

“ साक्षरता नै मानव विकासको पूर्वाधार हो ”

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**LITERACY WATCH COMMITTEE OF NEPAL
BULLETIN NO. 12**

Special Issue on Introduction of Technologies in Literacy Programme
1999 August

To Commemorative International Literacy Day
8th September 1999

Editor-in-Chief : Mr. T.M. Sakya

Editorial

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It is well known fact that variety of teaching/ learning methods both traditional and modern have to be used by the literacy and non-formal education to attract and sustain adult learners' interest to the NFE program. Quite often literacy classes are started with song, dance, drama, role-play, radio. TV programs are quite common in NFE program conducted both by the government and NGOs. These days new modern technologies such as video, TV and computer are increasingly used. But it needs good software and training for instructors. Uses of new technologies in education both formal and non-formal is the demand of time, so it could not be stopped. But if we prepare ourselves in time, we could take a lot of advantages. If we are not prepare for continuation new technology will just sweep-up that we first start. Therefore, in this issue an attempt has been made to highlight varieties of technologies which we use at present and which has potentialities to be used in future.

Thus we hope will it help NFE educators to be prepared and alert towards new changes and development in the technology of Literacy Program.

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Importance of Technologies in Education with Special Reference to Non-Formal Education

Technology is a scientific way of developing new techniques and a systematic way of evolving and applying these techniques. Education Technology is an application of scientific knowledge about learning and condition of learning to improve the effectiveness and efficiency of education system. It can be considered as the systematic use of scientific method to plan realize and evaluate effective teaching learning process in informal, non-informal and formal education. It is comparatively a new idea that is grown as a result of the integration of technological devices in the use of practice in education.

Electronic devices such as film projectors, tape recorder, television sets and micro computers are mostly practiced and used as teaching tools in education. Non electronic instrumental materials such as books, photograph, poster, charts are also used. Technological devices are now used in large proportion. It has occupied a critically important role in the field of education and almost in the non-formal education. Its application is needed to an individual and society as an effective information tool to support educational development. Now a days educational technology can be used effectively for non- formal system whatever level it may be. Different instrumental materials such as audio visual media are used to communicate the needed factual information to the learners. These materials can be capable more accurately and efficiently than the teacher. Things seen are mightier than things heard. Visual aids - pictures, charts, maps, graphs, photographs, cartoon etc are served through the sense of vision. These materials should provide to adult women's environment. It enhances the adult thinking capacity and help them to reason things with proper understanding. These materials are usually pleasure to the eye. They help them to think and express new idea. It motivates the class also and added atmosphere to the situation, attention by some attractive features and conveyed the message quickly. Educational Technology requires a lot of change on the part of the instructors. They should be properly trained to participate in the teaching learning activities. Much specialized training is needed especially in non formal teaching method for successful program. Use of media such as puppet show street drama, role play, songs, dance visualization method etc are free games used in non-formal education classes. Since the adults get bored with traditional teaching, the literacy instructor have to use audio visual materials to attract and sustain learners interest in the teaching/ learning program.

The main aims of Education Technology of NFE program are :

- i. To provide appropriately designed situations for learning and teaching.
- ii. To modify the learners environment by presentation of materials by arranging the different learning activities and by organizing the physical and social surrounding of the learner.

The program should be locally planned as often as possible, target group should be included. Target groups are benefited from Educational Technology. Educational Technology for adult education is targeted to those who are working and do not have time go to literacy class. It is particularly important in reaching women who are cultural or

religious regions can not go to literacy class. People who wants additional information that will improve their quality of education. Some innovative programs for self learning environment in reaching Neo-literate with appropriate learning programs.

Different New Techniques for Reaching Learner

There are many Educational Technology Programs that have sought creative for reaching learners that are compatible with the demands on learners lives.

Strategies for Reaching the People

1. Public libraries

Public libraries are very common source of information in urban areas. It provides new knowledge and technologies of adult learner.

2. Mobile libraries

Since, the public libraries are not mostly available in rural areas, mobile libraries could play a major role replace the role of public libraries.

3. Educational radios

The most accessible source of new technology in education is educational radios. Even in penetrating hinder line, it is a powerful means of information.

4. Educational television

T.V is being used effectively to replace the face to face teaching learning situation and contact.

5. Discussion and demonstration at community meeting

Public meeting in community is very powerful means of interaction, sharing of experience and convincing the community people.

6. Special supplements in local newspaper and wall news paper

Occasionally, community people can be reinforced to have new information and knowledge through the special supplements in local newspaper and wall newspaper.

7. Linkage with formal school

One of the interesting program to non-formal graduate to have equivalency linked with formal school

8. Providing educational materials for social organization

Social organization can be enriched by providing education materials to disseminate new information to the community.

