

## Research in Non-formal Education

*A TREND REPORT*

R. GOVINDA

---

### INTRODUCTION

It is generally accepted that education as an activity is a social artefact modelled and remodelled from time to time to enable successive generations of individuals to realize their human potential as they grow from infancy to adulthood and beyond. The contours and characteristics of the strategies adopted for organizing the processes involved are themselves dependent on a number of factors that vary across time and space. A retrospective look at the history of mankind and the way the strategies of education have changed over the centuries reveals several interesting features.

The learning strategies adopted in primitive, pre-literate societies were characterized by a highly informal mode of interaction. Education was largely limited to hunting and food-gathering and the learner acquired these skills from other adults through observation and participation. The onset of literacy, by itself, did not usher in much variation in the informal mode of learning which was still marked by spontaneity with the teacher and the learner being largely unaware of the fact that learning was taking place. The strategy essentially consisted of learning by participation and through reflection, occasionally involving a sort of Socratic dialogue.

As science and technology progressed and man started gaining greater control over his environment, life became increasingly complex, forcing him to acquire more specialized social and economic skills. This possibly necessitated the creation of formal educational settings where specialized knowledge and skills that different walks of life demanded could be impart-

ed to the growing generation. Thus, the learning process became less spontaneous and more deliberate, organized around master-teachers and apprentice-learners. This is what characterized such institutions as gurukulas, guilds and monasteries.

In course of time, the educational process came to be well-entrenched in regimented forms of institutional structures and practices. The learning strategies became increasingly book-centred or subject-centred, which seem to characterize many formal educational programmes even today. The long-term effect of this development has been that it has tended to create cleavage between learner and teacher by transforming a mainly human interactive process into a relatively depersonalized, mechanical activity. As has been pointed out by many scholars, formal educational institutions more or less mimic the typical production mode of industrialized society, fitting the whole process of education into a raw materials—finished goods paradigm.

It is not that the trend was never opposed. Several philosophers of education, particularly those belonging to naturalist and humanist schools, never ceased to express their opposition to the increasing tendency towards regimentation and formalization of educational activity. However, it appears that the protests were not well-orchestrated enough as they failed to make any significant impact on the educational scene. In fact, it is only during the last two decades that professional administrators have come to accept the need for deformalizing the educational system by adopting non-formal educational strategies. This trend developed mainly due to the pressures brought on the sys-

tem by the humanist-deschooler lobbies who effectively articulated the arguments in favour of de-formalizing education and highlighting the failure of the formal system to fulfil the expectations of the society. They demanded that the learning system be made more open, participative and vital. It was further advocated that non-formal learning strategies should be adopted to provide education on a lifelong basis, the endeavour being to equip the learner not with just knowledge and skills, but also with the 'ability to learn'—making the learner 'learn to learn'.

Thus, the concept of non-formal education emerged essentially as a reaction to the rigidity and inflexibility of the formal system. The characteristics of non-formal education (NFE) are, therefore, best understood when seen in contrast to formal education as Harbison (1973) does:

In most countries, formal education connotes age-specific, full-time classroom attendance in a linear graded system geared to certificates, diplomas, degrees, or other formal credentials.....In contrast, non-formal education which is probably best defined as skill and knowledge generation taking place outside the formal schooling system is a heterogeneous conglomeration of unstandardised and seemingly unrelated activities aimed at a wide variety of goals.

## II. NON-FORMAL EDUCATION: THE INDIAN SCENE

In India, non-formal education has to be seen both in a wider and in a narrower perspective. Viewed in the wider perspective, non-formal education activities would include a large variety of programmes operating in different sectors of life such as health, agriculture, family welfare, and literacy development. In this sense, it falls within the definition given by Harbison. However, seen in the narrower perspective, non-formal education refers to India's programmes for achieving universal elementary education through part-time programmes for children of school-going age.

Looking at the total gamut of activities in the sphere of non-formal education in India, one can classify them in three categories. One is the area of adult education, which clearly falls within the broad framework of non-formal education, considering its objectives and methodology of organization and implementation.

A second set of activities which are also largely meant for adults cuts across sectoral barriers as they include agricultural extension activities, family welfare promotion activities, general awareness development programmes and so on. This represents an omnibus set of educational activities related to different developmental sectors which are undertaken by government as well as non-governmental organizations. The third set of activities are exclusively in the area of elementary education. In fact, it is this set of activities which has gained the specific connotation among professionals in India as non-formal education. In line with the above broad classification, researches in non-formal education can also be looked at as belonging to three categories.

A cursory review of all researches in the area of non-formal education conducted in India reveals that more than 50 per cent of them are in the area of adult education. In a way, this is understandable, as adult education programmes have a relatively long history in India. The balance of studies is more or less equally divided among programmes for elementary education and others.

Reviewing the 50 and odd researches on non-formal education completed in the country till 1983, Palsane and Rastogi (1983) sounded a note of high optimism, stating that his area is now attracting the attention and interest of research workers. However, the relatively small number of research studies that have got added to this area since then does not reflect a high degree of enthusiasm among researchers. Nevertheless, the quantum of researches in the field of non-formal education has shown an increasing trend and needs to be dealt with in some detail. It is in this context that the present volume deals with this area under two sections: one exclusively devoted to researches on adult education; the other, the present one, to a review of researches belonging to the other two categories mentioned earlier.

In all, about 40 studies have been reported in the area of non-formal education since the time research activities in education started in the country. Of these, about a half relate to elementary education and the rest refer to a wide range of subjects such as social education, health education, agriculture education and so on. Some researchers have focused only on rural areas while some others focus only on NFE in urban areas; some studies can be considered as impact studies while certain others are simple surveys. Keeping these differing concerns of the researchers in view, an at-

tempt has been made in this report to present an overview of researches under different sub-headings such as Non-Formal Elementary Education, Social Education, Need Survey for NFE, NFE and Systems Approach, NFE for Farmers, NFE for Rural Women and Impact of NFE Programmes. The number of studies under each of these categories is very small, except in case of studies on NFE at the elementary stage, and, therefore, they do not lend themselves to elaborate trend analysis of each aspect separately. Combining them for analysis would also not be justifiable as it would mean ignoring the differing concerns of the researchers. Also, considering the small number of studies in each area, one cannot make any critical observations on the content and method of the studies; rather, the attempt has been only to present a broad review of the studies in each of the subareas listed. The last section of the paper includes certain general observations about the nature of the studies conducted, pointing out the gaps and indicating the dimensions of non-formal education which need to be researched in greater detail and depth.

#### (a) *Non-formal Elementary Education*

The need for and utility of organizing elementary education programmes outside the framework of full-time formal schools was articulated by R. V. Parulekar several decades ago, even before India became independent. He advocated the initiation of a programme of part-time education to cater to the educational needs of children who fail to benefit from full-time schooling facilities. But the proposal seems to have fallen largely on deaf ears as far as educational policy makers were concerned. The issue was raised again, in a fairly effective manner, only during the mid-sixties, by the Education Commission, 1964-66. The Commission recommended the adoption of a flexible programme of part-time education at the elementary stage, the content of which had to be determined according to the needs and aptitudes of the learners. In fact, the commission expected the part-time education programme to be instrumental in raising the educational level of the average citizen. This was to be achieved—

by making part-time education for one year compulsory for all children in the age-group 11-14 who have not completed the lower primary stage and are not attending schools. The aim will be to make these children functionally literate and stop all further additions to the ranks of adult illiterates.

In spite of the strong recommendations made by the Education Commission, 1964-66, no provision for any programme of part-time education outside the formal stream was made, for about a decade. However, the 1970s witnessed a few independent exploratory efforts at working out a model for organizing part-time elementary education under the umbrella of non-formal education. As mentioned by Kurien (1983), there were at least two such efforts. The NCERT evolved a model of non-formal education after long experimentation at Bhumaidar. The model represented an attempt at integrating education with environment and making work experience the central focus of educational activities. Partly drawing on this experience, the NCERT also organized a fairly large number of NFE centres in different parts of the country through the network of their Field Officers and Regional Colleges of Education.

