The National Literacy Mission Authority has begun pilot testing an innovative open distance education program for newly literate individuals in 20 districts of India. Using open and distance education where literacy is at its infancy is feasible because newly literate persons can manage to read printed material and have the motivation to read and learn. Curriculum and learning requirements are graded at three levels. The target groups include successful neo-literate persons from the Total Literacy Campaign, successful learners from nonformal education centers, and dropouts from formal primary schools and from nonformal education centers. The project's objectives are as follows: provide an alternative channel to schooling; reduce disparities in educational access, especially for girls and disadvantaged groups; increase retention rates; and provide a learning continuum. The program is composed of three to five of the following subjects at Levels A, B, and C: language, mathematics, environment, science, social sciences, and vocational. Innovative features include introduction of vocational courses at all three levels; large internal choices for learners; and multiple points of entry. Curriculum and instructional material have been developed keeping in mind the diversity of learning needs of the neo-literate population belonging to various cultural, linguistics, and rural-urban settings. A decentralized model of implementation has been adopted. (YLB)
Linking Literacy to Education Through Open and Distance Education

Dr. Marmar Mukhopadhyay
National Institute of Educational Planning and Administration, India

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Prof. M. Mukhopadhyay*

Introduction

In this paper, I shall describe an innovative open distance education program for the neo-literates, conceptualized and designed at National Open School of India when I chaired the institution. This innovative program has been accepted by the National Literacy Mission Authority (NLMA) for pilot testing in 20 districts of India. Before I actually get into the details of the program, I owe the readers revelation of the source of my inspiration for this innovative idea and the program.

The NLMA achieved unparalleled and unprecedented results in literating more than 50 million adult illiterates in a short of five years through district based literacy campaigns. Result oriented as it was, the campaign was evaluated after a particular period of time to actually assess the number of persons who was qualify to be literate according to the norms prescribed for literacy. Government of India nominated me in a few districts as a member of the Expert Evaluation Committee. One such district where I had the privilege to be associated was Midnapore in West Bengal that drew international attention for its brilliant performance.

In one such sampled evaluation center in a remote village, I took the test of a lady of about 20 years. After she fulfilled all the criteria for literacy, in a tone of appreciation and congratulation, I said, "so you are literate, now. Congratulations". Instead of thanks, pat came the reply, "I am literate, but not qualified." There twinkled a drop of tear in her eyes.

I asked inquisitively, "What do you mean by qualified?"

Ready with her answer, she said, "like you." She pointed her fingers at me, "don't you have degrees?"

I admitted, "Yes, I do have."

"Can't we also study and get degrees? Can't you do something for us. I assure you, I shall study hard..." she kept pleading. I assured her of my best consideration. It bothered me day in, day out. Result was the program, I am to place before you. It is called "Open Basic Education".

Prof. M. Mukhopadhyay is Senior Fellow, National Institute of Educational Planning and Administration, New Delhi and Former Chairman National Open School, New Delhi.
The program is in a developmental stage; curriculum has been designed; sample instructional material have been developed; instructional material have been adopted into two regional languages other than Hindi; and 20 districts from four states have been identified for trial implementation. Two of the states have already submitted their proposals and Government of India, National Literacy Mission Authority have already sanctioned funds. I shall describe the program as it is planned as well as it is being implemented under a few broad heads.

Feasibility

Feasibility of using open and distance education where literacy is at its infancy has been often questioned and has been a bone of contention. I would like to deal with this contentious issue first. Despite open and distance education started at the school level in the earlier part of this century, it actually flourished in higher education. All over the world, distance education is a popular modality in higher and continuing education. At the school level too, it is restricted to higher classes, namely, secondary and senior secondary classes (Mukhopadhyay and Philips, 1994*). There is very little evidence of use of distance education at the basic education level, leave alone for the neo-literates. There are very few exceptions though. For example, Andhra Pradesh Open School offers distance education courses for standards fifth through seventh. Use of Open and Distance Education in higher levels is largely due to the question of feasibility of use of distance education in early grades where reading skills are limited and students presumably require greater attention and direct contact with the teachers.

The distance education mode depends largely upon the print material, more so in the developing countries like, India where mass media or telecommunication is not well developed; or their capacity is far more limited compared to what is required. Even if there are programs, the access to such media is restricted due to economic reasons. Thus reading skills becomes the foundation of all distance education programs. Neo-literates have usually very limited reading skill; and on this ground is raised serious doubt about the feasibility of distance education mode as a means of education of the neo-literates.

