Quality School Education through Open and Distance Learning (ODL)

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Abstract of the Paper

In their endeavour for "reaching the unreached" and human resource development, the developing countries are up scaling their Open Schooling programmes; thus providing appropriate responses to the challenges of number, credibility and quality of education. Although all sections of the society can be beneficiaries of the Open Schooling system, it is a boon to those who are socially and economically deprived and are unable to attend conventional schools for a variety of socio-economic and other reasons. For quality assurance in Open Schooling programmes, certain imperatives are (i) weaving generic Vocational Education component in academic courses, (ii) stress on competencies, (iii) softening of subject boundaries to enable the learner to get a taste of integrated knowledge and joy of understanding, (iv) flexibility of curriculum in terms of time, space content, methodology and testing, (v) modular approach to academic and vocational education courses, (vi) multi-entry and multi-exist system to provide career pathways, (vii) provision of self paced learning package comprising of print and non-print learning materials, (viii) use of teaching-learning strategies such as self-study supplemented by group work tutorials, on-line study, video conferencing, audio conferencing, (ix) formative and summative assessment in an environment of ease, (x) provision of On Demand Examination, and (xi) provision of credit for prior learning, credit accumulation on completion of modular courses and credit transfer from other Boards of School Education.

Effective Networking among ODL educational institutions and employment sector will go a long way for balancing the demand and supply of requisite manpower. In order to place the Open Schooling system on a sound pedestal, its Management Information System (MIS) is required to be toned up.

> A human being is a positive asset and a precious national resource, which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism -------- Education has historically played this important role and has emerged as natural characteristic of human societies.
> (Source - National Policy on Education (1986), India)

1. BACKDROP

1.1 The unprecedented economic development coupled with the growth of Information and Communication Technology (ICT) has placed the human resource development programmes of the developing countries at the centre stage of their developmental agenda. No country in the world can survive with dignity unless its population at large possesses certain essential **survival skills** and a minimum level of knowledge in various fields. The developing countries of the world have been **endeavouring to meet (i) the challenge of numbers, (ii) the challenge of credibility, and (iii) the challenge of quality of education.**

1.2 For meeting these challenges, the educational planners and administrators are planning to upscale the **formal schooling system** at an unprecedented scale. They are, however, worried as to how large scale finances may be mobilized for making provision of additional schools, additional teachers and requisite equipments and other infrastructural facilities.

1.3   The Open and Distance Learning (ODL) is a new paradigm with some elements of shift such as:
From **classroom** to **anywhere**
From **teacher centric** to **learner centric**
From **teacher as an instructor** to **teacher as a facilitator**
From **mainly oral instructions** to **technology aided instructions**
From **fixed time** to **anytime learning**
From **you learn what we offer** to **we offer what you want to learn**.
From **education as one time activity** to **education as life long activity.**

There are several reasons for adoption of 'open schooling' programmes. Some of these are:
- Providing education to those who are unable to attend conventional schools for a variety of socio - economic reasons, as well as to those who, for similar reasons, missed opportunities to complete school education.
- Providing wider choice of educational programmes to learners.
- Providing a 'safety net' to school drop-outs so that they do not remain under-educated.

1.4   **The challenge of "reaching the unreached"** can be met if the national governments provide flexible and viable system of **open learning** along with the formal **schooling** programme. The increasing use of Information and Communication Technology **(ICT)** will enable the developing countries **to meet the challenge of educating the increasing number of prospective learners.**   In order **to meet the challenges** posed by multiple revolutions in science and technology, commerce and industries, ICT and in several other fields of life, it is imperative that responses need to be provided through **multi-model schooling system,** adopting **multi-media approach** including open learning, distance education, ICT based learning programmes, contact classes, peer learning, self study and, more importantly, learning of requisite skills.