Around the same time, while the Bhumaidar experiment was going on, an altogether different approach to part-time education for children of the age-group 9-14 was made in Madhya Pradesh. This approach was also described as non-formal education. This model involved essentially the adoption of a condensed version of the course followed in the formal primary schools. It advocated the completion of the course for the first five years of full-time formal education in just two years of part-time instruction, using a condensed course. This scheme, popularly known as the Madhya Pradesh Model, seems to have received strong support from the bureaucracy in Madhya Pradesh and the programme was implemented with full patronage from the state government.

These large-scale experiments perhaps induced educational planners and administrators to accept, in principle, the need for creating such programmes, outside the formal school system, for achieving the target of universal elementary education. Accordingly, the Planning Commission, prior to launching of the Sixth Five Year Plan, set up a Working Group on Universal Elementary Education consisting of experts from all over the country. The group deliberated on the issue of promoting supplementary programmes of elementary education outside the formal set-up. Finally, it was declared: 'We propose a major change in this (past) policy and recommend a new motto: every child shall continue to learn in the age-group 6-14, on a full-time basis, if possible, and on a part-time basis, if necessary. The Working Group further prescribed: 'It is to be noted that part-time non-formal education should begin not earlier than the age of 9, for children of the



lower age-group, i.e., 6-8, would not be mature enough to benefit from this mode of education.' After examining the status of implementation of universal elementary education in various states, nine were identified as educationally backward and it was suggested that programmes of non-formal, part-time education be initiated in these states on a large scale.

Meanwhile, the Planning Commission had already initiated a pilot experimental programme of part-time, non-formal education for implementation in selected blocks of the educationally backward states with a view to stimulating action at the state government level and evolving experimental schemes. Based on the experience of these pilot experimental schemes and in line with the recommendations of the Working Group, the Government of India launched a centrally sponsored scheme of non-formal education under the Sixth Five Year Plan. Thus, came into existence an official programme on non-formal education at the national level entitled, 'Experimental Projects for Non-Formal Education for Children of 9-14 Age-group for Universalisation of Elementary Education'. The scheme explicitly endorsed the adoption of Madhya Pradesh Model and it was envisaged that this would be the main model for non-formal education to be introduced on a massive scale throughout the country.

This total endorsement, apparently, was not based on any scientific evaluation of the experimental efforts made either in Madhya Pradesh or elsewhere in the country. In fact, even after implementing the programme throughout the Sixth Five Year Plan period, it was lamented in *Challenge of Education*, issued by the Government of India in August 1985, that, 'To date, no systematic study of the effectiveness of non-formal education is available'. In order to fill this gap, the Government of India initiated two national-level evaluation studies as diagnostic exercises covering all aspects of the programme being implemented in the nine educationally backward states. One study, to be carried out by the National Council of Educational Research and Training, was to deal with the academic and curricular dimensions of the scheme. The focus of the other study, to be conducted by the National Institute of Educational Planning and Administration, was to be on the administrative and financial aspects. It was visualized that the findings of these evaluation studies would provide a scientific basis for preparing a revised scheme of non-formal education to be implemented during the Seventh Five Year Plan period.

It may be mentioned that the Revised Scheme has

already been formulated and even grants to state governments and several voluntary agencies have been released under the Revised Scheme whereas the national evaluation reports of the two sponsored studies have yet to see the light of day. However, during the Sixth Plan period, when this earlier Centrally Sponsored Scheme was in operation, several other experimental efforts in the field of non-formal education continued, quite independent of the scheme. Two such efforts need to be mentioned. One was in the form of a nationwide project known as the 'Comprehensive Access to Primary Education (CAPE) Project'. The project visualised large-scale production of learning material which is local-specific, problem-centred and relevant to the work environment of the learners. The materials are to be in the form of learning episodes suitably cast into modular units. The NFE centres and the instructors are seen essentially as facilitating mechanisms for self-learning by the learners.

The project undoubtedly presents an excellent model for decentralized production of learning material for non-formal education. It represents a truly non-formal approach to curriculum development and its transaction. The project has been in operation with sharply varying degrees of success in different parts of the country. It has been subjected to both external and internal evaluation exercises. The main problems in the project appear to arise out of the grandiose scale of its implementation, over-ambitious targets for task performance and pace of coverage, and over-dependence on the bureaucracy for implementation.

The second innovative approach is the experimental project on universal elementary education carried out at the Indian Institute of Education, Pune. The NFE model under this project was designed broadly within the time parameters fixed by the centrally sponsored scheme. The highlight of the project was the unique method adopted for developing and transacting a really need-based and learner-centred curriculum.

Needless to say, these innovative experiments offer several lessons for designing a national scheme on non-formal education. Presumably, the Revised Scheme of Non-Formal Education has taken into cognizance the experience gained through these attempts. At least, the official circular on the scheme explicitly mentions that there is no insistence on the adoption of the Madhya Pradesh Model and presents a list of seven different NFE models suggesting that, within the broad framework of the scheme, the implementing agencies may evolve their own operational approaches.

This detailed discussion about the genesis and evolution of the centrally sponsored scheme had been undertaken in this review as it is considered quite pertinent for two reasons. First, these developments form the backdrop for analysing the research studies currently being carried out in the field. Secondly, a majority of the researches reported in non-formal elementary education are directly or indirectly based on the scheme, making a prior discussion of its features essential. Having done this, a brief overview of researches on non-formal education at the elementary stage is presented in this sub-section.

Gadgil (1945) made pioneering research efforts in the field of elementary education more than four decades ago. Even though the contents of the study did not directly refer to non-formal education, the findings of his study have a direct bearing on any work dealing with elementary education, whether in the formal or the non-formal sector. The study attempted to examine the problem of lapse into illiteracy in a scientific manner. Gadgil found that it was necessary for a pupil to complete at least a four-year course at school in order to ensure retention of literacy throughout later life. A lapse into illiteracy, when it takes place, does so within a comparatively short period after leaving school, mainly due to non-use of abilities acquired. These findings have certain very important policy implications for organizing non-formal education. It may be mentioned that the non-formal education programmes currently being organized in the country aim at achieving permanent literacy and numeracy in a matter of just two years, that too through part-time education programmes. This assumption appears to go contrary to the findings of Gadgil's study. It may be argued that children attending the non-formal education programmes are relatively older in age and more mature in mental ability and, therefore, can acquire minimum levels of learning in a shorter period. However, this remains only an assumption as no scientific study conducted in the country has closely examined this issue in the field.

Gadgil's study highlights the need for conducting continuing education programmes, at least for one or two years after completing the NFE programme at the primary level, in order to ensure that the children successfully retain the basic capabilities acquired during the previous years. Thus, the policy should be such that continuing education programmes become an integral part of the NFE scheme for school-going-age children.

Interestingly, it was only after a lapse of about two decades that a concrete attempt was made to deal with the task of developing a programme of continuing education for school leavers. Chickermane (1966) conducted an experiment in continuing education for school leavers after the compulsory education age limit of eleven. In fact, Chickermane was, perhaps, the first researcher in the country to conduct an action-oriented research project for organizing a non-formal education programme for school-going-age children. He developed a well-structured programme of evening continuing education classes for children of the age group 12 to 17 who had left school after completing class IV and were engaged in work on farms or in shops during the day. It was ensured that the knowledge and skills provided related to the work-life of the learners and were not just an imitation of the formal school content. It is important to note that the programme emphasized the relevance of the curriculum to the work-life of the children and not its equivalence with formal school curriculum. The appropriateness of this approach was confirmed by the findings of the survey conducted, although after a lapse of more than one decade, by Aikara (1979). This study, which focused on the needs of out-of-school children in a Bombay slum, revealed that the parents of these children were generally eager to send them to an educational programme that combined literacy and vocational training. They wanted the classes to be conducted during the evening and through the mother-tongue.

