools; while non formal education is an organized,

systematic, education activity carried on outside the framework of the formal system to provide selected types of learning to particular sub-groups in the population, adults as well as children according to their needs. Thus, distance education is like non formal type of learning.

We can define distance education, as it is an instruction through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor or instructors. It has six elements as listed by Desmond Keegan (Keegan, 1980).

I. Separation of teacher and learner
II. Influence of an educational organization
III. Use of media to link teacher and learner
IV. Two-way exchange of communication
V. Learners as individuals rather than group of students
VI. Educators as an industrialized form in the participation

Many scholars have modified the definition of distance education and invent other VII characteristics of distance education as "the privatisation of learning (Keegan, 1986: 49-50).

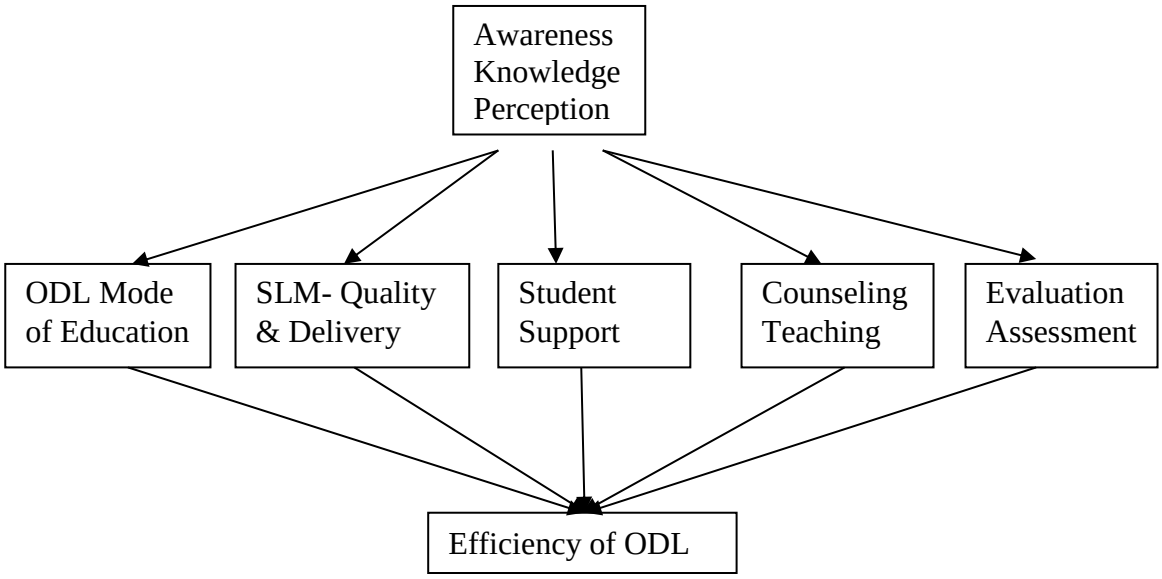

Figure 1: Conceptual framework for Perception and Awareness study

Conceptual Framework

In this article, we have discussed about the review of literature related to ODL system of Education in India, which was conducted in 2023. We discuss about the conceptual framework and research methodology for studying students' perception and awareness level. A conceptual framework identifies the direct and indirect relationships that are present in understanding a research issue. In the conceptual framework we have explained relationship between variables. Conceptual framework for the study shows the path of research and establishing relationship among the study variables (Figure 1).

After reviewing of literature, we can find out the various aspects of ODL mode of education and framed a conceptual framework and briefly discussed here. These aspects are related to knowledge level of the respondents, awareness about the ODL mode of education and their perception towards ODL. Awareness affects knowledge and the knowledge creates interest, the interest raises desire, the desire promotes to adopt the system of education, adoption changes the perception either positive or negative. The knowledge of, awareness about, and perception towards- ODL system, quality and delivery of SLM of ODL, Student support services, teaching/counseling methods and evaluation/assessment methods and other related components of ODL. All these components of conceptual framework will be linked with cost effectiveness and cost efficiency of ODL mode of education. As we have discussed above that respondent would be both from tradition system of education and ODL system of education and established all the possible relationship to find out the perception towards ODL as compared to the traditional education.