1.5 The working of Open Schooling has been exemplified in the next section wherein some highlights of the Open Schooling Programme of the National Institute of Open Schooling (India) have been given.
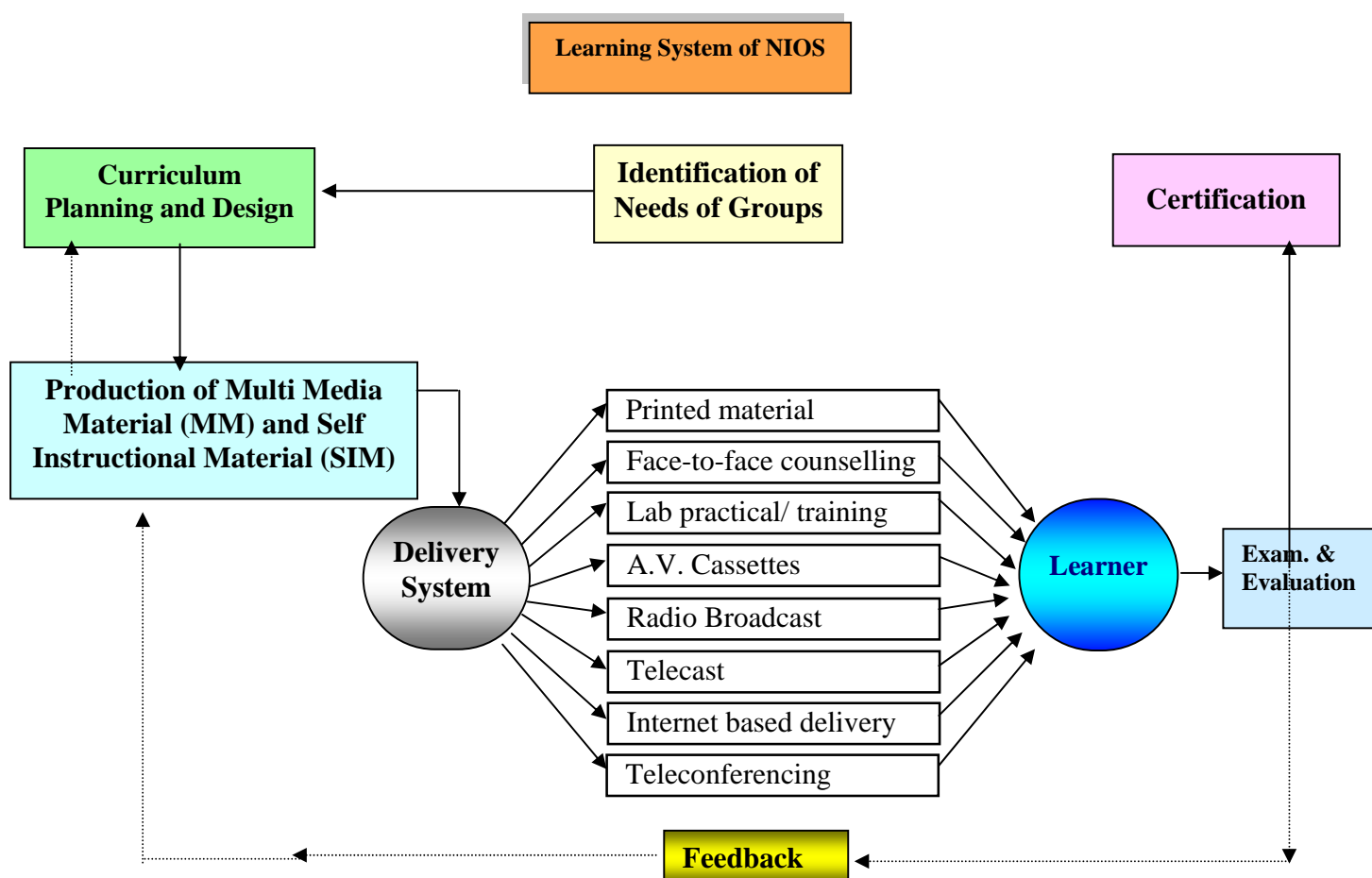
2.   NATIONAL INSTITUTE OF OPEN SCHOOLING (NIOS) INDIA

2.1 The National Institute of Open Schooling (NIOS) is an autonomous organization set up by the Government of India, Ministry of Human Resource Development (MHRD) on 23 November, 1989. It is vested with the authority to register, examine and certify students up to pre-degree level courses. The courses of study offered by NIOS are:
- Open Basic Education Programme
- Secondary Education Course
- Senior Secondary Education Course
- Vocational Education and Training (VET) Programmes
- Life Enrichment Programmes

2.3 NIOS operates through a network of five Departments at its Headquarters, eleven Regional Centres, more than 3100   study centres (2067 for Academic Courses and 1063 for Vocational Education Courses).   It has a current enrolment of about 1.5 million students at Secondary and Senior Secondary levels which makes it the largest Open Schooling system in the world. For implementation of the   Open Basic Education Programme, NIOS has partnership with 350 Voluntary Agencies in 27 States providing facilities of Elementary Education at their study centres.