In one of the early attempts to develop a scheme of non-formal education as an alternative to the formal school education programme, Chickermane (1979) prepared a programme involving a curriculum of six subjects. The programme was to be organized on a regular part-time basis everyday in the afternoon. It was suggested that full-time teachers be employed who would, apart from teaching in the afternoons, pay home visits to observe the children. After experimenting with the scheme, it was concluded that the programme was operationally feasible and universal elementary education could be achieved through such part-time education programmes.

Sujatha (1980) studied the constraints on education of the tribals in Nellore district of Andhra Pradesh with the objective of formulating some strategies for non-formal education. She made an in-depth analysis of the constraints, although the suggestions she made did not really lead to or result in any concrete strategy for non-formal education.

During the present decade, 16 research studies were conducted, all of which were related, in one way or another, to the scheme of non-formal education sponsored by the Government of India, specially in the educationally backward states of the country. Except for a couple of them, all these studies were evaluative; some of them focused only on academic or administrative aspects of the programme, while certain others attempted to study the programme in a more comprehensive manner. Also, some studies made comparison of certain aspects from formal and non-formal programmes.

A detailed analysis of the specific objectives of the NFE programme and their relevance for different sections of the target group should provide useful feedback for making the programme more meaningful for learners. Surprisingly, no study has focused exclusively on the issue of objectives. The only study which indirectly touches this point was conducted by Bhatnagar (1985). He attempted to find out the expectations of girls studying at non-formal education centres in five different districts of Rajasthan. The girls wanted that, apart from teaching of language and mathematics, practical knowledge of knitting, embroidery, home science and drawing should also be given. They also wanted to undergo tests and examinations, as in formal schools. Parents expected the centres to provide their daughters with practical knowledge which would make their lives happy.

Two studies dealt with the aspect of instructional material for non-formal education. The concern of Mullick (1981) was to develop relevant instructional material, while Shukla (1985) made an evaluation of instructional material used under different NFE programme. Mullick (1981) developed tape-slide based programmed learning material for non-formal education of girls in the age group 11-14. Based on a field try-out of the material in rural areas it was concluded that the tape-slide presentation was a viable method of teaching illiterates. Teachers and teacher trainees involved in the tryout opined that the method made the lesson more interesting and effective than the lecture method, provided the teacher concerned was adequately trained to adopt the method effectively.

Shukla (1985) made an attempt to evaluate the instructional material being used under the NFE programmes at the elementary stage. The evaluation focused on the condensed curricular material being used under the NFE scheme in Madhya Pradesh and the locally relevant material produced under two UNICEF-

assisted projects, namely, Comprehensive Access to Primary Education (CAPE) and Developmental Activities for Community Education and Participation (DACEP). The investigator developed two tools of evaluation, namely, an Analysis Sheet for content-analysing the instructional material and an Evaluation Pro-forma for studying the processes adopted for developing the instructional material. It was observed that under the CAPE project an attempt was made to ensure that the materials were locally relevant and they were invariably developed by a group of authors actively involved in teaching the target group. However, the study did not throw much light on the quality of the instructional material used under any of the schemes.

Training of facilitators is an area which is often described as a weak link in the programme of NFE. Unfortunately, very little has been done to investigate this aspect in a scientific manner. Only two studies were found dealing with this vital aspect. Khan (1983) developed a self-instructional training package for training of non-formal education facilitators. The effectiveness of the package was validated through a pretest-posttest design experiment involving 100 NFE facilitators.

Mohapatra (1987) studied the conditions under which the Non-Formal Education Centres in Orissa were functioning. The specific purpose was to examine whether the women facilitators could effectively function in these centres. The study was done in 22 rural and 24 urban centres. It was found that, in many cases, the centres were located at considerable distances from the habitations and that was major problem faced by women facilitators. The centres functioned under poor physical conditions in terms of building, lighting arrangements, furniture, storage and display materials. Quite often, women facilitators could not establish proper contact with community members, particularly male guardians, due to the conservative outlook of the community.

Environmental awareness and academic achievement levels were the subjects of study for Gupta, Grewal and Rajput (1981) and Naidu (1986), respectively. In both the studies, the researchers made an attempt to compare children studying in formal and non-formal education programmes. As part of a larger study, Gupta, Grewal and Rajput (1981) made a status survey of environmental awareness among children studying in NFE centres. It was concluded that the level of environmental awareness of children in NFE



centres was comparable with that of children in formal schools in rural areas and was even better than that of children from urban areas. Academic achievement of students from formal and non-formal streams was compared by Naidu (1986) with the help of specially prepared achievement tests in the areas of Telugu, arithmetic and environmental studies. Significant differences were observed with respect to student achievement in all the three areas with students from the formal performing better than their NFE counterparts.

Of the several evaluative studies reported two had been conducted in Rajasthan, one in Madhya Pradesh, and three in Andhra Pradesh. Dave (1981) from the SIERT of Rajasthan surveyed the position of implementation of the NFE programme in Rajasthan and found that, while rural areas accounted for about 85 per cent of the children in NFE centres, only about 20 per cent of those enrolled belonged to rural areas and tribal belts. It was found that a large number of children shifted to formal schools as they progressed in their studies. Based on the achievement test performance it was concluded that, on the whole, their achievement in various aspects was quite good. Examining the background of the instructors, it was found that the majority of them had studied only up to primary or lower primary level. Further, only about 12 per cent of the instructors were women. An important observation was the Advisory Committees, wherever they had been functioning, were found to be very helpful in mobilizing community support, acquiring buildings, obtaining teaching-learning material and other facilities.

The other study from Rajasthan was conducted as part of doctoral work by Aoulkh (1984) who made an attempt to evaluate the NFE programme in Rajasthan by adopting a systems approach. Relevant data were obtained from a large number of respondents, which included 800 NFE participants, 80 instructors, 400 social workers, five project officers and five district education officers. It was concluded that, in most cases, the NFE programme was academic, fact-oriented and instructor-centred and failed to reflect community needs. This was perhaps due to the fact that all the instructors were primary school teachers and had received no special training for working in NFE centres.

The evaluative study (Gupta, 1983) reported from Madhya Pradesh made a status survey of the NFE programmes in the state. Data were obtained with respect to 47 NFE centres organized by the state government

and 12 others run by the NCERT. The NCERT centres were being organized on an experimental basis, while the others were part of the larger state government programme of NFE. The attendance of children at both sets of centres was quite satisfactory, even though there was need to further identify and bring to the centres more children in the target age-group. The instructors had received adequate training. The remuneration given to the instructors was not the same under the two agencies, which had affected the working of the system. These observations in the status of the NFE programme in the state have limited value as they are based on a very small set of NFE centres. In fact, Madhya Pradesh was one of the earliest states to organize the NFE programme on a large scale, with full patronage from the state government. Therefore, drawing generalizations about the implementation of the programme in the state demands a more detailed and comprehensive evaluation.

As mentioned earlier, three evaluation studies were reported from Andhra Pradesh. Of these, one was doctoral study (Rajyalakshmi, 1986) conducted at the Sri Venkateshwara University. The other two (Murthy, 1986 and Nanipantulu, 1986) were conducted under the auspices of the Directorate of School Education of Andhra Pradesh.

The evaluation study by Murthy (1986) conducted in two districts of Andhra Pradesh focused mainly on the administrative aspects of the programme. In all, 180 centres run by two different agencies, namely, the state government and the Seema Seva Samiti, were covered. It was concluded that the administrative and financial management machinery were quite inadequate both at state and district level, considering the requirements. Lack of proper transport facilities seriously affected supervisory work. The enrolment of learners was quite satisfactory, although the supply of learning material needed to be strengthened suitably. There was considerable delay in the release of grants to the Seema Sewa Samithi.