We know that there are three components of behaviour- Knowledge, Attitude and Skill. There are a number of theories seeking to model the process whereby attitudes might be translated into behaviours. One of the most commonly used and accessible of these is A*jzen's* Theory of Planned Behaviour (TPB), which is formed on the basic premise that attitudes are significantly correlated to behavioural intentions, which in turn are the proximal determinants of behaviour. A diagrammatical representation of the model is shown in Figure 2.

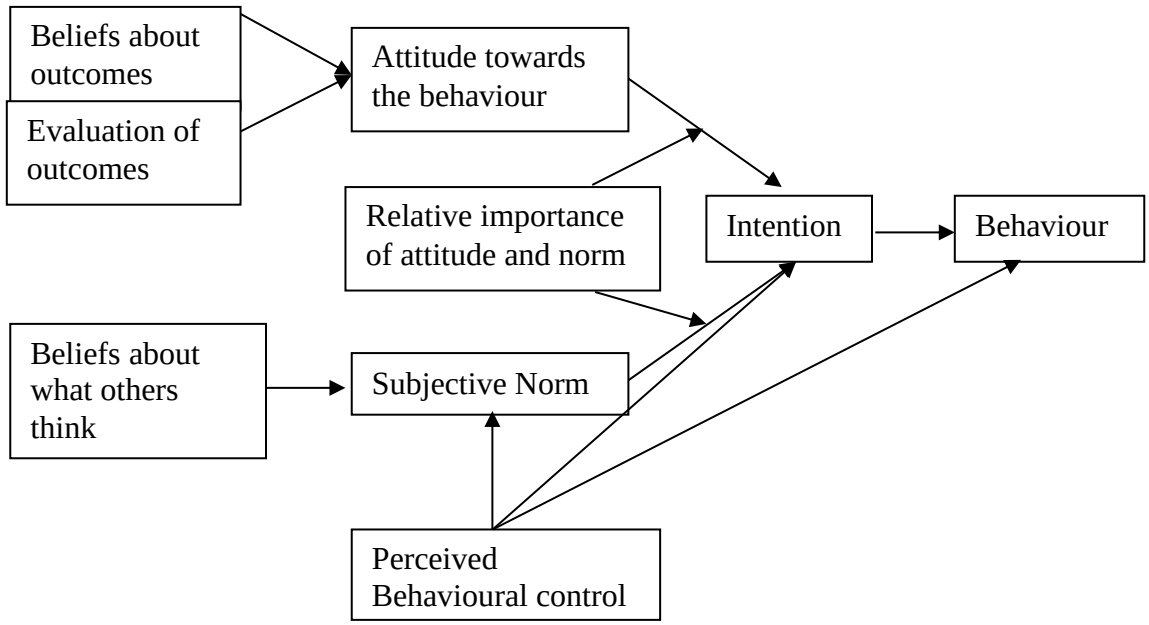

Figure 2: Theory of Planned Behavior Model (Ajzen, 1991)

The use of attitudinal data in the design and evaluation of behavioural intervention is based on a belief that attitude and behaviours are linked. While empirical research does not support the use of attitudes as a direct proxy for behaviours. It is generally accepted that attitudes do have an indirect impact on behavior alongside third variables such as social norms. One of the commonly used and accessible of these is Ajzen's theory of planned behavior which is formed on the basic premise that attitudes are significantly correlated to behavioural intentions, which is turn are the proximal determinants of behavior. If the research is based on primary data of perceptual study or attitudinal study should be based on face to face interview. Conceptual framework should be conducted based on primary survey from mixed methods. Components of conceptual framework for perception and awareness study, which is based on following Strength and weakness of ODL and challenges in ODL.

- In skill development
- Communication skill
- Behavioural Change

- Promotion
- Salary increment
- Personality development

Issues in ODL education-

- Assignment compulsory
- Evaluation is tough
- Drop out is higher
- Duration of programme
- Fees higher
- Study material quality is low
- Lack of library facilities
- Behaviour of the staffs in the centres
- Low number of centres
- Delayed in SLM delivery
- Understanding the system
- Credibility of the system
- Learner performance
- SLM quality
- SLM delivery on time
- Counselling to learner
- Availability of counsellor
- Study Centres
- Regional Centres of ODL

Main challenges in ODL education-

- Management of Regional Centre
- Management of Study Centre
- Counselling methods are not good
- Lack of counsellors
- Quality of counsellors not good
- Providing effective support services
- Distribution of Learning Resources

- Short duration of face to face interaction between learner and counsellors
- Limited Number of ODL institutes
- Project work completion is tedious work

All these points are related to ODL system of education and its issues and challenges.

