

CHAPTER I

CONCEPT AND TYPES OF EDUCATION

The general notion of education a few thousand years ago was that of someone assigning lessons to a group of young people and punishing them for their mistakes. But now with the introduction of several communication media in transferring the sophisticated knowledge into simple and understandable form and with substantial changes in the educational norms as well as the norms of the teachers, the system of education is moving towards a speedy evolution.

WHAT IS EDUCATION ?

Education is the process of bringing desirable change into the behaviour of human beings. It can also be defined as the process of imparting or acquiring knowledge and habits through instruction or study. When learning is progressing towards goals that have been established in accordance with a philosophy which has been defined for, and is understood by the learner, it is called 'Education'.

If education is to be effective it should result in changes in all the behavioural components (Fig. 1.1).

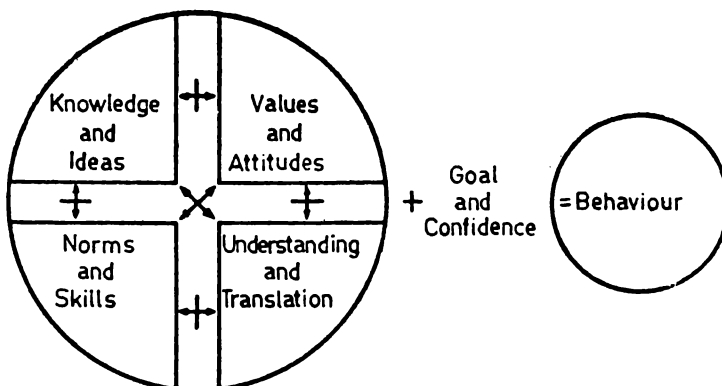


Fig. 1.1. Behavioural components

The behavioural changes must be directed towards a desirable end. They should be acceptable socially, culturally and economically, and result in a change in knowledge, skill, attitude and understanding. Thus, in education, the greatest emphasis should be placed on the behavioural component of an individual.

Behaviour

The behaviour of an individual, in a broad sense, refers to anything the individual does. This is goal-oriented, it includes the goals one selects and the means one chooses to achieve these goals and, as such, it is action-oriented.

Parsons and Shils (1965) proposed a theory of action which could serve as a conceptual model for the analysis of human behaviour. They say that:

(i) Behaviour is oriented to the attainment of ends or goals or other anticipated state of affairs;

(ii) It takes place in a situation;

(iii) It is normatively regulated; and

(iv) It involves expenditure of energy or effort or motivation.

According to Leagans (1961), behaviour refers to what an individual knows (knowledge), what he can do (skills—mental and physical), what he thinks (attitudes) and what he actually does (action).

Behaviour is, therefore, a function of the person in interaction with the situation. The factors motivating behaviour either in the person or situation, are:

(i) An environmental determinant;

(ii) The internal urge, wish, feeling, emotion, drive, instinct, need, want, desire, demand, purpose, interest, aspiration or motive which gives rise to the action; and

(iii) The incentive or goal which attracts or repels an organism.

When the relationship between environmental and behavioural components are not identifiable, some hypothetically intervening variable is postulated to account for the behaviour. Thus, individual variations do exist in the learner's behaviour. His behaviour is extremely difficult to predict.

In the experimental analysis of human behaviour, three fundamental problems arise:

(1) Determining the significant factors which influence the behaviour under investigation;

(2) Determining how these factors determine the behaviour; and

(3) Deciding the ways in which these factors react.

In order to bring about an all-round development in the personality of a student, a trainee or learner, a farmer, or a homemaker, etc., the teacher, or extension worker must devote attention to change in knowledge, skills, attitudes, beliefs, etc. Merely increasing knowledge or perfecting skills will not make a man educated.

THE NEED OF EDUCATION

As society develops, it becomes imperative that the cumulative experience and the knowledge necessary for political, economic, social and other development should be passed on to new generations, or to the people who need this knowledge. The accepted customs, norms, values, skills, which are required to be preserved need to

be passed on to successive generations. It is the need for education that gradually gave rise to a philosophy of education.

Education as a learning experience has several facets. Before these facets are examined, the basic proposition that education is a learning experience needs some examination. Education comprises instruction, teaching, information gathering, knowledge gathering and transmittance, study and reflection, discussion, demonstration and the formulation of pilot programmes. What is common to these several forms of education in which one individual confronts another or several others, or in which an individual is placed face to face with a book, film, museum or experiment, is that they are means of acquiring knowledge and/or information. In these various forms, it is possible to distinguish between the bits and pieces of knowledge and information acquired, and the process of acquiring them. The former is intellectual baggage and the latter is what is termed the learning process.

Learning has several objectives. At the highest and most idealistic plane, learning entails becoming a whole and complete man, physically, mentally and spiritually; learning how to create a pathway to knowledge which continues to evolve throughout the course of one's life is yet another grand objective. Defending oneself against exploitation by the dominant classes, understanding the conflicts in and between societies and the utilising of collective action by those who are powerless and hungry are the other facets of the new education.

Learning also has a more specific, and relevant objective, namely, **To Do, By Doing, and For Doing**. Learning To Do refers to two interrelated activities, learning and doing. They comprise: (a) the formation of new ideas or new combinations of existing ideas, which we call learning; and (b) purposeful activity, leading from one overriding purpose to another, which may be called doing. These activities are interrelated for the union of learning with doing results in the socialisation of the ideas and the purposes of the activity. Learning To Do, unlike learning *per se* cannot be self-centred, and, unlike doing along, cannot be wasteful or self-serving.

Learning To Do permeates all forms and types of education. In adult education as well as in all out-of-school and out-of-college education, the work situation through which learning is acquired is there at hand.

The main task is to design the curriculum around the concepts and resultant skills that conform to the various forms of work. This is a hard exercise because it is innovative, individual and informal. It is innovative because there are no prior models that can be copied or adopted. It is individual because the learning programme for each new case will be different from the others. It is informal because it does not have the pomp and paraphernalia surrounding formal degrees and diplomas and their false promises of attractive employment and rewarding remuneration.