Nanipantulu (1986) made an evaluative study of the academic aspects of the NFE programme in Andhra Pradesh. The study was carried out with a sample of 100 centres selected from all over the state. It was concluded that the centres were working satisfactory with respect to class management, regularity and punctuality of instructors as well as learners, involvement of local community, availability of resource material and organization of cocurricular activities. It was reported that, in general, mean achievement scores of learners

for the NFE centres was much higher than those of children of a similar level from the formal schools. Interestingly, as mentioned earlier, though both studies reviewed here were conducted during the same year, from the same organization, the sample and methodology adopted varied widely. While the administrative aspects were studied through a sample of 180 centres from only two districts, the academic aspects were covered through a sample of only 100 centres taken from all over the state. Thus, the studies provide no way for combining their respective findings and arriving at even a broad understanding of the status of the programme. From this point of view, the study by Rajyalakshmi (1986) appears to be a more useful one. She conducted a very systematic and fairly comprehensive evaluation of the NFE programme for children in the age group 9-14 operating in the Rayalaseema area of Andhra Pradesh. The sources of data included a wide range of respondents, namely, 400 NFE learners, 160 dropouts from NFE centres, 80 NFE instructors and 200 formal primary level pupils. It was found that most of the instructors were males and only a small number of them belonged to scheduled castes and scheduled tribes. Almost all the instructors were at least matriculates. The NFE classes were conducted mostly in the primary schools. All the NFE centres had roll-up black-boards and an adequate number of textbooks. But, none of them had any such supportive material as work books, maps, charts, globes, flashcards and playing material. To be able to read and write was the main aim for which the learners had been attending the NFE centres. Performance of the NFE learners in the various achievement tests was at an average level. However, the children from the formal stream invariably performed better than their counterparts in the NFE stream. The important reasons for dropping out of NFE centres were found to be engagement in household work, exhaustion due to routine work, family problems, ill-health, fear of moving out at night, shyness to attend the NFE centres and ridicule by others.

The studies reviewed here deal with a variety of aspects related to non-formal education at the elementary stage. As the number of studies on any one aspect is very small, they do not permit the drawing of any convincing conclusion with regard to the questions examined. At best, they help restate, possibly with greater sharpness, certain hypotheses which need further investigation through more research studies. For instance, a significant aspect that has been examined by

some of the studies relates to the achievement levels of children learning through NFE centres. Generally, the learning outcomes have been reported to be of a satisfactory level. However, when it comes to a comparative analysis of achievement through formal and non-formal streams, the findings are not unequivocal, even though some of the studies have reported the difference to be statistically significant, showing the performance of formal school learners to be superior to that of learners from the NFE stream. This point is of crucial significance as the two programmes are supposed to be equivalent in terms of their learning outcomes, thus making way for multi-point entry to the middle and secondary levels of the formal school system.

NFE programmes are supposed to be need-based and locally relevant. Are the present NFE programmes really so in terms of the instructional material used and the teaching-learning processes adopted? This should have been a very important question for scientific investigation. Unfortunately, there is no in-depth analysis of this aspect. Similar is the case with many other fundamental aspects that should characterize any programme of NFE. In fact, most of the researches are status studies, limited in their scope, taking the officially sponsored programme to represent the total reality with respect to non-formal education. Even this approach could have been quite useful and productive if the studies had been designed and carried out within a broad common framework. Such an approach would have facilitated making a meta-analysis of the studies and arriving at concrete conclusions on the programme. But, this had not happened. A few studies have, no doubt, attempted to evaluate the programme in a critical fashion, but they fail to carry the necessary strength and conviction to influence the programme itself as they are only sporadic attempts carried out by individuals with the sole purpose of getting a doctoral degree. As a result, the feedback value of these small-scale evaluative studies carried out by individual scholars becomes quite limited.

Two general observations based on the studies reviewed here appear to be pertinent. One is that the researchers need to view the field of non-formal education in a broader perspective, as defined by its basic characteristics and not by the rigid parameters of a particular programme. Secondly, even when specific programme evaluation studies are taken up, the researchers should put to use their academic insights and skills in examining the fundamental aspects of the pro-



gramme instead of limiting themselves to dealing with its peripheral operational features.

*(b) Social Education*

Social education was a broad-spectrum programme initiated more than twenty-five years ago as part of the Community Development and National Extension Services programmes. In a way, it covered, in addition to adult literacy, programmes of education in several other areas also, all of which were generally operated through a Social Education Officer attached to the Block Development Office. The programme got gradually de-emphasized in course of time during the seventies, when adult education emerged as an area of activity. The main significance of the social education programme lay in the holistic perspective it had of education through non-formal and non-institutionalized means.

Three studies on social education were reported (Trivedi, 1966; Chaturvedi, 1969; and Kudesia, 1973) conducted in three different states. All of them attempted to study the impact of the programme on the life of the people. Trivedi (1966) attempted to make a critical assessment of the status of the programme in Kheda district of Gujarat. He reported that it normally included literacy, and social, cultural, scientific, aesthetic and agricultural activities for youth and women. The impact of the programme was seen in terms of general change in the behaviour of adults participating in it. It was reported that women did not take part in the adult literacy classes. Chaturvedi (1969) made a survey of 20 villages selected from different regions of Uttar Pradesh. He found that the social education programme made no significant impact in the field of agriculture and animal husbandry as people continued to follow the same old methods. Definite changes in the manner of living and the outlook of the people could be observed only in areas with adequate irrigation facilities. It was found that voluntary agencies operating social education programmes were handicapped by inadequate resources and training facilities. No improvement in the conditions of living of rural women could be observed. The study by Kudesia (1973) examined the role of social education in the rural development of Madhya Pradesh. It was concluded that the social education programme had a significant impact on the health and recreational life of the community. Welfare activities had been given proper scope in the social education programme, but

the political awareness of the rural people continued to be at a low level.

*(c) Need Survey for NFE*

While the formal education stream consists of relatively standardized sets of programmes, the non-formal education programmes are expected to be flexible and need-based. Thus, the NFE programmes should invariably be designed on the basis of a systematic survey of the needs of the concerned target population. In one such study, Chaube (1963) made a survey of youth welfare programmes functioning in Uttar Pradesh. It was concluded that informal education programmes should be encouraged for the benefit of illiterate youths and dropouts through evening classes, continuation classes and other classes, offering not only literacy programmes but also vocational subjects, handicrafts, etc. Introduction of 'earn while you learn' schemes in a big way was recommended. Another study with similar objectives was reported by Pillai (1980) who made a survey of the non-formal continuing education needs of employees of different parts of Kerala State. More than 50 per cent of them wanted to acquire higher qualifications through continuing education programmes, such as evening colleges and correspondence courses. The main purpose of going in for continuing education programmes was to improve ones educational status and to explore better employment avenues.

*(d) NFE and Systems Approach*

Studies by Sharma (1980) and Sheth (1981) had, more or less, similar objectives. Sharma's study resulted in the formulation of a non-formal education programmes arrived at through application of a systems approach in analysing and understanding the situations prevalent in rural areas. Sheth also developed a systems model of non-formal education and tried it out in a rural setting. He also examined the scope for relating non-formal education and community development.

It may be observed that one of these was a doctoral study while the other was a funded research project. The attempt made in the two studies to develop a systems model which visualizes rural or community development in a holistic perspective is a very useful exercise. However, the studies do not take a longitudinal perspective for arriving at the systems framework.

Also, the area chosen for obtaining an empirical basis for the systems models is too limited to carry conviction regarding their validity and replicability for wider adaptation.