2.4 Learning System

NIOS takes certain other steps also to support the students. Based on the curriculum, audio and video programmes to complement and supplement the Self Instructional Material

(SIM) are prepared and made available to the learners in cassettes at the study centres and through telecast/broadcast of the programmes.

Learning System of NIOS

Curriculum Planning and Design	**Identification of Needs of Groups**

Certification

Production of Multi Media Material (MM) and Self Instructional Material (SIM)

Delivery System

- Printed material
- Face-to-face counselling
- Lab practical/ training
- A.V. Cassettes
- Radio Broadcast
- Telecast
- Internet based delivery
- Teleconferencing

Learner

Exam. & Evaluation

Feedback

3. INCREASING ACCESS TO SCHOOL EDUCATION THROUGH OPEN SCHOOLING SYSTEM

3.1 Realizing that education is a very significant input for human resource development, there is worldwide awakening to increase access to education including life long education.

3.2 **A large number of youth and adults now aspire for "learning while working" or "working while learning"**. A rigid system of "formal education" is fraught with certain road blocks for reaching the unreached and life long education unless it moulds itself to the flexibilities of the "Open Learning" System**. It is now high time that the developing countries may give impetus to the open learning system, along with expansion of the formal system of education, for "reaching the unreached" and for opening ample avenues for life long education.**

3.3 Taking note of the importance of the **"Open Schooling" system,** the Governments of developing countries are required to formulate policy guidelines for promotion of this system of education. In order to ensure equity, social justice and sustainability of the system on its own, provision may be made to run the open schooling system on **"no profit no loss"** basis, by and large, with positive discrimination (fees concession/exemption etc.) towards weaker sections of the society.

4.   CLIENTELE OF THE OPEN SCHOOL PROGRAMME

4.1   One of the most contrasting features of the **open schooling vis-à-vis the formal system of education is the fixity of age group** that the latter enrolls while excluding the rest at any particular stage. Besides, the socio-economic, geographical and often the gender outreach, the learner disabilities, and the fixity of hours and place of instruction of the formal system excludes all others who cannot conform to its requirements. All these **left-over groups** who cannot derive the benefit of the formal system together define the clientele for open schooling generally. The clientele of Open schooling programme is as follows:

(i) Rural poor and urban slum dwellers

(ii) Socially and economically deprived

(iii) Disabled or differently abled

(iv) Unemployed youth and adults

(v) Employed and partially employed workers

(vi) Formal school dropouts

(vii) Women and girls

(viii) Migratory populations, hill and desert dwellers

(ix) Life-long learners

(x) Hobby skill learners

4.2   **All Sections of Society can be beneficiaries of Open Schooling**

Clearly there is some overlap among the target groups mentioned above, but separate initiatives may be needed for different groups owing to differences in specific circumstances. Current education and training initiatives cover only a part of the typology spectrum.

While these sections of the society are examples of groups requiring special attention, it should be clear without saying that **open schooling is for all learners of the society** regardless of any distinction that people may like to make between them and **offers the promise of being the mainstream learning system like the present day formal schools at some point of time in future.**

5.   QUALITY ASSURANCE IN OPEN SCHOOLING

5.1   Innovations in Curriculum
Since acquisition of life skills is an integral part of development, **General Education and Vocational Education and Training (VET) need to be intertwined effectively.** Education in the 21st Century must place emphasis both on cognitive and non-cognitive outcomes. The non-cognitive outcomes inter alia include personal initiative or entrepreneurship, life skills, social competence and values.

It is desirable that work be given an important place in educational system through the secondary stage of education and   streaming into academic and vocational channels be implemented at senior   secondary stage. **The generic   Vocational Education component may, however, be suitably weaved in academic courses**.