TYPES OF EDUCATION

With the development of society, education has taken many shapes, such as: (a) Child Education, (b) Adult Education, (c) Technical Education, (d) Education in the Humanities and Social Sciences, (e) Education in the Arts and Crafts, (f) Health Education, (g) Physical Education, and several others. The other broad classification

of education could be: (1) Formal Education, (2) Non-formal Education, and (3) Extension Education, which will be discussed in succeeding parts of the book.

Formal education

Formal Education is basically an institutional activity, uniform and subject-oriented, full-time, sequential, hierarchically structured, leading to certificates, degrees and diplomas.

Non-formal

Non-formal Education, is *not formal*, which means:

It is flexible.

It is life, environment and learner-oriented.

It is diversified in content and method.

It is non-authoritarian.

It is built on learner-participation.

It mobilises local resources.

It enriches human and environmental potential.

Extension education

This new term Extension Education combines both adult education and informal education. It is concerned with educating adults, i.e., farmers or homemakers, not in the letters and alphabet, grammar or language, but in the techniques of raising better crops, better animals, better fruit trees, managing the home in a more efficient way, rearing children scientifically, taking care of the nutrition of the family, etc.

The areas of our concern can be defined thus:

(a) Agricultural Extension—extending knowledge to the agriculturists;

(b) Veterinary and Animal Husbandry Extension—extending knowledge about breeding, managing, feeding and care of animals, and birds, etc;

(c) Agricultural Engineering Extension—extending knowledge about agricultural machinery such as tractors and pumps, the levelling of land, water use, soil conservation, etc;

(d) Home Science Extension—extending technical knowledge to farm wives, or ladies in urban and rural areas on food, child care, home decoration, kitchen gardening;

(e) Industry Extension—extending knowledge on the managing and running of industries.

Similarly it can be sanitation and health extension, or any area which seeks to extend technical and scientific knowledge to a client system or the audience or the people who are to be educated along the lines of the innovations developed in the respective technological disciplines.

CHAPTER 2

NON-FORMAL EDUCATION

Mere reliance on Formal Education cannot cover all the educational needs in India, and it is disproportionate both to the growing quantitative requirements and to the increasing demands for greater relevance of education. Therefore, the Central Advisory Board of Education endorsed this proposal and made the following recommendations:

(1) The exclusive emphasis on the formal system of education should be given up and a large element of Non-formal education should be introduced within the system. Multiple-entry and programmes of part-time education have to be adopted in a big way. At the secondary and university stages, part-time and correspondence education should be developed and all encouragement given for programmes of self-study.

(2) Programmes of adult education are of great significance for the success of the programme of universalisation of elementary education, as well as for securing the intelligent participation of the people in all programmes of National Development. They should, therefore, be developed on a priority basis. In particular, the Board recommends that the Functional Literacy Programme which represents the single largest on-going effort of intensive Non-formal Education linked to a developmental activity, should be strengthened and expanded; and that similar functional literacy programmes should be developed in relation to other developmental schemes appropriate to rural and urban situations. The Board further recommends that adult education programmes should form an in-built part of every developmental activity whether in the rural or urban, public or private sector, and that every Central and State Ministry/Department should make appropriate provision in the respective schemes.

(3) Adequate financial allocations should be made in the State Plans for non-formal education for the age group 15-25 on the basis of well-defined norms set up by the State Governments (Broad guidelines on the subject may be given by the Government of India).

(4) The programme should be flexible, diversified and functionally related to the needs and interests of youth and should equip them for participation in developmental activities.

(5) During the year 1974-75, all efforts were made to begin the programme in.

(a) one district in each State with Central assistance, and (b) at least one additional district with State funds.

(6) By the end of the Fifth Plan efforts were made to cover at least six to seven million illiterates in this age group.

For whom is it intended?

Non-formal education is intended for all age groups and sections of society—children, youth and adults; working men and women; the unemployed and those with leisure; the illiterate, semi-literate, literate or educated; urban or rural people. This means that all categories of people if and when they need, if and when they want—should be in a position to have access to non-formal opportunities for learning. Those who are in formal education or who have benefited from it, may also need non-formal education for personal fulfilment, professional growth, or deeper understanding.

For whom first?

First priority is now being given to those who have been neglected for a long time, the group of out-of-school youth for whom practically no learning facilities are available, but whose potential for the country's development is most precious and vital.

The emphasis in the Fifth Five Year Plan, therefore, is on providing non-formal education opportunities to youth in the 15-25 age group. Of the 90 million youth in this age-span, nearly 50 million are illiterate and another 20 million are semi-literate; a large proportion of them live in rural areas under deprived and under-privileged circumstances.

This programme is now being started in one district of each of the 24 States/Union Territories with Central Government funds. State Governments are also starting the same kind of programme in one or more districts with their own funds.

Where, when, how and for how long?

Non-formal Education Programmes can be organised wherever it is most convenient to learners.

The classes could be held whenever possible—in the mornings, afternoons, late evenings or on holidays. The courses could be continuous, extending over a long period with a shorter duration each day, or for a shorter term with longer hours each day, or as a recurrent course spread out over two or three summers or at convenient intervals. The exact timings and the length of the classes should be governed by the environmental conditions as well as the learners' work and occupational schedule, also important is the interest, need and will of the learners. The duration of classes may be prolonged or cut short as required.

What is its content?

By its very nature, the content of the Non-formal Education Programme is related to the specific social, cultural, economic and environmental needs of each learner group.

This means that the curriculum is flexible, diversified and responsive to contem-

porary national problems, current community issues and prevailing learner concerns. In any case, it should present a fair balance of major national, community and individual goals and interests.