In my assessment, that itself was the opportunity of converting fragile literacy into more durable and permanent literacy which alone is the goal of other post literacy programs in India. The scope and opportunity of linking post literacy learning with a continuum provide the necessary incentive to the neo-literates which is most crucial for their continuation in the arduous task of learning at an adult age alongwith their own children.

Open and distance education for the neo-literates was feasible because they can manage to read printed material and they have the motivation to read and learn.

Also the feasibility had to be built into the program. It is not either black or white, there are various shades of gray in this. On one hand the commitment of Indian Constitution and also the charter of the Education for All stood for universal elementary education -- equivalent of eight years of schooling. To achieve anything significant and meaningful, neo-literates must reach at least eight year equivalent education; only then they can aspire to study the secondary and senior secondary courses that lead courses that lead to recognized certification.

Open and distance education are usually terminal in nature -- learning level fixed at 10th or 12th equivalent. There are no sequential grades like VIII, IX, X, XI and XII as is the case with normal formal schools. Can a neo-literate manage the complicated curriculum of VIII standard? Has he/she mastered adequate reading and learning skills to be able to handle effectively the instructional materials meant for this level. Answer was uncontroversial -- "no". Further, a neo-literate is an adult with multiple set of other skills and knowledge which he/she may not be able to convert into a written document. But that does not negate his/her knowledge. Also, a neo-literate possesses differential level of knowledge in language, mathematics, environment and social sciences and vocations. Should all the neo-literates start in all the subjects at the same level?

To make the program feasible, the curriculum and learning requirements in each department of language, mathematics, environment, science, social science and vocation was graded at three levels. These were equivalent of level III, level V, and level VIII. According to available research and experiences, it is requires about three years of schooling to achieve sustainable literacy among children. Hence it can be hypothesized that two years of schooling provide fragile literacy. Thus the argument is if a child can manage III standard equivalent curriculum with fragile literacy, there is no reason why an adult cannot manage. Hence level III was accepted as the stepping stone for the neo-literate. The program designed provide an open and multi-point entry to the three levels of courses. For example, a neo-literate can opt for III level mathematics and science. Vth level environment and language and VIII level of vocational course. He/she is also free to complete the course requirements at his/her own pace. As and when a neo-literate achieve competency certification in all the subjects at VIII level, he/she is qualified with elementary education and is eligible to enroll at the tenth level courses of the open schools. The main approach of connecting literacy to education is given in figure 1.
Thus not only open and distance education was considered feasible for the neo-literate, but also feasibility was built into the design.

![Diagram](image)

**Figure 1. Connecting Literacy to Education**

**Target Group**

The target group in this project has been defined more in functional terms than by the proforma set by the government. For example, in the government parlance, neo-literate implies adults who have been lettered through total literacy campaign. This project defined all such categories of people who are functionally neo-literate; they may come from the formal and non-formal educational systems. The neo-literate, in this project were defined to comprise:

- successful neo-literates from Total Literacy Campaign,
- successful learners from the non-formal education centers,
- dropouts from formal primary schools after gaining literacy, and
- dropouts from Non-formal education centers.
This is represented in the following figure.

![Figure 2. Target Group of Open Basic Education](image)

Within these four groups of people, special focus will be on girls and women, socially disadvantaged groups, street children, working children, children in reform centers, handicapped learners.

Since the project aims at promoting primary and elementary education for all, it shall be open to persons of all ages. On the basis of experience in TLC, it is possible to presume that majority of the learners will be girls and women and in the age group 9+ to about 20.

**Objectives and Basic Framework**

The project, as it was designed, proposed to achieve following objectives.

- Provide an alternative channel to schooling,
- Reduce disparities in educational access especially with regard to girls and disadvantaged groups,
- Increase retention rates for all learners at the primary levels, and
- Provide a learning continuum based on a graded curriculum that would ensure quality education for all neo-literates.

These objectives were visualized to be fulfilled through the following activities:

- Developing a graded curriculum for neo-literates,
- Developing instructional materials in print and electronic media for the neo-literates,
- Adapting exemplar materials into regional languages,
- Developing instructors manuals,
- Providing expert guidance to state, district and local level agencies in implementing basic education to neo-literates, and
- Providing certification for basic education wherever relevant.

