

Role of Designer in Development of Process of Material of Distance Education

Muhammad Rashid^{*}, Nasir Mahmood^{**}, Muhammad Asghar Khokhar^{***}
and Nadia Rashid^{****}

Abstract

Distance education has emerged as remedial strategy to resurrect the diminishing intelligentsia of adults and budding cohort. Electronic media especially Web has opened the new windows to meet the challenges of conventional system of education. Virtual classroom concept has provided the facility to learn where you want. Self instructional and interactive learning material is the robust salient feature of this system. Personnel involved to nudge this system in developing the material for distant learner serve as the backbone of the structure. This study aimed to explore the effectiveness of the role of designer in developing the learning material for distance education keeping in view of its responsibilities, needs and problems. Results indicated that majority of students agreed that illustrations, visuals, textual design, cover design and page design devised by the designers has made the courses interesting, appealing and motivating factor for the students. Academicians, editors, coordinators divulged that role of course designer is effective in designing layout of page and cover, text and graphics of the learning material. Whereas they pointed the fact, that there is a need of coordination among designing personnel and professionals. Training appears to be indispensable to perk up the course development process especially designing in material.

Keywords: Self Instructional, Interactive Learning Material, Designing

^{*} Dean, Faculty of Education and Doctoral Programme, Preston University, Islamabad

^{**} PEAS, Lahore. Email: cheernasir@yahoo.com

^{***} Ph.D (Education) Scholar, Preston University, Islamabad. E.mail: asgharkhokhar72@yahoo.com

^{****} Lecturer, Allama Iqbal Open University, Islamabad

Introduction

Education is a process by which a society teaches its ways of life to the coming generation. It brings change in an individual as well as whole nation's life style. It has been declared as change agent for the society. It brings development in every field of life. It is an integrated discipline and is primarily concerned with the continuity and growth of culture.

The advancement in information technology has changed the trend of imparting education. There is a need that everyone should be literate and skilled, as he has to play a vital role in the socio-economic development of country. However, our formal system is unable to meet this requirement because of the meager resources and facilities. To overcome this situation non-formal system of education assists the formal system in educating all the people wherever they are residing.

Non-formal education as viewed by Coombs, & Ahmad, (1973, p.11) is

“Any organized education activity outside the established formal system whether operating separately or as an important feature of some broader activity that is intended to serve identifiable clienteles and learning objectives”

Non-formal education has different modes; one of its modes is correspondence education. Distance education has emerged out of correspondence education as a complete system with all latest information technologies. The term distance education has been defined by Verduin, Clark, (1991, p.8) as cited by Rashid, (1992, p.3) “It describe various forms of study at all levels. Distance education may be any formal approach to learning in which majority of the instruction occurs while educator and learner are at a distance from one another”

Distance learning implies that the learner's work is based around self-study materials. In distance education specially prepared or adopted materials are provided to the students. These materials may involve any of a variety of media i.e. print, audio-cassettes, television, computer, courseware and practical kits. Materials of distance education are designed to help the learner learn with less help than usual from a face-to-face teacher.

According to Gottschalk (2004, p.23) “A strong print component can provide much of the basic instructional content in the form of a course text, as well as readings, the syllabus, and day-to-day schedule.” It was further elaborated by Spencer (2006, p.12) “The convenience of paper for reasons of portability, reliability, annotation, highlighting, and ergonomics consistently made it the preferred form for printed text”.

Rowntree, (1994. p. 4) has defined the need and characteristics of open learning material as

Open, distance and flexible learners usually depend a lot on learning materials. This may be because there aren't enough teachers or trainers to give them constant attention. It may be because they want to learn of their own – at a time, pace and place of their own choice. It may be because they are learning to take responsibility for their own learning.

