

OPEN LEARNING: Communicating with the learner

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ABSTRACT

The present paper defines the key words of ‘Distance Teaching’(DT), ‘Distance Education’(DE), and ‘Open (Distance) Learning’(ODL) to be followed by the exploration of the ‘Instructional Design’ (ID) concept, its’ principles and process and the operational steps to emphasize on the ever missing issue of the “communication with the learner”. Considering the fact that educational needs and requirements are losing their ‘mass identity’ but becoming more individualized, communication with the learner becomes a more dominant fact in discussing the future strategies of education at a distance. The paper concludes with the suggestion that ‘Open Distance Learning (ODL)’ is the way ahead.

Key Words: Distance Education (DE), Distance Teaching (DT), Open (Distance) Learning (ODL), Instructional Design (ID)

The 20th century has observed great advancements in science and information/communication technologies that have an interdisciplinary impact. Due to those improvements, not only the philosophy of education but also the expectations of the potential learners as well as the teaching methods and the teaching aids changed drastically. The developments in information technologies played an important role in the formation and development of Distance Education (DE), Distance Teaching (DT), Open (Distance) Learning (ODL), and the web. Through these developments the institutional, location-based nature of knowledge and education have been challenged. Under the influence of these fascinating developments, man started to question whether the technology will replace the human factor in education or will there be a remaining role for man?

The aim of the present paper is to raise awareness to the significance of the relationship and the relativity between the instructional design process and the learners’ needs from the aspect of the intensive improvements in communication sciences.

In this paper we would like to focus on instructional design and the processes involved in instructional design; then, we take DT, DE, and ODL, all of which make use of ID, into consideration and suggest that ODL would be the way forward in education.

Distance Teaching, Distance Education and Open Learning

The next section explores the terms Distance Teaching, Distance Education and Open (Distance) Learning all of which rely on instructional design.

Distance Teaching

Distance Teaching has been realized by the Open Universities. In the UK, Open University was first established in Buckingham, for providing degree courses for the students who were 21 and over. This University accepts all the students who apply without requesting pre-requisite courses (GCE A’Levels). In other words, it has an open admission policy toward students. Initially, Open University provided correspondence courses (Lawton and Gordon 1993:133).

In Turkey, Open University education was established as a Faculty under the roof of Anadolu University in 1982, and has been accepting students with the marks they obtained from the Central University Entrance Examinations.

Distance Teaching is based on the ‘Teaching-Machine’ metaphor set forth by Skinner (1954), the father of programmed learning. He believed that the information should first be presented, followed by reinforcement till the learning occurs before moving onto the next stage of learning. Skinner suggested that one teacher may not be sufficient for motivating 30 or so students. Therefore, there is a need for a teaching machine. It is believed that the seeds of using the computer in education were planted by the teaching machine metaphor (Wiburg, p.1).

In DT, today, in addition to correspondence, other teaching aids like the radio, television and the web are being used.

Distance Education

Distance Education is a developed form of distant teaching. DE is “based normally on a pre-produced course (computer conferencing) which is self-instructional but where organized two-way communication takes place

between the student and a supporting institution” (Gordon and Lawton 1993:75). The most common kind is the correspondence courses. Currently these are gradually taken over by the courses put on the Internet.

The main claim of Distant Education is to provide a ‘second-chance’ in education that is better than nothing to those who would not be able to continue organized education.

One of the reasons for innovation in distance education has been the increase in the expectations of the learners’ due to the tremendous developments in communication facilities.

According to Distance Education;

- The education demands of the public are catered for.
- A central authority decides on the goals of the education.
- Face-to-face communication is rare and secondary.
- Media is fundamental and the organized education supports this.
- An academic advisory system is compulsory.

Open (Distance) Learning

Open Learning, with the support of the facilities of communication, suggests an alternative education with a high level of face-to-face communication, at least (if not more) at the quality of organized education.

Open Learning is based on John Dewey’s (1959) philosophy of progressive education. According to Dewey, learning is a problem solving activity. Learners are motivated to solve problems that would result in learning.

According to Open Learning:

- Individual demands have priority in education.
- Requirements are decided as a result of a needs analysis.
- Face-to-face communication is primary and its proportion is high.
- Organized education is fundamental and is supported by the media.
- Counseling replaces academic advising.

Teachers, Learners, Materials

In the cases of DT and DE, the institution takes over the role of the teacher. The institution is the holder of the knowledge, and provides the content of the pre-determined syllabus. The content is delivered from the perspective of the institution, which is in control of the education process.

In DT and DE learners are passive recipients. Their learning is based on memorizing the facts. They learn the content presented by the institution. They study the material as presented by the institution on their own.