*(e) NFE for Farmers*

The largest section of population who have failed to benefit from the formal schooling facilities happen to be engaged in agriculture. Most of these people lack even basic literacy and numeracy skills. They, thus, represent a strong section most needing non-formal educational facilities. Assessment of their educational needs and an evaluation of specific educational programmes operating for them have been the concern of four research studies. Pardeshi (1967) conducted, more than two decades ago, a survey to identify the agricultural education needs of out-of-school rural youth. It was found that their needs were related to knowledge of new inputs, new techniques of production, and the economics of production. They laid great stress on self-education supported by concrete educational inputs related to agriculture from village level workers and block level officers. No importance was attached by them to youth clubs or young farmers' organizations and their activities. Pal (1970), in his doctoral research in agricultural extension, made a critical study of farmers' training and education programmes in relation to the changes in their behaviour components. It was reported that participation in the programmes significantly increased their knowledge of modern agricultural practices and also helped them develop a more positive attitude towards their use. Brahma Prakash (1978) attempted to find out the impact of a Farmer's Training and Functional Literacy Programme on the farmers. It was observed, through a field experiment conducted in a block each in Delhi and Haryana, that the programme had brought about a positive and significant overall change in the knowledge status, attitudinal level and adoption behaviour of the participating farmers with respect to use of high yielding varieties (HYV). This was true of two age groups, 15-25 and 26-35, but not for those above 36 of age. Also, while knowledge status was found to be significantly associated with their attitude towards HYV, knowledge had no significant relation with their adoption behaviour.

The study by Karunakaran (1980) was an attempt to evaluate the Intensive Paddy Development Unit Programme. The purpose of the study was to identify fac-

tors that affected the effectiveness of non-formal education and training of farmers organized as part of this programme. The analysis showed that the specific areas that need considerable attention in such non-formal education programmes related to agricultural loans, use of fertilizers and pesticides, proper habits of reading and religious faith and superstitions.

Another study which also related to training of farmers was conducted by Heredero (1970). In this study, the researchers conducted an experiment to find out the effect of achievement motivation training on farmers. The impact of the training was clearly seen in case of rich farmers but the results were not quite encouraging with respect to poor farmers.

*(f) NFE for Rural Women*

Three studies have been reported which focus on non-formal education of women, even though on different aspects. All of them make particular reference to women in rural areas.

Chittemma (1978) developed a comprehensive nutrition education curriculum for mothers to be delivered along with health and nutrition programmes of the maternity and child care services. She developed prototype units and discussion guides for this purpose. Through an experimental tryout of the curricular material, it was found that attendance in NFE classes helped develop higher levels of awareness and knowledge regarding various health and nutritional aspects.

An experimental-cum-action research project was conducted by Jesudasan, Roy and Koshi (1980) to study the efficiency of the ICDS programme with particular focus on components related to women's welfare. It was found that the mother-child care services component gave the best results in terms of knowledge, attitude and practical skills, and it also led to reduction in malnutrition in both women and children.

Kapoor (1981) studied the extension education programmes for women with special reference to family life education. It was found that the programmes did not match the objectives they were meant to achieve. The physical conditions of the centres, as also the service conditions of the field level functionaries, were quite unsatisfactory, which seriously affected the participation of women in the activities of the centre.

*(g) Impact of NFE Programmes*

Assessing the general impact of NFE programmes on

the community was the concern of two studies (Shah, 1979 and Singh, 1986). Shah conducted her study with respect to a growing urban set-up, whereas Singh focussed on the whole population of Manipur Valley. Shah made a general survey of NFE programmes operating in Baroda City and found that there were 123 different programmes functioning at the time of the survey. Of these, only ten per cent related to literacy, personal and community health, and food and nutrition. The impact of programmes in the use of leisure time activities and supplementary income areas was quite high whereas the impact on knowledge and practices in health and nutrition was only average.

Singh (1986) attempted to study in a global fashion the different aspects of non-formal education programmes and their impact on the people of Manipur. It was found that the non-formal education programmes there were operating under severe limitations in terms of physical conditions, unsatisfactory methods of instruction, unsuitable reading material, ill-trained functionaries, absence of library services and other aspects also. However, in spite of these limitations, the programmes appeared to have made a considerable impact on the development of vocational abilities in the participants. An important aspect of the study was that, unlike most other such studies which more or less exclusively depend on questionnaire surveys, the investigator used such methods as participant observation and document analysis also.

Both these studies have made an attempt to view NFE programmes in a comprehensive manner within a specified geographical region. However, it may be observed that, being essentially evaluative in their objectives, the general findings of these studies about the overall impact of the whole gamut of NFE programmes may not help much as feedback. For this, it would be more useful if programme-specific analysis are carried out, identifying the relevant variables facilitating or thwarting the effective implementation of the respective programmes. A study on these lines was conducted by Mahar (1978) which focused on the operation of a workers' education scheme in Government of India printing establishments. It was reported that the scheme had helped create a sense of belongingness, productivity consciousness and trade union consciousness among the workers. Even though the study is limited in its scope, it is clear that the findings provide direct and concrete feedback for understanding and improving the programme under analysis.

### III. OVERALL OBSERVATIONS

Non-formal education as an area of research is of a relatively recent origin. But it should be recognized that this area provides the educational researcher with an effective opportunity to move out of the rigid confines of formal educational programmes and into a broader field of education as a life-long process which cuts across barriers of disciplinary considerations. Seen from this angle, one would expect the area to have attracted a large number of researchers, not only from education but also from allied disciplines. But, a survey of the researches done in the country reveals that this has not happened. While more than 4000 studies on education have been reported, those related to non-formal education constitute a very small proportion. The immediate need, therefore, is to encourage more scholars to take up research in the area.

Examining the qualitative aspect of the researches reviewed here, one finds that lack of conceptual clarity among researchers is a major factor affecting the quality of researches on non-formal education. Some researchers have taken a broad view of the area as covering all types of educational activities organized outside the formal institutional framework; some have taken it to mean only the adult literacy programmes; and for several others it refers only to the non-formal education programmes at the elementary stage. Quite often, finds that the scope of the empirical analysis carried out in a study does not match the conceptual description of non-formal education given by the researcher himself. In order to avoid getting into such an apparently inconsistent situation, it is necessary for researchers to begin with a sound theoretical framework within which the empirical study is to be carried out. As it is, hardly any researcher has addressed himself or herself to the task of building a sound theoretical framework before getting into the processes of empirical investigation.

This apparent indifference towards theoretical considerations, coupled with an excessive preoccupation with one or other of the officially sponsored programmes, has also affected the nature and scope of the problems studied. In general, the researchers have confined themselves to dealing with the specific operational problems related to NFE, leaving a number of more fundamental questions practically untouched. For instance, the basic assumptions on which the official programme of NFE at the elementary stage has been formulated have not come in for a close scrutiny



by any of the researchers. One wonders whether the assumptions have been considered as self-evident truths, not needing any investigation, or as sacrosanct prescriptions that cannot be questioned. An example of this type of approach is the explicit assertion by the Working Group on Elementary Education and its faithful adoption in formulating the officially sponsored scheme of non-formal education, that children, until they reach the age of nine, are not mature enough to benefit from this type of education. An assumption that is academically even more questionable is the claim of equivalence between 'the five years of full-time formal education provided by a professionally trained full-time teacher' and 'the two years of part-time education consisting of drastically reduced learning inputs delivered through an untrained part-time teacher who is paid only a nominal amount as honorarium'. Moreover, has not this undue concern with the question of equivalence resulted in the subversion of some of the most basic characteristics of non-formal education such as flexibility, child-centredness, and local relevance, would it not be better if programmes of non-formal education were evolved independently, without being bogged down by the dictates of the system of formal education? These and many other such fundamental questions should have become the subjects of experimental investigation.