Course development team has the obligation to meet all the basic requirements of a distance learner, so that he may achieve the optimal learning objectives. This course development team generally includes writer, coordinator, editor, reviewer, designer, print manager etc. Course designer is the person who makes the course material more attractive, interesting, motivational and supportive to make learning easy. He uses different illustrations; maps, charts, graphs, tables, cartoons, photographs, pictures etc. to get done the above said tasks. He is also responsible to develop the design and format of material i.e. text style, font size, placement, spacing, paragraphing, layout and most important the title page of the course. The designing of graphics as explained in Graphic Design (n.d.) in Britannica Concise Encyclopedia is as:

The art and profession of selecting and arranging visual elements - such as typography, images, symbols, and colours - to convey a message to an audience. Sometimes graphic design is called "visual communication." It is a collaborative discipline: writers produce words, photographers and illustrators create images that the designer transforms into a complete visual message.

Generally a designer has to make page design, text design, cover design and graphic design in the whole process of any publication. But his responsibilities are divided into different organizational framework according to work load and nature of work. The term “course designer” is a vast term with reference to its implication with different attached roles. But basically it has two major roles that a designer prepares the blueprint of the learning experiences which is largely taken in the sense of pedagogy, whereas its other role is designing print material, for which the designer makes use of graphics, illustrations, layout, typographical design etc. Through literature review it could be made known that a designer who designs print material may be named as Visual designer, Graphic designer, Material designer, Graphic artist, Course designer, Transformer, Illustrator, Text designer, Cover designer, Typographer, Art director, Media designer, Web designer etc in accordance with the nature of work accomplished.

There is instant visual brain responses by seeing at a book filled with nothing but print and so obviously effort is made to break up the print into breaks that makes the material ultra-relevant. Such material can draw upon non-verbal aspects of the course. The pictures selected for material will have both high impact and suitability for reproduction.

However, the authors need to know what the final product is going to look like. They need to show it around, they need to see the final product in their minds and eyes to give them the encouragement. They need to keep going. It is very difficult and a very demanding task as the designer has to make illustrations, diagrams, maps, figures and finally the layout of the unit in a good looking and perfect way.

Education starts from cradle and leads to grave. It is not something static but a continuous and life long process. It is bound up with human race since its birth and continues to function as long as the human race exists. Education is imparted generally in three modes i.e. formal, non-formal and informal.

The Non-formal education is an organized educational activity like Formal system but it takes place outside the school. It is a part time system which evolves children and adults according to their learning needs. In this system emphasis is laid on learning rather than teaching by utilizing facilities provided by the community.

Non-formal education can take place anywhere under a shade of a tree, in the home or in halls. The learning is functionally related to the environment in which it takes place. Coombs, et al. (1973, pp.10-11) stated,

Any organized educational activity outside the established system. Whether operating separately or as important features of some broader activity that is intended to serve identifiable learning clienteles and learning objectives.

Non-formal education mostly depends on learning material provided to students at home. Although all the learning material is important but print is the foundation of distance education and the basis from which all other delivery systems have evolved. The first distance-delivered courses were offered by correspondence study, with print materials sent and returned to students by mail. While technological developments have added to the repertoire of tools available to the distance educator, print continues to be a significant component of all distance education programmes. Rowntree (1994, p. 1) has commented on the importance of learning material by saying that;

Open, distance and flexible learners usually depend a lot on learning materials. This may be because there aren't enough teachers or trainers to give them constant attention. It may be because they want to learn their own – at a time, pace and place of their own choice. It may be because they are learning to take responsibility for their own learning.

Smith & Smith (2006, p. 35) has also realized its importance in the following words;

Relatively little attention is paid to print-based distance education materials, yet it is likely that print-based materials will remain widely used for the foreseeable future as demand for fully on-line learning remains low and problems of access and technology remain in many areas of the world. There is a dearth of current research studies on printed distance education materials and the use that DE students make of these materials (Phipps and Meristosis, 1999) as most recent studies of distance education have tended to focus on the use of e-learning. However, while the literature on printed distance learning materials is relatively limited

Designing educational materials involve the design of both text-printed words-and graphics-illustrations, charts and photographs. As distance educators we work with text and graphics on paper and in other media. Professionally we need a good understanding of typography and layout, just as we need a good understanding of teaching methods or educational counseling.