Paths of Conceptual Framework

Mixed methods of research design will be adopted to draw the conclusions. Methodology in this study will be applied into following sub-headings-

In this study we have used secondary and primary sources of data. Both qualitative and quantitative data will be collected through Google survey monkey. The following variables have included in the conceptual framework.

Dependent Variable

Do you know about Open and Distance Learning (ODL) University? Y/N

Do you know the nature of ODL mode of education? Y/N

Have you completed any programme in ODL mode? Y/N

How ODL is useful in career development? 3/5-point scale responses

Do you know about the IGNOU and its active programmes? Y/N

Do you consider ODL as secondary level of education? Y/N

Independent Variable

Age, sex, income, education level, employment, social group, religion, residence (RU), media exposure (Print, Electronic, cyber, social media), source of information about the ODL were considered as independent variables. The operational definition of variables has been given in the next subsection.

Respondents have selected from ODL institutes who are currently enrolled or have completed any programmes from the ODL institutes. More than 2000 emails sent to the ODL learners those were available in the system.

Questionnaire has constructed with 45 items/ questions on different aspects of ODL such as nature and characteristics of ODL system of education, SLM of ODL, Student support services, counselling, evaluation, need of ODL education in career development and others relevant informative questions. A pilot survey was conducted in a non-sampled respondents and refinement of questionnaire have done. There were sufficient questionnaires in Google form has received from respondents for the purpose of testing of the questionnaire. After pilot survey, we have tested validity and reliability of questionnaire (survey instrument).

Validity and Reliability of Instrument

Validity means "measure what is intended to be measured" (Field, 2005) or it means how well an instrument measures what it is intended o measure. The validity of the attitude scale was ascertained in terms of item validity, content validity (Asthana, 2017). The main types of validity are face, content, construct and criterion validity. We have used content validity. The attitude scale was considered valid enough in terms of item validity because only those items were retained in the final draft of the scale which was having t-values equal to or greater than 1.75 (highly discriminating items). Scale was used for the verification of the questionnaire. We have used 2-point scale as relevant and non-relevant questions in the questionnaire by using Coefficient Variable Indicators (CVI) as follows-

CVI= No. of Relevant Questions / Total no. of Questions

CVI= 42/47= 0.89 (0.9) (*no. of questions 47 during pilot survey*)

The content validity index for the questionnaire is 0.89 (or 0.9) which is above 0.7. Thus, the questionnaire is declared valid.

Reliability is the degree of consistency of a measure. A test will be reliable when it gives the same repeated result under the same conditions. We can say that reliability concerns the extent to which a measurement of a phenomenon provides stable and consistent results.

$$\textbf{Reliability} = \frac{N}{(N-1)} \times \frac{(\text{Total Variance} - \text{Sum of variance for each question})}{\text{Total Variance}}$$

Where, N= Number of Questions

Type of reliability	Measures
Test –retest	The consistency of the same test over time
Interrater	The consistency of the same test was conducted by different people.
Parallel forms	The consistency of different versions of a test which are designed to be equivalent
Internal consistency	The consistency of the individual items of a test

$$\textbf{Pearson's Correlation coefficient (r)} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where, n is the total number of pairs of test and retest scores. x and y are the test and retest scores. The correlation coefficient (r) was found out to be 0.87 which is greater than 0.70 so the scale is reliable.

Test-retest reliability relates to the measure of reliability that has been obtained by conducting the same test more than one time over some time with the participation of the same sample group. Test-retest reliability measure test consistency. In other words, give the same test twice to the same people at different times to see if the scores are the same (Pathak, 2008).

After pilot testing, Google form link have shared to the ODL learners. Questionnaire has about 48 questions after pilot survey. Data was collected through Google form and information has recorded in excel sheet in the google drive and that data export to the SPSS (Statistical Package for Social Sciences a data analysis software) for the analysis purpose. The questionnaire is

attached in the *Appendix-I*. Tool of monkey survey (google form) has tested its Validity and Reliability.