These observations should not be taken as implying that it is not useful to study the operational effectiveness of one or more features of a particular programme. In fact, such programme-specific evaluation studies can provide extremely useful feedback for incorporating mid-course corrections in ongoing activities. But, whether the findings of an evaluative study would be put to such use at all is determined by many factors external to the study itself. For instance, who is conducting the evaluation study — an individual or an institution — is a matter of crucial importance; it also matters as to how much credibility and influence the particular individual or institution enjoys in the circle of professional administrators of education. At whose instance has the evaluation been done is another factor; whether it has been done at the instance of the agency sponsoring and implementing the programme or the personal initiative of an individual scholar. It is also important to consider the particular point of time when the evaluation is done; whether it is concurrent, mid-course or *ex post facto*. Whether the evaluation is carried out exclusively by an external agency or it is a participatory exercise involving the implementing

agency also is another factor that influences the scope for and probability of the evaluation findings being utilized. Further, it also depends on the way the findings are stated and conclusions drawn with respect to different dimensions of the programme. It is generally found that unduly critical, fault-finding types of observations have less chances of being used as feedback than moderately worded observations which have the focus on initiating mid-course improvements and revisions. Thus, before taking up evaluation studies, researchers need to clarify for themselves the situation with respect to all these parameters and design their studies accordingly. Without this, the studies tend to remain isolated academic exercises. Unfortunately, this appears to be the case with respect to several of the evaluation studies on non-formal education.

The role of an educational researcher is not only to critically look at the current status of a phenomenon but also to effectively intervene in it for bringing in progressive changes and innovations. This, in the context of non-formal education, demands on the part of the researcher considerable originality and creativity to conceptualise design and experiment with new models of operating non-formal education programmes. Researchers often express apprehensions about taking up studies involving innovation and experimentation on the ground that the educational system is rigid and inflexible and does not allow the necessary scope and freedom for experimenting with new ideas. This may be true of the formal system, but non-formal education provides the ideal kind of setting for innovations and experimentation. It provides ample opportunities to researchers to conduct action research projects which gives them complete freedom to conceptualize original models of operation, design new methods and materials, evolve alternative solutions to the problems and test their workability in field situations. Researchers in non-formal education do not seem to have addressed themselves to this task seriously. There are exceptions, but they are too few to make any significant impact on the scene. It is high time that researchers become original trend-setters, evolving new paradigms of conceptualization and action with respect to non-formal education, instead of only tinkering with the government-sponsored programmes.

Before concluding, one may highlight three important considerations that should be borne in mind by researchers in non-formal education. First is the need for taking a holistic perspective of the field, whether

one is concerned with only formal or non-formal education. Basic administrative arrangements may be different for formal and non-formal education; also, different schemes and programmes may be independently organized and administered. But this should not restrict the researcher to view reality in a truncated manner. Formal and non-formal education do not represent two diverse poles of action; rather, they are two complimentary components of the total educational endeavour of the society. A study may focus on any one particular aspect of non-formal education but the conceptual framework and the design of the study should reflect an understanding of education in its totality.

A second consideration is the need for designing studies in non-formal education in a 'programmatic framework' instead of simply proliferating small, individual pieces of research. It should be noted that empirical findings of studies of individual scholars do not automatically mesh into a well-orchestrated pattern reflecting the total reality. In fact, they invariably remain isolated observations, however individually valuable they are, without much relevance for ongoing educational practices. This limitation can possibly be overcome if the thrust is on organizing broad-spectrum 'Research Programmes', instead of being content with individual efforts carried out in an uncoordinated manner. But, organization of research programmes demands inter-disciplinary team-work among scholars and collaborative arrangements among institutions so that studies are carried out as part of broader research programmes having a com-

mon conceptual framework and design. This may not be an easy objective to achieve, yet the value of such an effort in the long range is too obvious to be understated. In promoting such efforts, funding and sponsoring organizations such as the UGC, NCERT and ICSSR, which support major research projects have a crucial role to play.

The third consideration relates to the perennial question of making educational research more relevant to practice and policy-making. It is not completely unjustified to say that researchers in non-formal education, as well as in other areas, have not paid adequate attention to this question. It should be recognized that research findings in education are not meant to be used only by specialists in the field of education, however sophisticated the study might be. Their value really lies in the extent to which these findings are understandable and usable by lay practitioners and policy-makers. After all, the aim of educational research is not merely to describe or criticise the existing state of affairs, but also to effectively aid in bringing about desirable changes in it. This, of course, has to be a bi-directional process, prompted by continuous interaction among researchers, practitioners and policy-makers, which at present seems to be almost completely absent. The blame cannot be placed entirely on the researchers; nevertheless, the need for researchers in non-formal education to be more sensitive to these requirements and make conscious efforts to achieve this end while conceptualising studies, designing methodology, interpreting findings and in stating the conclusions is definitely indicated.

**ABSTRACTS: 1316—1333**

**1316.** AOULKH, G.S., *Developing a Strategy for Evaluation of Non-formal Education in Rajasthan*, Ph.D. Edu., SGU, 1984

The major objectives and the hypotheses were (i) to explore the needs of rural participants of non-formal education (NFE) centres in Rajasthan, (ii) to evaluate the NFE programmes being conducted by different rural NFE centres of Rajasthan, and (iii) to develop a systematic strategy for evaluation of rural NFE programmes appropriate to the varying needs of rural adults in Rajasthan. The hypotheses of the study were: (1) Rural youths' needs in Rajasthan non-formal education programmes are associated with the practical solution of real life problems and issues. (2) Rural youths' needs in non-formal education programmes are associated with their sex, age and socio-economic status. (3) NFE centres for males do not differ in the strategy for evaluation than the NFE centre for females. (4) Socio-economic status does not influence the evaluation of participants in NFE centres. (5) The age factor does not show significant difference in evaluation of NFE centres of rural youths. (6) NFE centres of voluntary organizations show better performance than government NFE centres.

Eighty non-formal education centres were randomly selected from the districts of Jaipur, Udaipur, Kota, Bikaner and Barmer in Rajasthan state. Respondents included rural youth (800 participants), instructors (80), social workers (400), district education officers (five) and project officers (five). A need assessment questionnaire, structured interview schedules and observation pro-forma were used for data collection. The system approach was used for analysis of the present situation of the NFE centres. For evaluation of the NFE programme, Seriven's (1967) model was used. The percentage and mean scores were calculated for the analysis of pooled data.

The major findings were: 1. The majority of the villagers were indifferent to NFE programmes due to lack of awareness of and interest in the programmes. 2. If the NFE programmes were tied with vocational skill training, environmental studies, etc., these centres would attract more participants. 3. It was found that there was no link between course objectives and levels of performance. 4. Community needs were not properly reflected in the curriculum. 5. NFE instructors were

not provided guides and manuals. 6. Instructors were of the opinion that the instructional material did not provide adequate illustrations and visual elements. 7. In all cases, school teachers were working as NFE instructors. 8. Preservice training facilities for NFE instructors was neither available at the district level nor at the state level. 9. Programme participants reported that their instructors did not know their problems and needs but they were friendly with their NFE students. 10. In most of the cases the NFE programmes were academic, fact-oriented and instructor-centred and did not cater to community needs.

**1317.** BHATNAGAR, R., *The Expectations of Girls Studying at Non-formal Education Centres*, SIERT, Rajasthan, 1985

The study aimed at finding out (i) the expectations of girls studying at non-formal education centres with regard to curricular and co-curricular activities and various facilities available there, (ii) the expectations of their parents, and (iii) of the instructors from the centres.

Udaipur, Chittorgarh and Banswara districts were selected because of their population of scheduled castes, scheduled tribes and economic backwardness; Ajmer for its academic atmosphere; and Kota for its industrial development. Two centres each from these districts were taken up for study. One instructor, five girls and two parents connected with each centre were interviewed with the help of an interview schedule.