As it is inter-disciplinary and since it is made up of several elements according to the environmental and learner requirements, no person can handle the programme single-handed. The programme, therefore, envisages the mobilisation of resources and persons drawn from various disciplines, as well as the use of multi-media. Instructors would include employed and unemployed educated youth, skilled workers and technicians, educated and progressive farmers, social workers, retired persons, educated housewives, university, college and school teachers and students, personnel from teacher training colleges, craftsmen and artisans.

What are the learning processes?

Learning in a Non-formal Education Programme takes place through:

Democratic discussion and dialogue

Critical analyses of factors in the environment

Self-analysis and reflection leading to understanding

Autonomous selection of information and cognizance

Acquiring of new communication potential such as reading, writing and calculating capabilities

Action programmes and community activities

Training in practical skills

Sharing experiences

Relating education to life, social and work experiences.

In short, it should be an exciting, revealing and profitable experience. Non-formal education should not be:

Authoritarian and imposed

Abstract and theoretical

Mechanical and routine

Unrelated to the concerns and interests of learners.

Where does it lead to?

Non-formal education processes and programmes should, in the long run, lead to:

Creating an awareness, in individuals and society, of the prevailing environmental situations and the need for and direction of change.

Cultivating a rational, objective and scientific temper.

Enriching human potential and thereby increasing community resources, and promoting individual and group creativity.

Increasing the functional relevance of learning both to the learners and to the community.

Achieving a greater degree of individual, social, cultural and economic development through democratic action and active participation.

Building a learning environment in which every individual shall have equal opportunity for continuing self-learning.

A better sharing of opportunities and social wealth and particularly, a more equitable and just distribution of knowledge among various sections of society.

Who can help?

The answer to this is that everyone can help.

Legislators *by* political action;

Administrators *by* planning and implementation;

Developmental agencies *by* integrating education with development;

Industry and business *by* offering physical and material facilities;

Professional bodies *by* exploration of new methodologies;

Institutions for formal education *by* opening their doors to the non-formal education of the community;

Mass media *by* giving motivational and follow-up support;

Educated men and women *by* donating their time and labour;

Teachers and students *by* teaching, mobilising resources, organising classes, guiding and assisting the learners; and

Educational institutions and specialists *by* preparing teaching/learning materials.

MAIN SCHEMES OF NON-FORMAL EDUCATION

The Fifth Five Year Plan's educational strategy was built on the assumption that formal and non-formal education should be correlated and integrated. Since in a country like India with its enormous educational needs, formal education through full-time and institutional education alone cannot be sufficient for the achievement of major educational objectives. However, non-formal education should not follow the same pattern and methods as the formal systems but should adopt new flexibility and adaptations to real learning needs. It must be developed for all categories of learners and at all levels of education. The main emphasis will be laid on the following programmes:

- (1) Non-formal education for non-school going children in the age group 6-14;
- (2) Non-formal education for youth in the 15-25 age group;
- (3) Functional literacy linked with development schemes.

(1) Non-formal education for Non-school-going children in the age group 6-14*Part-time programme and multiple point entry*

The universalisation of primary education is certainly one of the major, if not the major, national goals in the whole educational sphere.

Indian primary education, both for the 6-11 and for the 11-14 age groups, has its bright sides and shadows:

(a) Although the enrolment in elementary education rose between 1950 and 1973, from 22.3 million to 78.8 million, there are many millions of children still to be enrolled in primary schools;

(b) Although a very large percentage of children start elementary education, a considerable number of drop-outs, even at a rather early stage, is decreasing the positive effects of primary schooling; and

(c) Although the network of primary schools has practically covered all areas,

there are millions of children who for various reasons (mainly socio-economic, but educational as well) are missing elementary education.

In spite of the availability many children are not enrolled in primary schools for reasons like the necessity to work (numerous children are not only working at home or on the family farm, but are also employed in handicrafts, industries, shops etc.) or (particularly in the case of girls) the need to take care of younger children in poverty-stricken families.

Many other children are not enrolled or leave school at an early stage because there are prejudices against formal schooling. Many pupils, as well as their parents, have the feeling that the existing curriculum is neither relevant to their needs, nor suitable to their interests, and, in addition, the ways of formal education are often unattractive and even loathsome to them. Parents, particularly in families where the children are the first generation of learners, often cannot perform their educational and motivational roles.

Therefore, universalisation of primary education necessitates economic measures, social promotion, improvement of the existing school education, parents' education and the search for new educational alternatives in order to attract non-school-goers and early school-leavers. Here we are concerned only with the last aspect.

Basic objectives

The basic objective is to offer elementary education to children who cannot afford it under existing circumstances and modalities, particularly through: (1) Part-time instruction for children who cannot follow full-time programmes; (2) The possibility of multiple entry into primary schools at later stages (at the age of 9, 11 or even 14); (3) Remedial programmes for so-called drop-outs. There are already interesting experiences in this respect ("Three-hour Schools", or evening classes for "Working Children", or schools functioning as "Community Centres", etc.) which should be studied, popularised and utilised on a large scale.

Beneficiaries

Different categories of children and youngsters may benefit from these different programmes and facilities:

- (a) Children in the age group 6-11 who are not in a position to follow full-time, regular primary school instruction;
- (b) Children in the age group 6-11 who have left primary education after a few years of schooling;
- (c) Illiterate children in the age group 11-14, who have not had the chance to be enrolled in the primary schools, or have left them after one or two years only; and
- (d) Literate children in the age group 11-14 who for various reasons, after having completed class V, are not continuing their education through the formal system.

The educational needs of these children may vary. Some may be interested in returning to educational institutions and continuing their regular education, others may be more inclined towards receiving some basic additional knowledge and know-how, as well as acquiring a broad understanding of different aspects of work life so as to prepare for it. Various methods of non-formal education for children in these

age groups should be devised, so as to meet the educational needs of all these categories.