There are five guiding principles in the conceptualization and management of Open Basic Education. These are:

- The target of the project is to provide a learning continuum to the neo-literates to move from one level to another; and can dream of acquiring the highest degree available in the country. It would go much beyond consolidation of literacy.

- The curricular requirement is guided by the paradigm of Minimum Levels of Learning (MLL) developed by Ministry of Human Resource Development and the NCERT for elementary education with the provision of adapting such guidelines and principles for the adults in keeping with andragogy.

- The program of basic education will be developed as three level courses -- A, B, and C equivalent to standards III, V and VIII respectively which can link to, and open access to secondary education.

- The program will be delivered through distance education mode with all the flexibilities of an open learning system.

National agencies, like National Open School, will act as a resource system developing curriculum and exemplar learning material, providing professional support to the implementors and instructors and certify wherever relevant state agencies have not been set up. Actual implementation would be done by field level agencies.

Program

- The program comprises three and five subjects as indicated in table 1. It should be evident from the table that language, mathematics and vocational courses are common at all the three levels. At level A, a student is expected to study environment as an integrated subject of science and social science. At level B and C, there are independent subjects like, science and social science. This disaggregation is also dictated by the consideration of equivalence.
One should notice the departure in the program design from the conventional schooling. Most striking feature is introduction of vocational courses at all the three levels of the educational continuum. The main argument was that every adult is at work, be that a wage earning or non-wage earning work at home by the housewives. In economically poorer families, occupation occupies not only the largest 'space in life', but it is almost equated with life itself. A program without a provision for enhancing that central core of life would be irrelevant. Also vocational courses provide enormous opportunity for building education in language, mathematics(applied), science and environment.

The second major feature is the large internal choices for the learners. In the secondary and senior secondary classes in National Open School, there are large number of subjects. Students are allowed to choose any subject they like. In Open Basic Education, number of subjects are limited and there is no way a student can choose among the subjects. Flexibilities have been built in within the subjects. The internal choices as proposed in the project is given in the table 1.

**Table 1. Level wise course requirements**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Level A</th>
<th>Level B</th>
<th>Level C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course Requirements</td>
<td>Total Number of Lessons</td>
<td>Course Requirements</td>
</tr>
<tr>
<td>Language</td>
<td>10</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics</td>
<td>12</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Environment</td>
<td>12</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Vocational Course</td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
</tbody>
</table>

>Note: Vocational Course will have many lessons; and all lessons both theoretical and practical have to be opted by the student.

The main contention was that for example, a housewife as a student may prefer to choose such lessons that are related to her life whereas a young farmer may choose lessons linked to farming. Of course, this internal choice was difficult in subjects like mathematics and science where there is a definite learning sequence.

The third major innovative feature is multi-point entry. Adult neo-literates are very unlike their counterpart in primary schools. For
example, an adult possesses much larger stock of vocabulary compared to the children in schools. He/she can process number much faster through sheer practice than the children. He/she possess technical, vocational and social skills compared to his/her counterpart. However, their skill of written communication can be as poor as that of the children or even worse. These have to be taken into consideration in designing the program.

The curriculum and instructional material have been developed keeping in mind the diversity of the learning needs of the neo-literates belonging to various cultural, linguistics and rural-urban settings. It is recognized that many learners may be adults while others may be children whose life experiences have made them more mature than others of their age. Hence openness would be cornerstone of material development. The gender perspective have been kept in view while developing the materials.

In all, so far 34 different curricula have been developed in languages -- Hindi, Bengali and Marathi, science, social science, arithmetic, mathematics for levels A and B. In vocational courses for level A, foundation level courses have been developed in agriculture, animal husbandry, arts and crafts, office management, etc. Terminal and qualifying vocational courses have been developed in several other trades, for example, tie and dye, production of pre-processed foods, child care center assistance, cutting and tailoring, and dress making etc.

On the basis of this curriculum, 113 lessons for levels A and B have been developed in Hindi. There are another set of 72 lessons developed in Bengali and 60 in Marathi.

After the development of the curriculum, there was an intensive exercise to identify the needed media support -- audio and video programs for effective implementation of the program. Alongside the print material, audio scripts have also been developed on a few lessons; and a few initial exemplar recordings have also been done.