The study revealed: 1. Most girls preferred to study in the afternoon or evening and wanted that, besides mathematics, practical knowledge of knitting, embroidery, home science and drawing should also be imparted. Sixty-four per cent of the girls wished to take up health education, 76 per cent of them wanted to learn how to make cosmetics like soap and hair oil, 86 per cent desired to learn simple budgeting. 2. The girls wished there were radio and television sets and film shows at the centres. 3. Besides games and entertainment, festivals and social functions should be celebrated at the centre. 4. Seventy-six per cent of the girls favoured tests and examinations as in formal schools. 5. The parents wanted that the centres should not run for more than two to three hours and that practical knowledge to make the lives of their daughters happy be imparted. 6. They wished to participate in the functions celebrated at the centre and were particular that there



should be proper arrangements for electricity, water, dresses and mid-day meals. The instructors felt the need of teaching materials, small reading rooms, and newspapers. 8. They were of the view that they should not be changed when the honorarium was increased. 9. Proper arrangement of light, usefulness of the curriculum in real life, training of instructors and a system of effective supervision and guidance were considered necessary.

**1318.** DAVE, V.G., *A Survey of the Position of the Implementation of Non-formal Education in Rajasthan*, SIERT, Rajasthan, 1981

The study aimed at finding out (i) the position and use of human material resources available for non-formal education, (ii) the scope for cooperation of different agencies in this programme, (iii) the extent of the benefits from non-formal education to dropouts during primary education, (iv) subject-wise attainment of students, (v) the causes of irregularity of students, and (vi) other difficulties in the implementation of this programme.

Out of 1200 non-formal education centres in Bikaner, Jaipur, Jodhpur, Kota, Nagaur and Udaipur districts in Rajasthan, 120 (10 per cent) were selected for the study. Ten per cent of the total students, dropouts and their parents and children of the 9-14 age group who did not attend school and their guardians were interviewed. The data were collected through information blanks, questionnaires and interviews.

The study revealed: 1. Under this programme, 82.2 per cent of centres were situated in rural and 6.1 per cent in tribal areas. 2. The percentage of rural and tribal students studying at these centres was 79.6 and 5.8 respectively. About 17.5 per cent of the girls came from rural areas and 1.9 per cent from tribal belts. 3. A considerable number of students at these centres comprised those who had left traditional schools before completing their studies. 4. The percentage of students who had dropped out after passing ungraded unit classes was 63.6 and of those seeking admission after class three was 12. Similarly, a large number shifted from these centres to formal schools. 5. Books and stationery were provided but not in time. The percentage of centres running in government buildings, private buildings and temples was 44.4, 51.8 and 3.8 respectively. 6. Knowledge about local occupations was included in the curriculum which was divided into units.

7. So far as achievement was concerned the position was that 66.7 per cent of the students had knowledge of the letters of the alphabet, 44.9 per cent could read, 38.4 per cent were able to write, 38.2 per cent could relate orally what they had learnt about environment, 59.3 per cent knew numbers, and 20.4 per cent could add, subtract and multiply. On the whole, their achievement was quite good. 8. About 87.7 per cent of the instructors were male. Of them, one-third had studied up to upper primary level, one-fourth up to primary, the rest had qualifications higher than upper primary level and 5.8 per cent were students themselves. 9. Two hundred centres were being supervised by seven supervisors. 10. About 65.5 per cent of the centres had advisory committees which had helped 30.9 per cent centres in acquiring buildings, 36.4 per cent in getting teaching materials and 18 per cent in solving other problems.

The study recommended that there should be one supervisor for every 30 centres and a good system of the training of instructors. The curriculum should have more content on local environment and rural-based industries. The need for providing materials in time and proper system of budget provision was emphasized. To increase the enrolment of girls, especially from tribal areas, incentives should be provided.

**1319.** GUPTA, DALJIT, *A Critical Study of Non-formal Education Programme (Age Group 9-14) run by different Agencies in the State of Madhya Pradesh*, Ph.D. Edu., Bhopal U., 1983

The study attempted to investigate various aspects of non-formal education (NFE) programmes from different locations in the State of Madhya Pradesh organized by two agencies—The M.P. Balika Shiksha Nidhi and the NCERT.

The study was confined to 59 out of a total of 107 NFE centres. These were located in various districts of the state of Madhya Pradesh. The researchers selected 47 NFE centres run by the state government and centres run by Regional College of Education (NCERT), Bhopal from 1979 to 1982 on an experimental basis. The data were collected through two information blanks. One of these was used for the collection of data from the NFE centres and the other for the collection of data from the headquarters of the organizing agency of these centres. In addition, two interview schedules were used, one for the teachers and the other for the

parents and guardians. All the teachers (N=59) working in the NFE centres covered under this study were selected for interview to elicit information and suggestions about the programmes. In all, 59 parents were interviewed to elicit their opinions about the programme.

The major findings of the study were: 1. Due to economic constraints those children who were not able to join the formal schools could get education at these centres. 2. The number of NFE centres opened by the MP Government were not sufficient in view of the total school going child population. 3. The system of NFE being operated by the two agencies—the State Government and the NCERT—differed in respect of payment of remuneration to instructors, and mode and the time of payment, which affected the working of the system. 4. Training courses were organized for the teachers by both the agencies. 5. There were no separate buildings for the centres run by the two agencies. 6. The instructional work at these centres was done for two hours, both in the morning and evening, but no systematic effort was made to identify eligible children for these centres. 7. On the whole, attendance of children at the centres was found to be satisfactory.

In addition to these conclusions, the researcher has presented a comparison of the working of NCERT-run centres and State Government centres on various components, such as enrolment of children, instructional work, attendance, orientation of teachers, and pass percentage. The researcher suggested that the NFE system in the state should be developed and expanded and proper linkage established with the formal school system, so that the achievement of children could improve.

1320. HEREDERO, J.M., *Rural Development and Social Change: An Experiment in Non-formal Education*, Ahmedabad, 1979

The main objective of the study was to find out the effect of providing intensive training in achievement motivation to a group of farmers.

The experiment was conducted in Gujarat and continued for four years. The professors of a college were involved in giving intensive training to farmers through need-based courses for a period of ten days working eight hours a day. The theory of 'Achievement Motivation' of McClelland was tested. In each

course, 20–30 marginal farmers belonging to one caste or homogeneous castes constituted the sample.

The findings were: 1. The first tentative cost-benefit analysis showed that the benefits resulting from the programme exceeded the cost ratio of two to one. 2. The biggest success recorded in absolute figures was in the case of rich farmers who organized themselves in two very successful cooperatives. 3. The success achieved with poor farmers was not very encouraging. 4. The results with heterogeneous, small, caste groups were also not encouraging.

1321. JESUDESAN, V., ROY, PRODIPTO, and KOSHI, T.A., *Non-formal Education for Rural Women*, New Delhi (Allied Publishers), 1980

The major objective of the project was to test the integrated child experimental-cum-action research project. The experiment included, (i) a functional literacy class, (ii) oral instruction-cum-demonstration education along with the basic package called the mother and child centre service consisting of medical advice, nutritional services, and feeding programme, (iii) a combination of (i) and (ii) and a control village where only the normal community development and health programmes were operating.

The data were collected through formal and informal interviews and participant observation.

The main findings were: 1. The mother and child centre services gave the best results in terms of gain in knowledge, creation of better attitude, and adoption of more sensible practices. 2. It made a significant reduction in nutritional deficiency in both women and children.

1322. KHAN, A.R., *Developing a Self-Instructional Training Package for Training of Non-formal Education Facilitators*, Ph.D. Edu., SGU, 1983

The major objective of the inquiry was to design a self-instructional training package to enhance the competencies of NFE teachers in Rajasthan.

The training package was designed for use by both experienced as well as aspirant teachers who intended to work as NFE facilitators. The competencies around

which this package was designed were identified on the basis of study of literature and field research findings. A sample of 100 NFE facilitators, ten officials and ten NFE experts was selected for the study. Pretest and post-test design was used for experimentation.