Programmes

The programme for the beneficiaries in the 6-14 age group cannot be uniform as there is diversification of interest and concern in the group. They should be adapted both to the different children's groups and to the varying environments. There are, in reality, two main categories of programmes:

(1) Part-time primary education, meant to enable out-of-school children to join the main stream of formal education. These programmes will practically follow the same curriculum as in regular schools, with a shorter duration due to the children's age, maturity and experiences; and

(2) Non-formal education, meant to cover the various educational needs of non-school going children or "drop-outs". These programmes will need to be differentiated, based on conditions prevailing in various environments and oriented to help children improve their work, earnings, health, family life, understanding of the natural and social surroundings, etc. These programmes should be of various durations, using different learning and instructional materials and methods.

Instructional materials

A portion of the learning and teaching materials can be the usual textbooks and other aids utilised in formal primary education. But, the need will gradually arise for new types of didactic materials as the content of learning for this age group has to be enlarged and made more practical, and also adapted more to the psychological and mental traits of working children, drop-outs, etc.

Agencies

Community support will come through the provision of learning facilities as well as through the adaptation of the programme to community needs. The agencies will be the same as for formal education: primary and middle schools, primary school teachers and existing supervisory machinery at the State and District levels.

(2) Non-formal education programme for young people in the age group 15-25

This scheme is of paramount importance and had a priority role in the Fifth Five Year Plan period. Its implementation should be the joint effort of the Central Government, State Governments and voluntary organisations.

The problem

The largest portion of the youth in the 15-25 age group which is illiterate or semi-literate have either not got involved in the primary schools at all, or have left primary school at an early stage. The members of this group play a very important role in society. They are often engaged in economically productive occupations and not only render socially useful services, but are involved in many community activities as well. Most young people get married and make a home and start a family in this

age span and they are thus in the most dynamic stage, imbibed with both the potential and the thirst for learning.

Past experience has shown that a programme which is based purely on, and limited to, literacy does not attract and hold the attention of the illiterate. Past experience has also shown that, particularly in rural areas, out-of-school educational activities should not be developed in isolation, but in close correlation with family and community life, as well as with various development programmes. It is, therefore, essential to relate the educational content to the needs, interests and environment of the persons for whom it is intended to make it as functionally relevant as possible and also to link such a programme to the other social and economic inputs in a rural or urban community. It should form the "Educational Component" in schemes such as food production, water supply, agrarian reform, resettlements, employment programmes, generation of self-employment, family planning, small scale industry, sanitation, various minimum needs programmes, etc. This will be a departure from the previous literacy courses, in the sense that it will be a composite programme of non-formal education, including literacy.

Motivation and encouragement

Motivation should be intrinsic, based on the internal and practical needs of young people. This is why: (a) programmes should be diversified, in order to correspond, as much as possible, to the different environments, interests and needs of various categories of boys and girls; (b) starting from a general framework and proto-type learning material, adaptation of the curriculum should be founded on a survey of each environment.

This type of non-formal educational programme needs a lot of encouragement, both before (political and moral support, psychological preparation, etc.), and during the implementation of the programme (use of attractive methods, cultural and outdoor activities, excursions, etc.). The learners involved in non-formal educational programmes should get some priority treatment such as employment, job promotion, credit facilities, fertiliser distribution, new seed varieties, etc.

There is another type of motivation which is certainly advisable. This is the opportunity to be provided to non-formal learners (the best of them) to gain admission (on the basis of a test or other examination) to formal education or higher types of vocational, professional, non-formal, training facilities. For the time being, in the Indian system, the interlink between the formal and non-formal is practically non-existent and at best marginal. A lot of improvement and innovation has to be done in this respect.

Agencies

In the implementation of this programme there is a role for a variety of institutions and agencies—schools, vocational institutions of all categories, Nehru Yuvak Kendras, Youth Clubs, Agricultural Training Centres, Industrial Training Institutes, Institutions for Health Education, Family Planning Centres, various voluntary organisations, Village Literacy Centres, Farmers' Functional Literacy Project Centres, local skill training facilities, social service schemes, libraries, local non-governmental schemes for rural

development or social welfare, and many other “potential” institutions and individuals whose contribution to such a vast and multifaceted programme is essential.

Contents

It is evident that the content of the programme has to be complex:

(a) It has enabled the participants to get the basic understanding of the social and environmental structure around them, based on an elementary scientific knowledge and mode of thinking;

(b) It must encourage a positive set of attitudes towards themselves, their fellow-men, and their society;

(c) Equally, it should enable them to participate in the local economy through employment or self-employment, and also improve their way of living; and

(d) Finally, it has to equip them mentally and functionally to raise a family and run a household.

The emphasis of the learning-teaching process is not so much on accumulation of knowledge or skills, but more on aptitudes and attitudes for problem-solving, and for active participation in the surrounding environment.

Curriculum

The curriculum will contain:

(a) Information and knowledge about the living environment and the development process in the country;

(b) Basic knowledge for understanding various social, economic, scientific and technological changes in the midst of which the youth has to live and work, and to which he has to adjust in terms of knowledge and skill, in order to play a fully contributory role;

(c) Elementary principles of health and hygiene, child care and nutrition;

(d) Basic skills in reading writing and arithmetic, correlated with attitudinal changes and aptitudinal promotion; and

(e) Introductory occupational/vocational skill programmes to prepare him for employment and self-employment.

The learner should be brought up to a level where a habit of continuing education or self-education could start.

Methods

The basic principles for methods used in the scheme are:

(a) That the educational process should be a dialogue about problems stemming from life;

(b) That the methods should be active, in order to involve the learner as a true participant;

(c) That such methods should be attractive to young people;

(d) That the methods should be based on facilities existing predominantly in the local environment; and

(e) That in communicating the programme, the method should be largely audio-visual media based.

Types of programmes—extensive vs. intensive

With as large a target as six million to be reached in a period of five years, it is essential to mount a programme on as wide a base as possible, covering all the districts in the country. Although this means an extensive effort and coverage, the programme is more of an intensive nature, from the standpoint of its educational objectives, its broad curriculum and the methods to be used.