The materials, the sacred deposits of knowledge have been sequenced according to the pre-determined curriculum.

In Open Learning, the institution partially undertakes the role of the teacher. The learners have the opportunity to interact with each other and with the instructors. The teacher acts as the facilitator of the learning process and provides the basis for social interaction.

In OL, learning is considered a process and emphasis is placed on learning how to learn. Learners are no longer the passive recipients but the constructors of knowledge. They develop their skills in problem solving, open to multiple perspectives, and they take the responsibility of their own learning. Learning is experience based and holistic. There is a multiple-way transmission between the teacher and the student and learner and learner and an interactive method is used in teaching. The outcome of learning differs for each learner.

Instructional Design

Instructional Design refers to a process that comprises production and consumption. It involves all the political, strategic, technical and tactical activities used in solving the pre-defined problems; planning, structuring of the product and the process of production. In a nutshell, this definition addresses the following questions:

- Why shall we produce?
- What shall we produce?
- How shall we produce?
- With what shall we produce?

The issues referred to by each question are:

Why shall we produce?

- Who is the learner?
- Which problem(s) of the learner would be solved by the product?
- Whose problems do we set out to solve?
- What are the aims and objectives (of the product)?

In education, these issues are addressed as the ‘needs analysis’ and the ‘statement of the problem’.

What shall we produce?

- Which of the learners’ expectations would be fulfilled by the product?
- What would be the structural identity of the product?

Comparing the product with the demand is done on paper at the desk, and, as a result, the content of the product is designed.

How shall we produce?

- Which action or operational steps will take place in the production process?
- How will the job descriptions be clarified?

In carrying out the process of instructional design, political and strategic decisions are taken into consideration.

With what shall we produce?

- At which stage of the production process shall we make use of the source(s)?
- Which function(s) will be overtaken by the sources?

The need for reaching the vital data is valid for the production and consumption processes of the product called education whose basic specification is defined as ‘service’.

Principles of Instructional Design

With the raise of the positivist paradigm, education, like other sciences, started to locate its foundations on scientific research (among many others Skinner 1968, and Dewey 1959 applied psychology to learning). In relation to instructional technology, Skinner’s view of learning (learning will take place if the content matter is carefully selected, refined, sequenced and if the students are appropriately reinforced) is the first important theory of learning underlying instructional design.

He prescribed intense practice as a condition for learning. Another significant name in the literature of instructional design is Gagne (1965) who pointed out that learning is not a uniform concept. Gagne drew our attention to the fact that there are various types of human learning, each of which require different types of instructional strategies.

Gagne noted that practice was effective for kinesthetic types of learning (like learning typing) but not for developing cognitive strategies (like the ones used in solving puzzle problems).

Gagne also suggested that instructional designers should understand the functions of short and long-term memory. Learners will only be able to retrieve learning from the long-term memory for later use only if they are assisted in encoding the new concepts in meaningful ways. In other words, Gagne’s ideas inspired the instructional designers to take the cognitive needs of the learner into consideration.

Process of Instructional Design

The process of instructional design comprises the following stages:

- Problem Analysis Stage
- Design Stage

- Development Stage
- Application Stage
- Assessment and Evaluation Stage

Problem Analysis Stage

Instructional design seeks to provide the students with problem solving experiences and skills. The question addressed is whether the students' problems would be solved via education.

Expectations of the students' should be clarified and attempts should be made in order to fulfill these expectations. Therefore, analyzing; the problem to be solved is the first step forward. The analysis of the needs and the expectations of the students is the second stage of problem solving process with the assistance of education.

It should be explored whether the expectations of the students' are suitable for solving their problems via education.

Design Stage

At the design stage:

Aims of the program are clarified. Goals are the problems that will be solved when the students have the necessary knowledge and skills.

The required knowledge and skills are clarified in accordance with the defined goals.

The defined goals are translated into tasks that the program would enable the students to accomplish.

The skills the students would gain, and be able to perform at the end of the program in order to solve the problems and reach their goals, are specified.

The defined targets should be the targets of the students not the designer. Considering this is a pre-requisite of instructional design.

Development Stage

The development stage is the conversion of preparations into teaching materials and the process of physical production of the teaching aids. At the end of the production stage, the product will be produced concretely. At the development stage, the targets should be used to constitute and structure the content, direct the teaching strategies from the testing and evaluation scales and choose the communication opportunities that will be used.

The relationship among the aims will contribute to the construction of sections and chapters for each lesson. At the end, topics will constitute the units. The units will constitute the sections. The sections will constitute the lessons and how the lessons will be grouped in order to constitute the program.