6.   ORGANISATION OF ODL CURRICULUM

6.1   Focus on Competencies

Competencies are broadly defined as **cluster of skills/abilities, underpinned by relevant knowledge and attitudes, which enable a person to perform the complete range of specified tasks pertaining to an occupation**. The tasks can be both technical and non-technical. It is important to ensure that the curricular content and process of a certain skill area delivers what is needed to practise occupation in real work situation.

6.2   Softening of Subject Boundaries

The Curriculum Framework for academic subjects like language, mathematics, science and social science should emphasise on softening of subject boundaries thereby enabling the students to get a taste of integrated knowledge and joy of understanding. The teaching   of science should inter alia emphasise on examining and analyzing every day experience.   Concerns related to environment may pervade through different subjects with emphasis on activities. The teaching of social science may be discipline based mainly while emphasizing integration on significant themes such as water. Certain other curricular areas required to be included in the curriculum for academic courses are work, the arts and heritage crafts, health and physical education, and peace. Realising that work transforms knowledge into experience, generates significant personal and social values such as creativity, self reliance and cooperation, linking of learning with work from primary stage onwards should be an important teaching – learning strategy. Peace Education should also be emphasized in the school curriculum as it has potential of socializing students into democratic and value based culture. It can be actualized through appropriate activities and judicious choice of topics in various subjects up to secondary level.

6.3   Curriculum Flexibility

Flexibility is the **key word** in the context of **curriculum for open education.**

The ODL curriculum should be flexible in terms of time, space, content, methodology and testing.

6.4   Modular Approach to Courses

Modular approach to learning is vital to ODL courses. Each module of curriculum is a module of learning package and a unit of testing and evaluation. It is a tool to achieving flexibility, to provide add-on character to the course, to accommodate various topics in a programme.

6.5   Multi-entry and Multi-exit Systems to promote Flexible Career Pathways

In an educational programme, multi-entry and multi-exit systems offer the learner a chance for discontinuing his/her programme after a module at his/her convenience and resuming it at the time of his/her choosing. This entails no loss of time or wastage of the credits acquired. It also offers an opportunity for stretching a programme of study should the circumstances so demand. **Learning and earning can be sequenced as convenient**. It offers flexible career pathways with no age limit, recognition of prior learning, alternation of work and academic courses, and credit accumulation. Credit transfer provision between different programmes of study is another aspect of flexibility offered by multi-entry and multi-exit systems.

7   DELIVERY MODALITIES

7.1 The teaching-learning strategies may comprise the following.

- *Self-paced learning packages, that* enable learners to work individually on the basis of print material supplemented with audio and video cassettes, CDs, DVDs, etc.

- *Mixed-mode study* that allows self-study to be supplemented with group-work, workshops, tutorials and other structured activities.

- *On-line study,* that allows the learner to use on-line resources on computer, via the Internet. This may be in self-study mode or interaction with peer and teacher through chat, e-mail, web-cam, voice-mail, etc.

- *Video conferencing,* at a convenient location for closer interaction with the teacher without having to travel long distances.

- *Audio conferencing*, which uses the telephone to communicate with the teacher, tutor, or peer.

8. LEARNER'S ASSESSMENT

8.1 Assessment and evaluation according to a given plan in terms of frequency and modality is an integral component of curriculum and teaching-learning. It should measure learner's attainments in an environment of ease to determine his/her deficiencies in learning that need to be made up and to grade him/her on a specified scale.

8.2 Formative and Summative Assessments

The **formative assessment** against a set of given criteria could be done by the learner himself/herself for the purpose of attaining perfection. The tutor to guide the learner towards perfection can also do it as the learner progresses in terms of acquiring knowledge, skills and attitudes. It should be done internally and continuously.

The **summative assessment** is done at the end of the module and takes into account the learner's ability to provide evidence of his/her ability to perform the given task. Generally outside experts are involved for summative evaluation of open schooling learners.

8.3 Credit for Prior Learning

Recognition of prior learning has an important place in any system of Open and Distance Learning. Modular courses and the credit accumulation and credit transfer make it easier to implement it. This will give the Open School a very prominent place in the system of overall training and education in the country as a unifying agency.