Incentives to student volunteers

Student volunteers who participate in the non-formal education programme could be awarded certificates of honour on the successful completion of their assignments. A certificate required to be provided by the village school headmaster to the effect that during the given period, the student volunteer appointed for the purpose has discharged his functions and imparted the non-formal education programme to the given number of students.

Follow-up

Follow-up is very important for the continued success of the programme of non-formal education. The responsibility in regard to the follow-up action may be taken up by the local school, or through a mobile library service, or through other available agencies. An intensive programme may be launched with the assistance of the local school teacher, who may be given a suitable honorarium for the purpose. An adequate follow-up programme will have to be devised and tested. It should include the production of literature, local journals, discussion forums, various community activities, etc., in order to maintain the literacy skill reached and to prevent relapse into illiteracy. This follow-up action will apply to all the three patterns.

(3) Functional Literacy Programme linked with Development Schemes

The Farmers' Functional Literacy Programme is the biggest on-going country-wide programme of out-of-school adult education. It is in reality a complex non-formal education system at its initial stage. Its implementation is the responsibility of the Central Government, and the scheme is classified as a Central Sector Programme.

The problem

There are many development schemes and projects in the country whose efficient implementation is hampered by the low level of educational attainments. This is particularly true of the enormous scheme of High Yield Crop Varieties, since the modernisation of agricultural practices has to be accompanied and supported by a programme of man-power development.

The farmers' training and functional literacy programme, an inter-ministerial project implemented jointly by the Ministries of Agriculture, Education, and Information and Broadcasting, is an attempt to get a qualified answer to this fundamental challenge. The basic idea behind the project is that there is a direct correlation between the physical and human ingredients in agriculture, between agricultural inputs and the upgrading of human resources. In other words, this is an integrated approach to a comprehensive rural development programme, to the "Green Revolution". The

main goal of the scheme is to support and strengthen one of the basic national objectives; self-sufficiency in food, increase in crop production and growth of agricultural productivity. It is an attempt, and the first one on such a scale, to place educational activities in direct relation to one of the major development purposes.

The functional literacy component was not only viewed in correlation with other developmental objectives but from the very beginning was conceived as, more than a literacy programme, a method of training for development purposes, a comprehensive non-formal educational programme and an opening to continuing education.

Expansion of the approach

The basic approach will be expanded during the Fifth Five Year Plan in three directions:

(a) The number of districts where the Functional Literacy Programme is functioning in relation to the HYCV Schemes will be increased;

(b) The number of farmers involved in functional literacy courses will be increased in each of the districts, particularly those from the poorer sections of the rural population for whom this development scheme is intended, but who do not benefit from it adequately; and

(c) The functional literacy component will be included in several other development schemes—such as dryland farming, water supply schemes, small and marginal farmers' programmes, programmes of industrial development, public enterprises family planning programmes, sanitation, child care, cultural development, civic participation, etc.

Planning

The first aspect of the programme planning concerns the expansion of the farmers' functional literacy to additional HYV Districts in coordination with programmes of the Ministry of Agriculture. Based on plans for agricultural development and modernisation, the selection of districts, as well as the selection of village centres in each district will be made, by an interministerial group, in close consultation with State authorities.

The second aspect of the programme planning consists of the identification of environmental needs and problems in each district as well as of the main trends and problems encountered in rural and agricultural development. Based on these findings, the programme content and learning material (prepared by the Directorate of Adult Education) may be adapted, modified and complemented. For this purpose, an interdisciplinary and interdepartmental group has to be established in every district.

The third aspect of the programme planning concerns the development of functional literacy programmes linked with social and economic development purposes other than HYV, such as those mentioned earlier. The most important and difficult task consists in selecting well-suited development schemes for this purpose, and building an educational "component" around them. In other words, there will be a certain number of non-formal educational programmes, diversified in their nature, based on and linked with environmental needs, developed round the interests of potential clientele groups, differentiated in content and methods, and selective in approach. Proposals for these types of programmes will have to be initiated by State authorities and/or voluntary organisations.

Type of Programme—Intensive/Selective

Bearing in mind the general objectives of the programme, it has to be both intensive and selective. Having overcome the mere goals of literacy skills the programme has to be intensive regarding its educational pattern, methods and results, and selective regarding the environments and areas chosen for operational work, clientele to be served and messages and content to be acquired.

Duration and timing

The duration of the programme for each group of learners would be eight to nine months, divided in two or three programme cycles.

The timing of the programme, i.e., beginning and closure, need not be uniform, but rather linked closely with the “cycles” of the development programme itself, the production cycle in a factory, the agricultural calendar in rural areas, etc.

Content and curriculum

The content and curriculum have been well formulated at the beginning of the programme, and have been constantly revised and improved.

The emphasis will now be placed on:

- (1) A better implementation of the curriculum; and
- (2) Closer adaptation to local needs, environmental circumstances and learners' abilities.

Learning materials

The learning material for the programme (linked with the utilisation of seeds of high yield crops) has been prepared and issued in Hindi (revised already four times), and adapted and translated into Assamese, Bengali, Gujarati, Kannada, Marathi, Oriya, Punjabi, Tamil and Telegu.

Thirty-two booklets, on different subjects linked with the “Green Revolution”, have been produced in six languages.

The main tasks during the Fifth Plan period are the following:

- (1) Enriching learning materials for functional literacy groups (providing a complete set consisting of at least eight items: primer, reading booklets, content sheets, newsletter, charts, other visuals, film strips for learners and teachers' guide for the group leader);
- (2) Up-dating reading materials (by organising, in as many districts as possible, the production and circulation of a monthly newsletter, or local newspaper, or a page in an existing newspaper with news, lectures, texts, answers to farmers' queries, etc.); and
- (3) Diversifying learning materials according to the variety of programmes and clientele, but basing them on the same methodological approach as for HYVP.