Designer as part of course development process, possess a vital role in making the text more lively and interesting. Now people are becoming fading up with reading the text and demanding some visual knowledge. According to Michael (1993) “A designer has to make illustration, diagrams, maps, figures and finally the layout of the unit in a good looking and perfect way”.

The role of designing in development of distance education material is very vital and dynamic. The term “course designer” is a vast term with reference to its implication with different attached roles. But basically it has two major roles, that a designer design the learning experiences which is largely taken in the sense of pedagogy, whereas its other role is designing print material, that a designer design graphics, illustrations, layout, typographical design etc.

The Context of the Study

The Allama Iqbal Open University (AIOU) was established in 1974 under the name, the People's Open University. It was renamed as Allama Iqbal Open University in 1977. In Pakistan AIOU is considered a model of distance and Non-formal Education. The idea of establishing an open university was presented in the Education Policy (1972-80, p. 67) in these words. It was established to provide part-time educational facilities through correspondence courses, tutorials, seminars, workshops, laboratories, television radio broadcasts, and other mass communication media.

The students who enroll with the university are provided with the course books specially prepared by the university on self-instructional principles. However, at Post-graduate level reprints of foreign books are also provided to the students along with a Study Guide. The Study Guide is meant to help the students to go through the reading materials according to learning sequence and course outlines (syllabus). The courses of graduate and post graduate programmes in the discipline of education are developed by the faculty of education with cooperation and team work of some other faculties, but faculty of education plays major role.

Allama Iqbal Open University adopts multi-media approach for effective teaching of the learners. Currently, it is using appropriately the electronic media to supplement the print material/media such as radio, television, Internet. University also prepares Cassettes and CDs of different programmes/ lectures, which are mailed to the learners for their help in studies at home. The role of designer is important in designing the course material thus the present study was designed to evaluate the role of designer in developing the course material for distance education.

Objectives of the Study

1. To explore the different facets of designer in designing distance education material.
2. To identify the responsibilities of the designers.
3. To evaluate the professional needs of the designers.
4. To explore the problems faced by the designers.
5. To develop a strategy for improving the role of designer.

Research Methodology

The sample of the study was as under

S. No.	Sample type	No
1	Students of M.A Education/M.Ed.	150
2	Academicians/Coordinators	10
3	Print Manager/Assistant Manager	2
4	Designers	5

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Research Instruments

To achieve the objectives of the study two questionnaires were developed for students and academicians. The instrument for student was consisted of statements based on five point rating scale to explore the effectiveness of role of course designer in developing graphic and textual design in print material. Students were asked to rate the work of course designers in print material keeping in view its effectiveness in learning. A questionnaire for academicians was also developed to know their opinion about the role, responsibilities, needs and problems of designers. While in case of print manager and designer the interview was planned. The questionnaires and interview schedule were validated through experts' judgment and pilot testing. For this purpose, instruments were given to some educational experts to review the item statement and face validity. Necessary corrections were made accordingly in the instrument. Reliability of instruments was censured by deleting the less reliable statements.

The questionnaire for students was administered to all the students personally during the student's workshops. The second questionnaires were administered to the academicians, coordinators personally. An interview of the course designer and print manager was also conducted personally.

The data collected through the questionnaires and interview from the sample were processed and analyzed in the light of objectives of the study and by applying formula of Descriptive Statistics (i.e. Percentage and Mean Score).

Findings of Study

The following conclusions could be drawn on the basis of interpretation of collected data. The analysis and conclusion of the study were as below:

Table 1: *Responses of students and academicians / coordinators*

Sr. No.	Statements	%	Mean Score
1.	Illustrations made by the designer are self-explanatory	82	4.3
2.	Visual material made text interesting	96	4.7
3.	Maps, diagrams, icon, facilitate in giving clear understanding of the concepts.	78	3.1
4.	Font size, style of text is appropriate	71	2.9
5.	Typographic features of text i.e. bold, italic, line and word space capital, etc, are properly used in the material.	80	3.0
6.	General layout of the material and design of material are attractive	63	2.3

It appeared that illustrations made by the designer are self explanatory and made course material more interesting and facilitating in giving clear understanding of concepts.