8.4 On Demand Examination

NIOS (India) has made provision for **On Demand Examination at Secondary level**. It is also desirable to extend it to practical skills also in a gradual manner. NIOS (India) is endeavouring for wider infusion of the On Demand Examination System (ODES) into the Open Schooling system country-wide.

9. NETWORKING

9.1 Accredited Institutions (Study Centres)

Under ODL, Accredited Centres will remain the most common sites for tutoring, training, guidance and assessment for many years to come. Both number and quality (of equipment and personnel) of these centres would pose challenges and no fixed formula can be prescribed. The task has to be imaginatively approached as **on this, more than**

any other aspect, will hinge the quality of the whole programme. The study centres need to be equipped with various **IT facilities. Outsourcing of equipping phase** may also be considered as an alternative proposition.

The accredited centre would also have the responsibility of identifying **part-time tutors,** training places and industries and make working arrangements with them. In other words, the Open School will have to **ensure that all accredited study centres, though on a variable pattern, function properly and the learners do not suffer on account of systemic faults. There is a need for frequent inspection and supervision** by the Open School personnel to ensure quality.

9.2 Inter-agency Collaboration

9.2.1 Networking with Statutory Bodies
As regards vocational education courses, the Open School will have to function in close collaboration with different departments and agencies, both governmental and non-governmental, in different sectors. The ODL system should strive for inter-sectoral cooperation in educational endeavours.

The recognition of vocational graduates has always been a problem for the purposes of wage employment as well as self-employment for certain categories of personnel such as pharmacists, nurses, etc. For this purpose, the certificates awarded by the Open School will have to be recognized by these bodies and their equivalence established. Many government departments of the state and central governments will also have to be approached and convinced. It will be necessary to meet their standards in training and associate them at the curriculum stage.

9.2.2 Linkage and Articulation with the Employment Sector

Proper linkage and articulation will also be required with the employment sector at large for its confidence and satisfaction. The challenge will have to be faced on course-to-course or programme-to-programme basis. If representatives from Industry etc., are associated at the curriculum planning stage and their requirements kept in view, acceptance of the graduates by them will be easier.

9.2.3 Coordination with other Open Schools

In a federal structure, coordination of the central level Open School with Open Schools in the states is vital since a single organization working from a central location cannot meet the varied needs of whole country. Appropriate sharing of work, course list, domains, material and media preparation, delivery modalities, etc., will be an imperative for all. All Open Schools at national level and at State level should constitute a forum to meet the challenges of open schooling. An effective coordination between personnel can further facilitate their working and reduce cost.

9.3 International Cooperation for Promotion of Open Schooling
For 'reaching the unreached' and for human resource development, the developing countries are required to up scale their open schooling programme as a priority agenda. Some developing countries are taking steps to give impetus to the open schooling programme along with large scale expansion of the 'formal schooling'. There is a need that the developing countries which have taken lead in operationalisation of the Open Schooling Programme should come forward to share their experiences with other developing countries.

The National Institute of Open Schooling (India) has been implementing the Open Schooling programme for more than two decades. It has been organizing advocacy and

consultancy programmes in the area of Open Schooling for quite some time. Several advocacy and consultancy programmes for developing countries of Asia and Africa have been organized jointly by NIOS and international organizations like the Commonwealth of Learning (COL) and UNESCO. A Forum titled Open Schooling Association of Commonwealth (OSAC) has been set up. NIOS (India) acts as a Secretariat of OSAC.

10.   MANAGEMENT INFORMATION SYSTEM

The Open Schooling organization is required to tone up its Management Information System (MIS) to bring efficiency in formulation, implementation monitoring and evaluation of programmes and activities. A comprehensive re-engineering of the process should be an integral part of the strategic approach of the vision of the organization. A viable and effective MIS will go a long way to ensure quality of the Open Schooling system and placing it on a sound pedestal.

11.   EPILOGUE

The Open Schooling System with inherent learner-friendly flexibilities is required to be given due emphasis in the developing countries for 'reaching the unreached' and for "turning human liability into human asset". In order to place the Open Schooling system on a sound pedestal, rigorous research, development of pedagogy and self instructional materials (both print and non-print) of good quality, capacity building of Open Schooling functionaries and flexibilities in examination and certification need to be ensured.