Methods

There is already a basic understanding of learning methods to be used in Farmers Functional Literacy Programme.

Nevertheless, there are three additional points which need to be emphasised:

- (a) The learners are neither sufficiently involved as active participants, nor has there

been a real dialogue and a common search for solutions established on a sufficiently large scale;

(b) Practical agricultural work is not yet generally included in the curriculum. Village centres for functional literacy are rarely equipped with seeds, fertilisers, tools, etc., to serve as learning equipment which will aid in increasing the know-how of learners; and

(c) Different activities organised by agricultural departments or farmers training centres, such as national demonstrations, agricultural extension work, dissemination of agricultural information through printing or broadcasting, etc., are seldom integrated with the teaching process in functional literacy centres.

Administration and coordination

The programme has to be implemented through machinery whose main "wheels" are:

- (1) The respective unit in the Union Ministry of Education, for planning the general lines of the scheme, for the allocation of financial resources, for basic supervision and general guidance;
- (2) One unit in the Directorate of Adult Education for technical and professional guidance and coordination;
- (3) An officer of a small unit for non-formal education and functional literacy at the State level, in the Department of Education;
- (4) A full-time project officer in each district who will be responsible for the two programmes (non-formal education for young people in the 15-25 age group and the functional literacy programme linked with development schemes);
- (5) A professional, full-time, supervisory machinery in every district; and
- (6) Coordinating committees at the central, state and district or local levels.

CHAPTER 3

EXTENSION EDUCATION

A dynamic and flexible type of education is one which serves the people wherever they are, whatever they are. It assists in the development of the individual as well as all categories of the constituents of society. These characteristics and qualifications are well suited to the discipline of Extension Education.

Lewis Jones says: "Invention of Extension Teaching was so original, so far in advance of conventional educational practice, that it has been little understood or even noticed by the main body of education."

Sohal has remarked: "On account of its simple but generic nature, extension education is taken for granted to be thoroughly and completely understood in its entirety by each and every person concerned directly or indirectly with it. But whereas it can be admitted that one or a few aspects of this subject can be expected to be known extensively, yet there are only a few individuals with professional insight into the subject who really know all of its varied facets."

Concepts of extension education

There are as many definitions as those who define. Shukla¹ (1972) collected and studied several prevailing concepts of extension education using psycho-physical methods to find out the comparative attitudinal positions for these concepts. The findings of his study are given as follows:

Rank Order of the Concept	Concept
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- I Extension education is an applied science consisting of contents derived from researches, accumulated field experiences and relevant principles drawn from the behavioural sciences, synthesised with useful technology, in a body of philosophy, principles, contents and methods focussed on the problems of out of school education for adults and youths (Leagans, J.P.).

¹Shukla, A.N. (1972) "The Concept of Extension Education: A Study in Psycho-physical Methods," *Studies in Extension Education*. (Ed.). PRR Sinha. NLCO, Hyderabad.

Rank Order of the Concept	Concept
II	Extension is an education and its purpose is to change the attitude and practices of the people with whom the work is done. (Ensminger. D.)
III	Extension education is defined as an educational process to provide knowledge to the rural people about the improved practices in a convincing manner and to help them to take decisions within their specific local conditions. (Dahama, O.P.).
IV	Agricultural extension is concerned with agricultural education aimed at assisting rural people to bring about continuous improvement in their physical, economic and social well being, through individual and cooperative efforts. It makes available to the villages, scientific and other factual information and training and guidance for the solution of problems of agriculture and rural life.
V	Extension education is the act of putting across to the people, in an understandable manner, new ideas and improved technology of practical utility and to enable them to put them into practice so as to improve their general standard of living through their own realisation and efforts.
VI	Extension education is a science which deals with various strategies of change in the behavioural patterns of human beings through technological and scientific innovations for the improvement of their standard of living.
VII	Extension is a continuous process designed to make the rural people aware of their problems and indicating to them the ways and means by which they can solve them. It involves not only educating rural people in determining their problems and methods of solving them but also inspiring them towards positive action in achieving them.
VIII	Agricultural extension is a bridge that fills the gap between agricultural research stations on the one hand and the farming population on the other by establishing a suitable teaching organisation at various levels of administration.
IX	Extension education is an applied behavioural science, the knowledge of which is to be applied for desirable change in the behavioural complex of the people.
X	Extension is defined primarily as an educational process aiming at the development of individuals; through this process the villagers are helped to become discontented with the present conditions and are helped by extension workers to improve their conditions of living.
XI	Extension is to teach a person how to think, not what to think, and to teach people to determine accurately their own needs to find solution to their own problems and to help them acquire knowledge and develop convictions in that direction.
XII	Extension is an out-of-school system of education in which adults and young people learn by doing. It is a partnership between Government, the Land Grant Colleges and the People, which provides services and education designed to meet the needs of the people.
XIII	Extension or agricultural extension is a method, or a series of methods, by which the technical know-how of science is carried to and included in the practices of the cultivators.

Rank Order of the Concept	Concept
XIV	Extension education is the education of the people as to what more to want as well as how to work out ways of satisfying them. Informing people not to remain content with their present lot and inspiring them to work vigorously towards fulfilment of their self-created, increased wants or desires.
XV	Extension is the education of the rural adults outside the school in matters of their choice and interest. It is education for freedom, which seeks to help persons to use the liberty of action with which democratic society is constructed.

From the above definitions, the following basic questions have emerged:

1. What category of science is it?
2. What is its subject matter?
3. What is its relationship with technology and the other sciences?
4. Who are the clients of this discipline?
5. What are its methods, contents, principles and philosophies?

Precise, valid and objective answers to the above questions have been attempted in the succeeding part of this chapter. However, the following definition, which covers the various components will give an answer to the questions raised above.

“Extension education is a Behavioural Science following a continuous, persuasive and discriminating educational process. It aims at affecting the behavioural components of people in a desirable direction, through conviction, communication and diffusion, by its proven methods, principles and philosophies resulting in learning-involvement of both client and change-agent systems.”