He showed working of things and their interrelationship with the help of diagrams. Adequate diagrams, maps, icons are given in the study material to facilitate the understanding of text. Appropriate charts and illustrations have been given to facilitate the understanding of text. Designers have used proper font style and size of text in learning material. Typographic features of text like, bold, italic, line and word space, capital and underline, have been highlighted by designer in course material. Designer has given attractive cover design and general layout to the course material.

Table 2: *Responses of managers and designer*

Sr. No.	Statements	%	Mean Score
1.	It is the responsibility of designer to ensure that visuals are in accordance with course objectives.	93	4.4
2.	Designer needs sound knowledge and skills of art work.	88	4.1
3.	Designer has awareness of learning process and theories of learning.	81	3.9
4.	There is satisfactory coordination between the academicians and designers.	38	2.2
5.	To check the sequence of illustration is the responsibility of designer	97	4.7
6.	Designing facilities are available to the designer	72	3.8

7.	Shot time is given to the designer for preparation of design.	91	4.3
8.	Designers have the knowledge of printing process	70	3.6
9.	Sufficient designers are avail in the department	80	4.0
10.	Assistant designer s are also available in the department	38	2.3
11.	Designers face some administrative problems.	78	3.1
12.	Training of designers is needed.	93	4.8

It is the responsibility of the designer to ensure that illustrations and visuals are in accordance with course objectives. Designer understand writer's point of view and cooperate with him in explaining the concepts. Designer needs sound knowledge and skills of art work, awareness of learning process and theories, and continuous professional development. Designer needs to be provided lucrative incentives to get better outcome from their work.

Academician's point of view is that there is lack of coordination between academicians and designers, whereas editors are satisfied on co-ordination with designers. Print manager has also emphasized more coordination among course development team. There is a need that designer should be involved in the whole course development process A qualified and trained designer develops effective illustrations. To check and maintain the sequence of illustrations is the responsibility of designer. He should be involved in from very initial stage of course development process. Designing equipments and other designing facilities are available to designers. Designers are given short time for designing illustrations and other designing work. They must have the knowledge of printing process. There are sufficient designers at design department, no more designers are needed at the moment Design assistants are needed to be employed at design department to operate machines. Designer faces some administrative problems in fulfilling their task. New comer in the designing process need to be given training before involving in the process.

Strategies for Improving the Role of Designing

After reviewing the related literature and analyzing the recommendations of personnel involved in course production process like editors, academicians, coordinators and print manager and designer itself, researcher think that following perspective of designers' work may be improved by taking into consideration the following recommendations:

1. Designers of AIOU should be consulted and involved from the very initial stage of planning of course development.
2. Course team coordination need to be improved. Some administrative rule may be devised and training may be given to personnel involved in course development to improve coordination among them.

3. Administrative procedures may be revised to give an independent hand to designer to work without any stress. Procedural drawbacks may be removed to improve the efficiency of designers
4. Some incentives should be offered to appreciate their creative and artistic skills. This may improve their outcome and may improve the quality of work.
5. Sufficient time should be given to designers for designing so that they may complete their work effectively.
6. Designer must also be given knowledge of educational objectives well in advance and learning theories, some meetings may be arranged by coordinator to get acquaintance with each other and the subject matter.
7. Continuous professional development arrangements should be made to update the knowledge and skill of designers
8. Designers must be given knowledge of printing process and efforts should be made to enhance the coordination among designers and print manager.
9. Design Assistants should be employed at Design department to support the senior designers and to operate machines.

References

- Ahmad, M. (2001). Identification of training needs of personnel involved in distance education, Unpublished doctoral dissertation, Allama Iqbal Open University, Islamabad.
- Bates, A .W .(1995). Technology, open learning and distance education. New York: Routledge.
- Bringhurst, R. (1992). The elements of typographic style. Vancouver: Hartley & Marks.
- Coombs, P.H. & Ahmed, M.(1973). New paths to learning: For rural children and youth. ICED Essen.
- Evans, D.R. (1982). The planning of non-formal education, Paris: UNESCO.
- Fleming, A.(1982). The Allama Iqbal Open University, Pakistan. in Rumble, G. & Harry, K., (ed), The Distance Teaching Universities, London: Croom Helm.