**Strategy for Implementation of the Program**

- Since the task is massive and continuing education of neo-literates must be location specific, it is necessary to adopt a decentralized model. The actual implementation would be done by the State, District and Sub-District level agencies. The entire program implementation is visualized as follows:

- State agencies like State Open Schools would collaborate with national agencies, and adopt and adapt the material in regional languages, supplement and compliment material on their own.
• State Open Schools, if need be in collaboration with National Open School and NLMA, will orient district agencies like Zila Shaksharata Samiti on implementing the programs.

Zila Shaksharata Samiti would orient in turn the block level agencies.

• Four or Five schools will be identified as study centers in each block; the neo-literates desirous of continuing education through open schooling would be attached to those study centers. Retired teachers, and educated but unemployed housewives can also run study centers.

• The registered students would choose study units. They will be provided with self-instructional printed material to study at home at their own pace and time.

• The students would attend evening and/or weekend classes in the study center for specific inputs, but primarily for clarification of doubts and receive feedback on the progress of their learning.

• At the end of the program, when they reach the level of 8th equivalent, a test can be conducted under the aegis of Zila Shaksharata Samiti supervised by the State Open School. Certificate of completion and pass can be awarded either by the State Open School or by National Open School on recommendations of the State Open School.

The proposed model of program implementation is given in figure 3.

Collaboration

The project is not only ambitious but also complicated. It will require collaboration of several agencies for successful implementation. For example, Andhra Pradesh Open School provides open schooling to children in the 5th to 7th standards. NCERT, SCERTs and other such agencies have developed curriculum and material for non-formal education for the age group of 9 to 14. University Departments of Adult and Continuing Education, District Resource Units, State Resource Centers, Literacy House, etc. also have developed some relevant materials. All such agencies have important and relevant experience and even learning material. Information on such material as well as experience and expertise would be collected, scanned and utilized.

Conclusion

The project has not yet gone into operation. Hence it is difficult to predict how it will actually fare in the field. However, a few early
positive and negative indications are available. For developing the curriculum and instructional material in Hindi, Bengali and Marathi languages several institutions came forward -- Indian Institute of Education (Pune), Institute of Education, Rural Studies and Development (Udang), State Resource Centers, State Councils of Educational and Training, MP State Open School, Ramakrishna Mission (Narendrapur), Lady Irwin College (New Delhi), etc. Thus there are indications of enthusiasm among the NGOs and educational institutions.

The proposed framework might undergo major changes in view of the emerging dimensions in open and distance education in India. With the launching of indigenous satellites, the availability of transponder has become comparatively easier. A full educational channel is on the anvil. NLMA has succeeded in getting separate allocation of time for adult and continuing education. Thus television is likely to come as a reinforcing media to the open basic education. Further, the National Action Plan on Inservice Education of Primary Teachers through Distance Education complimented by another report on Indian Educational and Training Network for Development (INTEND) proposes to set up a nation wide satellite based communication network for two way communication through interactive video. The proposal is to extend the network upto the block level (usually a cluster of about 100 villages). This network will have the capacity to support interactive education of more than 20 million people. Beyond education, the services of the network has been proposed to extended to health, rural development, women and child development, agriculture, civil services. Open learning institutions will be one of the major beneficiaries of this new infrastructure. The proposal has been approved by Government of India. It has been incorporated in the ninth five year plan and fund has been allocated for the first year of the project providing a sound framework for implementation.

There are, however, a few problems and roadblocks on the way. The problem is, on one hand, all the states selected for the pilot run do not have state open schools. On the other hand, some experts in adult education do not subscribe to the idea of the program to be run by the state open school. They prefer its implementation by the State Resource Centers. They are unable to see this program as a link between literacy and education. They are still stuck with the conventional post literacy campaign concept. In fitness of things, the open basic education should not be seen either as an alternative or threat to post literacy program. This program is meant for the ambitious among the neo-literates who wish to move up towards self-actualization.
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Author(s) Prof. Marmar Mukhopadhyay

Corporate Source: Prof. Marmar Mukhopadhyay
National Institute of Educational Planning and Administration
17 B Sri Aurobindo Marg
New Delhi - 110 016 (India)
Fax: 91-11-6853041 e-mail: niepa@del2.vsnl.net.in

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Sign here
Signature
Printed Name Prof. Marmar Mukhopadhyay

Position/Title Senior Fellow

Organization National Institute of Educational Planning and Administration

Address 17 B Sri Aurobindo Marg
New Delhi - 110 016 (India)
Fax: 91-11-6853041

Telephone No: 91-11-6862389

E-mail Address: niepa@del2.vsnl.net.in

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