Philosophy of extension education

Philosophy, in the original and wider sense, is the pursuit of wisdom, or knowledge of things and their causes, both theoretical and practical. It is also defined as moral wisdom. Philosophy is an attempt to answer ultimate questions critically after investigating all that makes such questions puzzling and after realising the vagueness and confusion that underlie our ordinary ideas.

The philosophy of extension education has been described and interpreted in different ways by different authors and a clear picture cannot be drawn due to the very complexity of its nature. All one can do is try to gain a comprehensive idea by examining the view points of various authors.

Kelsey and Hearne (1955) state that the philosophy of extension work is based on the importance of the individual in the promotion of progress for rural people and for the nation. Extension educators work with the people to help them to develop themselves and achieve superior personal well-being. Together they establish specific objectives, expressed in terms of everyday life, which lead them in the direction of overall objectives. Some will make progress in one direction while others will do so in another direction. Progress varies with individual needs, interests and abilities. Through this process the whole community improves, as a result of cooperative participation and leadership development.

According to Ensminger (1962), the philosophy of extension can be expressed in the following lines:

- (1) It is an educational process. Extension is changing the attitudes, knowledge and skills of the people;
- (2) Extension is working with men and women, young people, boys and girls to answer their needs and their wants. Extension is teaching people what to want and ways to satisfy their wants.
- (3) Extension is "helping people to help themselves";
- (4) Extension is "learning by doing" and "seeing is believing";
- (5) Extension is development of individuals, their leaders, their society and their world as a whole;
- (6) Extension is working together to expand the welfare and happiness of people;
- (7) Extension is working in harmony with the culture of the people;
- (8) Extension is a living relationship, respect and trust for each other;
- (9) Extension is a two-way channel; and
- (10) Extension is a continuous, educational process.

Dahama (1965) gives the following points as the "Philosophy of Extension".

- (a) Self-help;
- (b) People are the greatest resources;
- (c) It is a cooperative effort;
- (d) It has its foundation in democracy;
- (e) It involves a two-way channel of knowledge and experience;
- (f) It is based on creating interest by seeing and doing;
- (g) Voluntary, cooperative participation in programmes;
- (h) Persuasion and education of the people;
- (i) The programme is based on the attitudes and values of the people; and
- (j) It is a never-ending process.

Mildred Horton has described four principles which make the philosophy of extension education. They are:

- (1) The individual is supreme in a democracy.
- (2) The home is the fundamental unit in a civilisation.
- (3) The family is the first training group of the human race.
- (4) The foundation of any permanent civilisation must rest on the partnership of man and land.

Shukla, while supporting the philosophy of Horton, emphasised—"Extension programme revolves around the individual, the cultivator, and we have to bring change in his attitude, knowledge, skill, understanding, capacity and ability through persuasion by educational means."

Rudramurthy (1966) has linked the philosophy of extension work with the Vedas, the Upanishads, the Gita as well as the orthodox and unorthodox schools of philosophy. This is based on the concept of man and the values which are worthy of human pursuit.

Bhatnagar (1971) perceives extension to be the activities of the State Governments (with, or without, the help of Central Government, or other agencies) which provide the farmers with technical know-how as a guide to improved methods, in order to bring desirable changes in their behaviour with the aim of attaining higher production.

In this sense, the extension activities relate closely to the activities in research and education.

Principles of extension education

Understanding of principles

Before taking up the discussion of the Principles of Extension it will be worthwhile to examine what is meant by the word "principle". "A principle is a statement of policy to guide decision and action in a consistent manner" (Mathews).

Its meaning will be clear when we try to understand the sequence of generalisation. When something is put forth as a point of view, or an assumption, and its proof is not known, it is called a hypothesis. When a hypothesis is put to a test and the point of view, or the assumption, turn out to be acceptable, it is called a theory. When a theory is put to several rigorous tests, under different settings, by different individuals and the findings are found to be in substantial agreement, then it is given the name of a principle. Thus, a principle is a universal truth that has been observed and found to be true under varying conditions and circumstances. A principle is a fundamental truth and a settled rule of action.

Importance of principles in extension work

It is usually believed that the knowledge of the principles is of no value to an extension worker. These principles are considered to be of academic interest for the students taking advance courses in extension. Leagans, however, holds out clearly on the need for a sound knowledge of the principles for the extension workers. He points out that without this knowledge extension workers either keep on labouring under some handicaps, or make grave mistakes, particularly in the initial stages. Further, if an extension worker aspires to become an administrator or a supervisor, it will be all the more necessary for him to possess a sound knowledge of the principles of extension.

Relative sequence of extension principles

The principles of extension are relative and not necessarily fixed in importance or sequence. Generally, however, it is also true that all the principles are important. It may also be relevant to point out that it is never possible to prepare a complete and final list of the extension principles. The principles discussed below are those which are either fundamental in nature or widely accepted in literature on the subject.

(1) Principles of interest and needs

To be effective, extension work must begin with the interests and needs of the people. Many times the interests of the rural people are not the interests of the extension worker. Even though he sees the needs of the people better than they do themselves, he must begin with the interests and needs as they (the people) see them.

In this way only can the extension agency mould the needs and interests of the people into realistic needs. Needs that can satisfy the individuals, groups, community and national interests, needs that can be fulfilled with the available resources, and the needs that should be fulfilled first.

(2) *Grass-roots principle of organisation*

For extension work to be effective and real, it has to be a synthesis of democracy obtained at the level of the family and more particularly at the village level. Things must spring from below and spread like grass.

At the same time, modern science calls for an advanced stage of organisation and a wiser coordination of thinking and action than is feasible in a single family or a single village. A higher level of living means wider specialisation in a village. This calls for the corresponding organisation of different professions and vocations. These will have to be woven together at the level of the enlarged family at the village community level. The Panchayats, as social institutions, have also to be established at the Block and the District levels. Thus, the establishment of the three-tier system namely, Village-Panchayat, Block-Samiti and Zila-Parishad, followed by State Legislatures and Parliament satisfies the grass-roots principle of organisation in the extension.