At the design stage, decisions are made towards specifying the knowledge or skill(s) to be developed through communication opportunities. In this respect, the choice of media is a matter of strategy.

Teaching strategies comprise a series of decisions based on the aims related to structuring the content and the choice of communication opportunities for transmitting the structured content.

The students should be taken into consideration in choosing the suitable style, preferences and proportions among the visual (photography, graphics, tables, illustration, iconography, pictures, etc.) and textual or visual (animation, documentary, dramatization, etc.) and voice alternatives in specifying the decisions related to teaching strategies. Pages in printed teaching materials are designed according to the principles defined above.

Application Stage

Application stage is the stage at which the service is transmitted to the student; in other words, the producer introduces its product to its consumers.

Assesment and Evaluation Stage

At this stage materials are developed for testing the students performance and the materials are evaluated considering the aims and the objectives defined at the preliminary stages of the process.

Operational Steps to Follow

The work carried out at these stages is divided into five groups:

First phase

- Getting organized;
- Establishment of the technological infrastructure.

Second phase

- Defining educational needs;
- Analyzing students qualities;
- Embodiment of strategic education targets;
- Definition and writing of the education materials;
- Deciding of the teaching strategies;
- Structuring the content;
- Preparation of the ‘unit based’ lesson plans;
- Writing of the print materials;
- Composition and edition of print materials.

Third phase

- Establishing coordination and harmony among the units during the production;
- Setting up course teams;
- Educating academic advisors.

Fourth phase

- Production of audio-visual materials;
- Establishing the test criteria and measures.

Fifth phase

- Preparation of test materials;
- Publication of the material;
- Making the amendments.

Conclusion: The need to communicate with the ‘Learner’

Learning becomes not only an intellectual activity to become a civilized member of the modern society, but an open gate for problem solving. That is why it becomes a most crucial requirement for any person to survive. Keeping in mind the mentality of ‘social change’ as fulfilling the requirements of the daily life the importance of education and the speed of change is more understandable.

Yes, life changes faster and more intensely due to the fast and intensive changes in the communication facilities that serve for our needs. This provides people with more information to provoke new needs and more complex future expectations.

Thus, peoples’ needs are more complex today. And this explains the main reason for the speed of the change. As for the ‘problem solving identity of education’...In spite of the fact that the main problem seems as though equipping mankind with the necessary information to get what they are expecting, it is more acceptable to perceive the issuing a rather generalized perspective.

Problem solving approaches require neutralizing the affect of the problem resources in the first place.

For this, correct identification of the problem resources becomes more important. In the case stated above, the main resource is not the increasing and improving needs but improving communication facilities to speed up the social change by provoking the needs.

Depending on the problem statement the solution seems to be identified much easier.

To catch-up with the speed of the change by employing the resource of the problem which is the communication itself.

Having done this, people who are the owners of the problem will learn how to make use of communication for achieving their targets and meeting their needs and expectations.

Instructional design is an area improving day by day under the influence of new developments in communication. This is definitely a potential area for research.

The following are some of the issues to be discussed:

How can the designed materials be promoted?

How can the designed materials be publicized?

What are the ways in which the need is created in the learner for further improvement?

Which aspects of the materials make the material user-friendly?

Gardener (1983) suggested that all learners have the ability to be successful academically, but the schools stand in the way. He points out that the current education system focuses on logical and linguistic intelligence and undervalues other forms of intelligence (like music, visual etc.). Taking the ‘multiple intelligences’ pointed out by Gardener (1983), into account, we can explore a variety of strategies for catering the needs of different intelligences.

Although Instructional Design has been emerging as one of the essential concepts in today’s education system, there is an urgent need for training teachers to produce high quality communication skills including materials that help learners reach the information. In other words, materials produced should be promoted and publicized. In this venture, communication has a role to play.

References

- Dewey J (1959) *Dewey on Education, Selections from the Child and the Curriculum*, New York Teachers College.
- Gagne RM (1965) *The Conditions of Learning*, New York: Holt.
- Gardener H (1983) *Frames of Mind: Theory of Multiple Intelligences*, New York: Basic Books.
- Lawton D & Gordon P (1993) *Dictionary of Education*, Hodder and Stoughton.
- Skinner BF (1954) *Teaching Machines*, *Science*, 128, 969-977.
- Skinner BF (1968) *The Technology of Teaching*, Englewood Cliffs, New Jersey: Prentice Hall.
- Wiburg KM A Historical Perspective on Instructional Design: Is IT Time to Exchange Skinner’s Teaching Machine for Dewey’s Toolbox? <http://www-csc195.Indiana.edu/csc195/wiburg.html>