9. Non-formal meeting places

Non-formal communication is the best communication in the world. So, Non-formal meeting places are the best places for information dissemination.

10. Community learning centers

Since in the village, there are not any permanent infrastructure to continue literacy program and sustain literacy skill after completing certain level of literacy education. Community Learning Center could play a role model as a local level infrastructure for local level.

11. Developing of special text books and learning materials for adult learners

Most NFE materials are found prepared based on national and regional context. With the consideration of regional variation and commercial inspiration. There is a need of developing special learning materials for adult learners to gear their spirit toward the education.

12. Folk songs, puppet show, street drama, role play, dance, public festival

In most villages modern and electronic medias' may not be existed. But, in order to create motivation and encouragement local activities like folk songs, puppet show, street drama, role play, dance, public festival and local cultural program could be used as a tools of attracting and sustaining learner interest. These activities could be used in rural areas. As for example, street drama has becoming very popular means of public gathering and information dissemination.

In conclusion above means of technologies could be used in a very role to delivering non formal education. It not only helps enriched the teaching learning situation of adult but also provide chance to share learning experience and functional knowledge related to life for their daily use.

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Non-formal Education through Distance Education

Different educational systems are also changing with expansion of Education Technology. Everybody realizes that there is inadequacy of face to face system of education. Due to the growing needs of the society, Distance Education Systems came into being. In this system learning is not through a teacher but learning process through Instrumental materials and electronic messages that emanate from the teacher. Teacher and Taught are separated by distance. There is not personal face to face contact on the part of teaching and learning process. Mass media is utilized. This kind of methodology would be important to the Non-Formal Education where many youth and adult have got a chance to acquire knowledge and skill from distance education. Employed adult also have got chance to acquire knowledge from it. Their aspire remains unfulfilled due to lack of time to go regular institution. Here come Distances Education to help such people .It caters to the needs of such classes of society. Thus, Distance Education complements the adult classes of Non-Formal Education. Corresponding materials of distance education are self instrumental. Radio broadcasts, audio and video cassettes provides academic support to the learner. Thus, teaching and learning through electronic devices is an effective alternative to the non formal literacy classes

The techniques of distance education has been accepted by community. This systems of education as viable alternative to search the deprived region also. It would help to bring change in the disadvantaged peoples. Distance Education would support to non formal learner.

Distance Media Education in Nepal

In order to promote Distance Media Education in Nepal, Radio Nepal, Nepal Television are playing major role. Private radio station and TV channel, which are recently established and other media companies also have become active role in providing media education.

Gorkhapatra Sansthan, government owned press has been playing a great role in media education.

Similarly other presses are also aware of their social obligations radio drama, street drama performed by Ministry of Health and Survanam are found very effective.

Some of the education programs broadcast through radio Nepal are:

S.N	Program	Description	Frequency
1.	Bhanjang Choutari	Interactive Radio Instruction for early childhood development	Twice a week
2.	Hatemalo	Children Program	Sunday,Wednesday
3.	Bal Aawaj	Children Program	Once a week
4.	Bal Karyakram	Children Program	Once a week
5.	Agricultural Program		Twice a week

6.	Environmental Program		6 days a week
7.	Women's Program		Twice a week
8.	Health Program		Twice a week
9.	Teacher's Training		6 days a week
10.	Population Program		Once a week
11.	Tourism Program		Once a week

The Distance Education Radio Program "Service Brings Reward " was introduced with a major objective to upgrade the reproductive health and contraceptive method's knowledge and skills of the grassroots level health workers. The program was introduced on Dang district in a trial basis at the end of December 1995 and completed broadcasting in the Mid West Region in the first week of June 1996. The test result show that the participants increased their knowledge, positive attitudes and skills as results of the program. They found the program was helpful in refreshing them. They gained new information and skills in the area of well-planned family, contraceptive methods and counseling, preliminary analysis of the impact evaluation shows some promising results. Despite many problem encounters in putting the program in place in a short time, pre-test, post-test knowledge scores show that in pre-test, 8 percent of the participants had scored below 41 and none of them scored above 80%. After going through the course none of the participants scored more than below 41 and one fourth of the participants scored more than 80%, similarly the gain scores increased from 57 percent to 75 percent at the end of the course.

Preliminary result of Nepal RCP Impact Monitoring Study 1995-96 shows that as result of Distance Education Course , quality of client -provider interaction has increased .

Further analysis shows even better result when combined with four days on the spot Interpersonal Communication and Counseling (IPC/C) training.

On an effectiveness scale of 1-5 the participants rated is 3,7.