Univariate (percentage distribution), bi-variate (Association among the variables, i.e., chi-squares test) and multivariate (Regression and Correlation) analysis have performed to find out the facts and for interpretation. Regression analysis will help to find the prospective ODL learners whereas bi-variable analysis will establish association between two variables or among the variables. Perception will be analyzed with help of Likert scale either 3-point scales (Positive, null and negative) or 5 point scales (Strongly agree, agree, null, disagree, strongly disagree) described below 3.2.9. Based on score obtained, measurement scales will be applied either ordinal or ranking will be assigned or interval scale/gap analysis.

Univariate, bi-variate, and multi-variate analysis was done with the help of SPSS, and MS-excel, to find out the percentage distribution, association and the relationship between the dependent and independent variable.

The hypotheses that have been developed following the various objectives will be empirically tested by using statistical techniques. The study mainly uses the following quantitative research methods i.e., Univariate, Bivariate, Correlation and Multivariate analysis. The Univariate analysis has been carried out in order to study the percentage distribution of respondents.

Statistical Tools applied to evaluate conceptual framework feasibility

Percentage

Simple comparisons were made on the basis of percentage. To calculate the percentage, the frequency of a particular cell was multiplied by 100 and divided by the total number of respondents in that particular category. The formula is: -

$$\textbf{Percentage}\ (\%) = \frac{\text{No. of respondents belonging to particular category}}{\text{Total no. of respondents}} \times 100$$

Mean

The simplest and the most important measure of average is arithmetic mean. It was calculated with the help of following formula:

$$\textbf{Arithmetic mean} = \frac{\sum x}{N} \quad \text{or} \quad \frac{\sum fx}{N}$$

Where, ∑= Sum.

x= Variable, f=variable

N= No. of observations.

Standard Deviation (SD)

$$\sigma = \frac{1}{N}\sqrt{N\sum_{i=1}^{n} f_i x_i^2 - \left(\sum_{i=1}^{n} f_i x_i\right)^2}$$

Bivariate has been observed between dependent and independent variables. It examined by cross tabulation analysis. A cross tabulation is that, where each row or column is a frequency table of one variable for observation falling within a specific category of the other variable. Cross-tabulation shows the comparison between groups and gross effects of the variables.

Chi-square test has been used to draw conclusions about the population from the sample data, by checking the correspondence between the observed and estimated frequencies in each category of the nominal variable. According to *Mahmood* (1998) the main assumption behind the chi-square test is that the variables are independent of each. As a result, with increasing strength of the association between the two variables, the statistics chi-square will be statistically significant at a lowest level of association.

$$\textbf{Chi-square} = \sum \frac{(Oi - Ei)^2}{Ei}$$

Where Oi and Ei are observed and expected frequency of the i^{th} class respectively.

Correlation Coefficient

In this study independent variables are categorical and nominal in nature. In this case of such independent variables, we have re-categorized them into dichotomous variables, with assumption that the dichotomy will fairly represent an interval scaled variable. The correlation indicates the strength and direction of a linear relationship between two random variables, or it refers to the departure of two variables from independence. We have calculated Pearson correlation coefficient; it reflects the degree of linear relationship between two variables. For analysis of the correlation, we have recoded the entire nominal variable into continuous variable. It will be computed by the following formula: -

$$\textbf{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where,

r	=	Correlation coefficient	
x	=	Observation of variables (x)	
y	=	Observation of the variables (y)	(Gupta, 1998, P, E-10.45)

The value of correlation coefficient is +1 to -1. Positive (+1) value shows perfect positive correlation and -1 shows the perfect negative correlation between the variables. Correlation never has zero (0) value. In statistics, correlation coefficient 'r' is a measure of the correlation of two variables x and y measured on the same object or organism, that is a measure of the tendency of the variables to increase or decrease together.

Multivariate Logistic Regression

Multivariate logistic regression analysis has been used in order to measure the net effect of background variable (independent variables) on the response variables (dependent variables). The response variables are dichotomous in nature i.e. Yes=1, and No=0.