(3) *Principle of cultural differences*

In order to make extension programmes effective, the approach and procedure must be suited to the culture of the people who are taught. Different cultures require different approaches. A blue-print of work designed for one part of the globe cannot be applied effectively to another part, mainly because of the cultural differences. These differences can be perceived in the way of life of the people, their attitudes, values, loyalties, habits and customs.

(4) *Principle of cultural change*

Because changed ways must be learnt and because all learning must be grafted on what is already known, it is obvious that the change agent who works personally with the villagers must know what the villagers know and what they think. With this in mind and with an attitude of mutual respect and receptiveness, the worker must seek to discover and understand the limitations, the taboos and the cultural values related to each phase of his programme, before it is introduced, in order that an acceptable approach may be selected.

This principle can be summed up in the words of Earl Moncur:

“As each culture is unique and each particular situation within which a change is occurring, or is to be made, is unique, it is not possible to lay down prescription for what to identify and to describe the process which occurs so that each particular individual or team charged with responsibility for planning, execution or adjusting to some type of change, may be able to act in terms of the process.”

(5) *Principle of cooperation and participation*

In an attempt to involve a great number of persons in achieving desired common ends, there seems to be no acceptable alternative but to let them choose the ends, and then aiding them to organise their self-help efforts successfully to do the things they want to do. Most members of the village community will willingly cooperate in carrying out a project which they helped to decide to undertake. It has been the experience of many countries that people become dynamic if they are permitted to take decisions concerning their own affairs, exercise responsibility for, and are helped to carry out projects in their own villages.

The participation of the people is of fundamental importance for the success of any educational endeavour. People must share in the development of a programme and must feel that it is their own programme.

(6) Principle of applied science and democratic approach

Applied agricultural science is not a one-way process. The problems of the people are taken to the scientists who do the experimentation necessary to find out the solutions. The extension worker translates the scientific findings of the laboratories in such a way that the farm families can voluntarily adopt them to satisfy their own needs.

However, extension work is democratic both in philosophy and procedure. It aims to operate through discussion and suggestion. Facts about a situation are shared with the people. All possible alternative solutions are placed before the participants, and their merits are highlighted through mutual discussions. Ultimately, the people are left free to decide their line of action, the methods to be adopted in the local situation with their own resources and available government assistance.

(7) Principle of learning by doing

In extension work, farmers should be encouraged to learn new things by doing and by direct participation. As Dr. Newman (1889) said—"Farmers, like other people, hesitate to believe and set on theories, or even facts, until they see with their own eyes the proof of them in material form. We must, in some way, bring this work to their personal attention. We must carry it home to them."

The motive for improvement must come from the people, and they must practice the new ideas by actually doing them. It is learning by doing, which is most effective in changing people's behaviour and developing the confidence to use the new methods in future.

(8) Principle of trained specialists

It is very difficult for a multi-purpose extension worker to keep himself abreast with all the latest findings of research in all the branches of science he has to deal with in his day-to-day activity. Trained specialists have to be provided, who keep themselves in touch with their respective research institutes on the one hand, and extend to the extension worker, in meaningful terms, the latest scientific developments, which have scope for adoption in particular areas.

(9) Adaptability principle in the use of extension teaching methods

No single extension teaching method is effective under all situations. Reading material is for those who can read, radio-programmes for those who have radios, meetings for those who can attend, demonstrations of recommended practices are for those who can come to the farms where the demonstrations of recommended practices are laid. Farm and home visits are, by far, the most valuable, but they take up considerable time. New situations also arise where a special combination of method is necessary.

Extension agents have found that they need a large number of teaching methods out of which they can select and revise the one effective for the purpose and best suited

to the culture of the people. At times, new methods must be devised to meet new situations and changing conditions.

Further, the use of teaching methods must have flexibility to be adopted to the members of a community who differ in age, education, economic status, sex and proneness to change, etc.

(10) Principle of leadership

A good rule in extension work is "Never do anything yourself that you can get someone to do for you." This calls for the development of local voluntary leadership.

The involvement of leaders in extension programmes is the one single factor that determines the success or failure of those programmes. Local leaders are the guardians of local thought and action and can be trained and developed to best serve as interpreters of new ideas to the villagers.

There is no dearth of local leaders. All communities have leaders or potential leaders; it is a question of searching them out and creating an environment which will permit and encourage their development and performance.

In the promotion of change however, it is neither right nor wise to disregard old organised groups and leaders. Old leaders, if they are trusted can open—as well as close—the gates to new types of community action. If such leaders are converted to new functions, the multiplication of new things to be done will almost certainly lead or drive them to share the role of leadership with others.

(11) Whole family principle

The family is the unit of any society. All the members of the family have to be developed equally by involving all of them. This is because of the following reasons.

- (a) The Extension programme affects all members of the family.
- (b) The family members have great influence in decision-making.
- (c) It creates mutual understanding.
- (d) It aids in money management.
- (e) It balances farm and family needs.
- (f) It educates the younger members.
- (g) It provides an activity outlet for all.
- (h) It unifies related aspects, such as the social, economic and cultural, of the family.
- (i) It assures family service to the community and society.

It is not difficult to adopt this type of approach in extension programmes. There is much work in the field for the men and at home for the women. The 4-H clubs play a remarkable role in this regard so far as young boys and girls are concerned. A comparative study has shown that the young 4-H club members have greater confidence in scientific information than the non-members.

(12) Principles of satisfaction

Satisfaction of the people is very essential in extension work. Unless the people are satisfied with the end product of any programme, it is not going to be able to run. In democratic societies people cannot be made to move like machines. They must continue to act out of their own conviction and that is possible only when they