Education Media broadcasted by Nepal Television:

S.N.	Program Description	Duration	Frequency/Week
1.	Krisi Karyakram (Program for farmers)	20 minutes	Everyday
2.	Children's Programm	20 minutes	Everyday
3.	Jagriti (Current various issues)		One a week
4.	Natural Calls		One a week
5.	Aayam (Informative)		One a week
6	Devi (Educational Service)		One a week

Nepal television has been broadcasting "Meena Cartoon Series". This series includes information on cultural rights participation, protection against violence and exploitation, minimum age, access to information, childcare facilities and social security. Similarly Meena Cartoon also provides message on discrimination, interest of child paramount, community family responsibility, nationality, standard of living and health care concerns. In relation to health issues, Ministry of Information and Ministry of Health jointly banned the smoking and alcohol related advertisements from electronic media and replaced by the advertisement of health related programs.

Distance Education Department under the Ministry of Education broadcasts media education from Radio Nepal. The programs of media education are designed on English, Mathematics, Science, Environment Education, Health Education, Music, Drawing and so on. During the academic year, 12080 hours Radio-Distance Education is planned and implemented. However, impact study has yet not been conducted.

Different Educational Technology have used effectively by different countries.

<i>Television</i>	<i>Radio</i>	<i>Face to face /Group work</i>	<i>Community based Literacy program</i>
Pakistan	Pakistan	India	India
Korea	Korea	Bangladesh	Bangladesh
Afghanistan	Afghanistan	Nepal	Nepal
China	China	Malaysia	
Thailand	Thailand	Thailand	
	Pacific Island State	Indonesia	

Distance Education and Mass media are particular, useful in financially difficult times .A major shortcoming is the lack of adequate infrastructure specially in the rural area where educational services are not needed by all accounts Distance Education efforts need to be exploited further.

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Information Technology (IT) in Adult Learning

Information technology (IT) will certainly play a greater role at all levels and in all kinds of education in the future. The use of computers in schools is already common in several countries, and computers are also being used in some adult education programmes. The user of computers probably needs some basic literacy skills, and thus IT will be most relevant for semi-literates, neo-literates and others who want to expand their reading / writing skills and knowledge base. The use of personal computer will either include the application of software for training purposes, such as continuing education software for neo-literates, or the use of the Internet for gathering information and learning about relevant topics. One advantage of the Personal computer is that it is interactive and can "respond" to the inputs of the learner. The learning process can also be made more interesting and varied with the use of computers, compared to books.

Technical expertise is also needed to address the problems which inevitably come with the use of computers. The use of Information Technology should be integrated into the teaching/ learning process and in programmes for capacity building.

Use of Computer in Literacy Training

In some countries computers in particular Personal Computers (PC) have become more common and widespread in most of the countries in the region. The distribution of computers very widely, both between countries and within one country people in the urban areas usually have more readily access to computers than a rural areas. Computers used to be very expensive and therefore, out of reach for most education programmes for the poor such as literacy programmes. The utilization of computers for literacy training has also been hampered by lack of adequate software. The situation however, is changing prices for both hardware and software have fallen and more user-friendly software is within reach. The new focus on computers for literacy training can be seen in two areas. The first is the introduction and use of Internet, and the second is the utilization of computers for training of literacy instructors and learners at local level.

Internet

Internet was introduced to the public in 1994, and its use has since then grown exponentially (very fast) in many countries. The users of Internet have mostly been in urban areas since Internet requires connection to reliable telephone lines through modems and an Internet Service Provider (ISP). Access is rather limited in certain geographic areas and the service also requires regular payments to the ISP. Access is rather limited in certain geographic areas, and the services also requires regular payments to the ISP. However, Internet has in short time proved to be an invaluable source of information for those institutions and persons who are able to access and utilize this new resource.

Computer Software for Literacy Training

Computer software for literacy training has great potentials where computers are available. There is, unfortunately, limited computer software available for literacy training. This is a rather sad fact since computers may be valuable tools both for literacy instructors and particularly for the learners. People often have the attitude that computers are difficult to handle and that users have to be not only literate but necessary to study the computer's operating system or advanced word processing tools to be able to interact with the computer in a simple way. If the software is user-friendly (easy to use) and easy to understand, then it may be sufficient to teach a learner for a few minutes how to use the mouse before she/he starts to play with the computer. Computer games are very popular among children and playing in an interactive way with the computer can also be utilized by adult learners. The computer will give feedback to the user/learner through text, pictures and sound. The learning process can then be more fun and varied than using traditional methods such as textbooks, writing pads and pencils. Another advantage is that locally developed software may be easily copied from one diskette to another at very low cost and widely disseminated.

Computer Assisted Instruction (CIA) is already a part of formal education in many developed countries. Computer Assisted Language Learning (CALL) is being applied in some countries to teach language skills. Software can be developed in local languages using existing programmes, such as Toolbox, Authware and Director. The development of software for CIA in most countries in Asia-Pacific has just started, but will probably prove important for literacy training in the future.

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