Scale to be Used

Attitude scale (3 or 5 point) which knows Thurston's technique to be used to measure general respondent/student and IGNOU learners/ ODL learners. Scale to be related as follows-

- Perception towards student support services for counseling, SLM, Career, etc.
- Perception towards admission process and fee structure.
- Perception towards self-learning materials and counseling.
- Perception towards assessments/evaluation mechanism.
- Perception towards career opportunities in ODL education, and so on.

Perception score is calculated by subtracting the percentage of those who rated the brand negative from those who rated the brand positive (i.e., % negative - % positive). In other words, it is the difference between positives and negatives. Exactly as in psychology, Likert scales are extremely often used in marketing to measure perceptions, emotions and behaviors (in this case, mostly of consumers or employees).

To measures the perception, list of statements will be framed accordingly. For example, Agreement (5 points scale): Fully Disagree – Disagree- Neither agree nor disagree – Agree – Fully Agree. Acceptability (7 Points): Totally unacceptable – Unacceptable – Slightly unacceptable – Neutral – Slightly acceptable- Acceptable – Perfectly Acceptable. Desirability (5 point): Very undesirable – Undesirable – neutral – Desirable – Very desirable. Difficulty (5 point): Very difficult – Difficult – Neutral – Easy – Very easy. Frequency (5 point): Never – Rarely – Sometimes – Often – Always. Likelihood (5 point): Extremely unlikely – unlikely – Neutral – likely – Extremely likely. Satisfaction (5 Points): Fully Dissatisfied – Dissatisfied – Indifferent – Satisfied – Very Satisfied. Some of the questions and statements are listed in the questionnaires (See **Appendix**-II).

Roger (2005) stated that attitudes are typically measured using two main types of scales- *Likert Scales* and *semantic differential.* In Likert scale, there are five response categories ranging between two extreme positions, e.g., strongly agree and strongly disagree, whereas in *semantic differential* contain a set of opposite questions, e.g., easy – difficult, and the space between the opposites is graded from 0 expressing the lowest evaluation to 6 representing the highest evaluation. For example, *how would you rate the role of your teacher*? Difficult (6) – Easy (0); Irritable (6) – Calm (0); Active (6) – Passive (0).

Saini (2021) stated that attitude cannot be measured by direct questioning or by direct observation so one has to construct the attitude scales. For constructing the attitude scale, one has to follow some steps that help in measuring the attitude. Likert's Summated rating scale is 5-point scales on which respondents express their attitude from strongly agree to strongly disagree towards the statements. In order to judge the degree of extremely unlikely to extremely likely of each statement on the five-point equal appearing interval continuum, a panel of judges was selected. The validity of content of scale was examined by discussing with experts to measure the feeling of respondents towards objects (Saini, 2019).

Table 1: Z-score and mean and SD for interpretation of scales of perception

S.no.	Mean range	Description
1	4.51-5.00	Strongly agree
2	3.51-4.50	Agree
3	2.51-3.50	Undecided /Null
4	1.51-2.50	Disagree
5	1.00-1.50	Strongly disagree

Data and Mete (2021) emphasized on “construction and standardization of tool of attitude of parents towards education of girls” and stated that tool of attitude indicates a favourable or unfavourable appreciation of the person, place, element, or event. Collected statements should be edited in such a way that the current collection should contain a wide range of statements ranging from the most negative to the most positive.

The raw attitude scores were converted into Z-score by taking into consideration the values of the mean and standard deviation to establish norms for interpretation of obtained attitude scores. Mean and Standard deviation have applied to illustrate the strengths and weakness based on the indicator in terms of rank. To interpret the obtained data the numerical values and descriptions were used (Table 1).

6. Operational Definitions

In this project, various terminologies have used. We have discussed all those definitions which are directly or indirectly related to ODL system of education.

Open University: the university is open to people, places, methods and ideas. It promotes educational opportunity and social justice by providing high quality university education to all who wish to realize their ambitions and fulfill their potential.

Age: It referred to the chronological age of the respondents in terms of completed years of life at the time of data collection.

Education: It referred to the number of years successfully completed in formal education. It is the process of developing capabilities of the individuals so that they can adequately respond to their situations.