- Gottschalk, T. N. (Ed.) .(2004). Print in distance education, Guide#7 University of Idaho. Retrieved February 12, 2007, from <http://www.uidaho.edu/evo/dist7.html>
- Graphic design. (n.d.). *Britannica Concise Encyclopedia*. Retrieved February 27, 2007, from Answers.com Web site: <http://www.answers.com/topic/graphic-design>
- Graphic design. (n.d.). *Dictionary of Marketing Terms*. Retrieved February 27, 2007, from Answers.com Web site: <http://www.answers.com/topic/graphic-design>
- Harris, W. J. & William, J. D. S. (1977). A handbook on distance education, University of Manchester: Department of Adult and Higher Education.
- Hartley, J. (1991). Designing instructional text: Theory into practice, Ed. Jenkins, J & Koul., B. N. *Distance Education, A Review*, New Delhi: Indira Gandhi National Open University.
- Holmberg, B. (1977). Distance education, schools and curricula in developing countries, Hamburg: Unesco.
- Indira Gandhi National Open University (1988). Producing texts, Block.3, DE-3 Self Instructional Materials, New Delhi: Indira Gandhi National Open University.
- Jenkins, J. & Koul, B.N. (1991). The design of distance teaching materials, in Jenkins, J & Koul., B. N. (Ed.) *Distance Education, A Review*, New Delhi, Indira Gandhi National Open University.
- Keegan, D. (1980). On defining distance education. *Distance Education*, 1 (1),13-36.
- Keegan, D. J. (1993). Research and development in distance education. *I.C.D.E. Bulletin* Vol.2, May 1993.
- Lewis, R. (1990). How to write flexible learning materials: A brief practical guide. Coventry: National Council for Educational Technology (NCET).
- Marland, P. W. & Store, R. E. (1991). The design of distance teaching materials, Ed. Jenkins, J & Koul, B. N. *Distance Education, A Review*, New Delhi: Indira Gandhi National Open University, pp.83-87.

- Marland, P. W. & Store, R.E. (1991). Some instructional strategies for improved learning from distance teaching materials, in. Jenkins, J & Koul., B. N. (Ed.) *Distance Education, A Review*, New Delhi: Indira Gandhi National Open University, pp.83-87
- Meggs, P. B. (1992). *A history of graphic design: Second edition*. New York: Van Nostrand and Reinhold.
- Michael, S.P. ed.(1993). *Development, design and distance education*, Victoria Monash University. Prospective. London: Croom Helm.
- Rashid, M. (1992). *Distance education concepts and methods*. Islamabad: National Book Foundation.
- Robinson, K. (1989). Producing materials: An overview. In Kate Robinson, ed., *Open and Distance Learning for Nurses*. Harlow, Essex (UK), Longman, pp. 39-52. Retrieved June 20, 2006, from <http://www1.worldbank.org/disted/Management/Operations/prod-01.html>
- Ross, M.M. & Waller, R. (2000). The transformer revisited. *Information Design Journal*, 9(2), 177-193
- Rowntree, D. (1990). *Teaching through self-instruction: How to develop open learning materials*. London: Kogan Page.
- Rowntree, D. (1994). *Preparing materials for open, distance and flexible learning: An action guide for teachers and trainers*. London: Kogan Page.
- Spencer, C. (Spring, 2006) Research on learners' preferences for reading from a printed text or from a computer screen. *Journal of Distance Education*, 21(1), 33-50. Retrieved November 12, 2006, from http://www.cade-aced.ca/display_publication.php?&i_nImageId=60
- State University Civil Service System .(2006). *Graphic designer series*. Urbana. State University Civil Service System. Retrieved May 24, 2006, from <http://www.sucss.state.il.us/documents/ClasSpecs/SPEC1004>.