Index of Educational Status (IES): Educational score of learners have computed in Following Table (Ray and Mondal, 2014, p225). **IES**= Total Score / Frequency, or IES= 873/305, or IES= 2.86

Distance Education: system of education in which teacher and learners/students are not present face to face like traditional or classroom education.

Open Education: in this system of education, there is no boundary of age, course, programme, place, etc., for education in formal mode. Anyone can take admission and complete the programme as their need, who are outreached and poor.

Social Group or Caste: a social group is a unit of two or more people in reciprocal communication and interaction with each other. People generally associate in groups because of-common ancestry; territory shared in common; similar body characteristics; and common interests. Group formation promotes discipline, loyalty, group responsibility and group pressure. It referred to the caste of respondents in which he born. Caste has been theoretically defined as hereditary indigenous group having a traditional association with an occupation and a particular position in the hierarchy of caste. Caste is a closed construct of society.

Data: Data are the desired information or facts related to ODL issue and challenges.

Variable: It is a symbol to which numeral or values are assigned that influence of the observation and data analysis.

Validity: it refers to how well an instrument measures what it is intended to measure.

Face Validity: it refers to the presentation of the measurement by the presenter and the thematic assessment of the researchers regarding the appropriateness of whether the components of the face material are relevant, rational, unambiguous, and clear (Oluwatayo, 2012).

Content Validity: the degree to which the material universe is replaced by the material universe where the instrument will be generalized (Strub, *et al*., 2004).

Reliability: the degree of consistency of a measure. A test will be reliable when it gives the same repeated result under the same conditions (Mangal, 2013).

Communication: it is the process of sharing ideas, feelings, information, etc with common understanding between source/informant and receiver/audience through communication channels. According to Leagans (1961), the process by which two or more people exchange ideas, facts, feelings, or impressions in ways that each gains a common understanding of the meaning, intent and use of messages. Thus, communication is a conscious attempt to share information, ideas, attitudes and the like with others.

Data: Data are the desired information or facts related with any issue.

Student- those who were taking part-time classes, correspondence course, attending literacy centres, etc. and were not engaged in any economically productive work. Daughters who were helping in the household work though they were studying full-time were recorded as 'Student' and not as doing 'Household duties. Married women, normally attending to household duties, who were full-time students were also required to be recorded as 'Student' and not as doing 'Household duties'.

Communication Technology: the hardware equipment, organizational structures, and social values by which individuals collect, process and exchange information.

Computer Graphics: the area of computer science, which is concerned with the generation, manipulation and display of pictures with the aid of a computer.

Communication satellite: a microwave relay station precisely positioned high above the equator with an orbit speed that exactly matches the earth's rotation speed. Since a satellite is positioned in a geosynchronous orbit, it appears to be stationary relative to earth and always stays over the same point with respect to earth. It is used for data transmission between any two randomly chosen points in very large area.

Computer Aided Design (**CAD**): use of computers to automate design operations.

Computer Aided Instruction (CAI): a general term that refers to teaching with the help of a computer. Also called Computer Aided Education (CAE).

Computer Network: A distributed data processing system in which multiple computers are linked together for the purpose of data communication and resource sharing.

e-mail: electronic mail, a general term to describe the transmission of messages by the use of computing systems and telecommunications facilities. It eliminates most of the problems and delays of getting a physical document from one person to another.

Global Village: A World that is increasingly interconnected by communication technologies and that is tending towards a global culture. The internet and the world wide web (www) are examples of these interconnections.

Hard Copy and soft copy: Printed or filmed output from a computer device in a readable form. While soft copy is a computer output which is displayed on the screen of a terminal without a permanent copy.

Hardware and Software: the physical components of a computer system comprising electronic, magnetic and mechanical devices. Software is the set of computer programmes, procedures, and control the operations of the computer in order to solve a problem or to perform a particular task.

Internet and Cyberspace: it is a global network of computers. To facilitate diffusion of the internet culture, the scientists and specialists of country should build up the internet content that is of relevance to the country and addresses the concern of the society. Cyber Space is a term for the shared imaginary reality of computer networks. Also used as a synonym for internet.

Network: an inter-connect of computer systems and/ or peripheral devices with carriers and data communications devices for the purpose of exchanging data and information.

Informatization: the process through which communication technologies are used as strategies for furthering socio-economic development.

Interactivity: the degree to which the participants in a communication process have control over and can exchange roles in their mutual discourse.

Tele-conferencing/Videoconferencing: a system in which persons sitting before appropriate screens see and talk to each other via a computer communication network.

Terminal: an input/output device which allows a user to communicate directly with a computer system.

Transponder: a device mounted on a communication satellite which receives, amplifies and retransmits signals from earth stations.

Videotext System: a general term used to describe personal computing/ communications networks that permit interaction between people and stored data bases.

Video Display Unit (VDU): An input/output device that consists of a television like screen for displaying outputs and keyboard for entering inputs.

Wide Area Network (WAN) and Local Area Network (LAN): a digital communication system which interconnects different sites, computer installations and user terminals, and may also enable LANs to communicate with each other. This type of network may be developed to operate nationwide or worldwide. LAN is a digital communication system capable of interconnecting a large number of computers, terminals and other peripheral devices within a limited geographical area.

Teaching: is the process of arranging situations in which the important things to be learned are called to the attention of the learners, their interest developed, desire aroused, and action promoted.

Teaching Aids: any instructional devices which are using in teaching learning process such as Audio, Visual and Audio-Visual Aids.

Audio Aids: Any instructional device through which we can hear only the object. Radio, tape recorder, etc.

Visual Aids: any instructional device through which one can see only the object. Poster, chart, graph, etc.

Audio-Visual (**AV**) **Aids**: any instructional device through which one see as well as hear at a time. TV, Drama, Puppet show, etc.

Learning: it is the process by which an individual, through one's own efforts and abilities changes the behavior. Process means a course of procedures, something that occurs in a series of actions or events conducting to the desired end.

Behaviour: it refers to anything an individual does. An act of behavior has three aspects- cognition (knowledge), affection (Attitude) and Conation (Skill). Thus, there are three components of behavior i.e., knowledge, attitude and skill (KAS).

Knowledge: to become aware of or know something.

Attitude: to have a certain feeling about someone or something.

Skill: to act in a particular way or direction after the feeling.

Wishes: it is a pattern of behavior which involves- anticipated future satisfaction; which the person believes is reasonably likely of attainment; and towards which the individual usually relates some of his/her present behavior.

Perception: perception as the process by which an individual maintains contact with the environment. The process whereby an individual receives stimuli through the various senses and interprets them. An individual's perception of a certain event, issues, person or place could be influenced by one's latent beliefs, attitudes, wants, needs or other factors. Two individuals exposed to the same programme, course or message could go away with different perceptions about it.

Decision making: it is the process of consciously choosing courses of action from available alternatives and integrating them for the purpose of achieving the desired goal. It involves deciding on what goals are to be achieved, what means and methods are to be adopted in reaching them, based on what facts are available and how they are interpreted. Decision making

is generally influenced by the level of knowledge, cost involved and time available in taking and implementing the decisions.

Assessment: Testing/evaluating student performance and providing feedback to students for grading purposes.

Authentic Assessment: Authentic assessment is a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills.

Computer Assisted Assessment: Computer assisted assessment (CAA) is a common term for the use of computers in the assessment of student learning.

Electronic portfolio: electronic portfolio (also known as an e-portfolio or digital portfolio) help learners to build and maintain a digital repository of artifacts, which they can use to demonstrate competence and reflect on their learning.

Evaluation of Technology in Education: Evaluation of technology in education means to ascertain the extent to which the technology is integrated into regular teaching and learning activities.

Evaluation of Technology: Evaluating relative appropriateness of various technologies in order to determine appropriately meritorious technologies and associated development and transfer strategies.

Evaluation: A process used to determine what has happened during a given activity or in an institution.

Online Assessment: Majority of online learning management systems come with built-in assessment tools which allow the development of questions and surveys with objective type as well as open-ended responses.

Technology in Assessment: Means using multiple forms of media that allow for both visual and graphical representations to present complex, multi-step problems for students to solve, and to collect detailed information about an individual student's approach to problem solving.

Technology of Assessment: Using multiple forms of technology to present complex, multi-step problems for students to solve, so that we can collect detailed information about an individual student's approach to problem solving.

All these definitions are related to ODL system of Education.

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