The major findings were: 1. Significant learning occurred on the part of trainee due to the use of the self-instructional package. 2. Opinions of administrators, experts and supervisors further suggested that self-instructional package could be an effective strategy for training of NFE facilitators.

1323. MOHAPATRA, P.L., *Study of the Working Conditions of Non-formal Education Women Facilitators in Orissa*, SCERT, Orissa, 1987

The objectives of the study were (i) to know the physical facilities available in non-formal education centres, (ii) to estimate the psychological constraints which hindered/accelerated progress, (iii) to know about the resources available, and (iv) to make suggestions for the improvement of working conditions of female facilitators in such centres.

The sample of the study consisted of 46 non-formal education centres, 22 rural and 24 urban centres. An opinionnaire prepared by the investigator was administered to women facilitators of the sample centres. The tool was administered through the heads of secondary training schools of Orissa. Data were analysed qualitatively.

The main findings of the study were: 1. Low payment of monthly remuneration of Rs 105 to the facilitators was very discouraging. 2. Almost all the facilitators were young. 3. Location of centres at a long distance away from their homes was causing disturbance in the working conditions of women facilitators. 4. The working hours of the centres varied from centre to centre. 5. Most of them functioned during day time. 6. The centres had poor physical facilities in terms of building, light arrangements, furniture storage, and display materials. 7. The facilitators had faced problems with regard to establishing proper contact with community members and male guardians because of the conservative outlook of the society. 8. The primary school teachers being trained in non-formal education teaching programmes need to be encouraged to run the centres. 9. Provision of better physical facilities in the centres, monthly emolument of Rs. 250 to the facilitators, constant supervision of the centres, and involve-

ment of the community in the management of the centres were suggested for improving non-formal education programmes for women.

1324. MURTHY, S.K., *Evaluation Study of Non-formal Education at Elementary Stage in Andhra Pradesh from Administration Point of View*, Directorate of School Education, Andhra Pradesh, 1986 (NIEPA financed)

The centrally sponsored scheme of Non-formal Education (NFE) for the children of the 9-14 years age-group was being implemented since 1979 as a part of Sixth Five Year Plan in Andhra Pradesh. The objective of the study was to evaluate the scheme in terms of realizing its objectives, success or failures in administration of the scheme and its financial and structural aspects.

This was a survey study of two agencies in the state which ran non-formal education centres. These agencies were the state government and the Seema Seva Samithi. The West Godavari and Chittoor districts were taken as sample for the study. It covered ten centres at primary level in each block of the two districts. In this way, 90 centres (there being nine blocks in each district) from each district were studied by the case study approach in respect of annual enrolment trends and classification of dropouts. For further details about the centre, the persons concerned with administration of non-formal education centres were interviewed through an interview schedule.

The findings of the study were: 1. The administrative machinery at the state and district level was inadequate, with the increasing demands of the non-formal education programme. 2. There was no advisory committee at any level in the state for the non-formal education programme. 3. There was a single non-formal education coordinator at district level to give academic support to supervisors and instructors. 4. There was a centralized system of distribution of teaching-learning material to the centres. 5. For supply of equipment and other material, budget allocations were sent to the District Education Officers. After purchases were made, the District Education Officers distributed them to the centres through supervisory staff. 6. Lack of transport facilities in case of many supervisors handicapped their supervisory work because centres were located far and wide in blocks. 7. Grants for the Seema Sewa Samithi had been released only for past two



years against their schedule to get the grant for two future years. 8. The non-formal education programme in the state had covered all the districts and the majority of the block ranges. About 17,790 village/urban areas had been covered by 1984-85 at the rate of 60 to 75 centres per block. 9. Average enrolment in non-formal education centres was up to national norms. 10. Even where the enrolment was more than 25 subjects, the reading-learning materials supplied was only for 25 subjects. 11. At the state level, financial management was inadequate. 12. At the district level the arrangement for looking after accounts and finances was inadequate.

1325. NANIPANTULU, J., *An Evaluation of Academic Aspects of Non-formal Education of 9-14 Age Group (1985)*, Directorate of School Education, Andhra Pradesh, 1986 (NCERT financed)

The objective of the study was to evaluate the non-formal education programme being run in Andhra Pradesh for students of the 9 to 14 years age-group. The evaluation was restricted to academic aspects only. Evaluation was done with respect to (i) concept, objectives and models of non-formal education; (ii) the motivational aspect of non-formal education; (iii) curriculum and instructional material; (iv) teaching and supervision; (v) equivalence and convergence of non-formal education with formal education; (vi) community cooperation; (vii) introduction of craft and library; (viii) cost and achievement of non-formal education.

The non-formal education programme for non-school-going children of the age group 9-14 was started in the country in 1978 by the NCERT. Around 228 non-formal education centres were established through the Regional College of Education, Mysore, and its field office in Andhra Pradesh. These centres undertook the work till 1982. At this stage, conceptual and instructional materials were developed for the centres, and various practices and methodologies were also evolved for managing these centres. For the purpose of the study, a sample of 100 non-formal education centres with highest number of children enrolled and 100 centres with high non-enrolled children were taken. These were chosen from tribal blocks and rural blocks. The books used in these centres from I to V grades were examined with respect to linguistic analy-

sis, and psychological analysis. For deeper analysis, a purposive sample of the instructors, retired teachers, locally unemployed youth, retired officers and clerks was taken. They were interviewed about the academic functioning of the non-formal education programme for children.

Some of the findings of the study were: 1. Agriculture was the main occupation of the non-formal education learners. They had been working with their employers for the last two years. 2. Learners attended the centres to get knowledge about letter writing, improvement of profession, etc. Most of them said that NFE helped them in day-to-day household work. 3. Both the instructors and the NFE centres were the main sources of motivation to the learners attending the NFE centres. 4. All supervisors were academically and professionally well qualified, with wide experience in the area of supervision in primary school education. 5. All teacher trainers of the NFE centres were MAs, M Eds, working as coordinators at teacher training institutes. 6. Most of the instructors were unemployed youth with qualifications ranging from matriculate to BA. Very few of them had a teacher training certificate. 7. The centres were working satisfactorily with respect to class management, regularity and punctuality of instructors, regularity of learners, involvement of local community, availability of resource material, organization of cocurricular activities. 8. The mean performance of boys attending the NFE centres was higher than the mean performance of boys attending formal schools. The mean performance of scheduled caste boys attending NFE centres was higher than the performance of scheduled caste boys attending formal education. 9. The performance of girls of the general group and scheduled caste group was good while that of the scheduled tribe girls was satisfactory. The performance of the general group at both formal school and NFE centres was near about similar. 10. The performance of boys in the general group and NFE centres was good. 11. The performance of learners beyond age eleven years was higher than the performance of learners under eleven years of age. 12. NFE learners at the centres had cognitive skills, social skills and communicative skills at the same level as that of the formal education learners.

1326. PARDESHI, J.S., *Agricultural Education Needs of Out-of-School Youth Engaged in Farming*, Dept. of Adult Education, NCERT, 1967

The purpose of the study was to identify the agricultural education needs of the out-of-school rural youth with a view to improving the educational programme in the area concerned.

This was a normative survey. Two schedules were used for interviewing the youth. Simple percentages were used for data analysis.

The main findings were: 1. The youth engaged in agriculture were hard-working. They were progressive insofar as they had adopted new techniques and improved method for increasing production. The progressive trend was found to increase with the rise in their educational level. 2. Their educational needs were knowledge of new inputs, new techniques of production and economics of production. 3. Their needs could be classified as belonging to farm production, farm management and farm mechanics. Under farm production, the first choice was given to insect control; under farm management, it was marketing; and under farm mechanics, maintenance of pumps and engines was the most popular topic. 4. Most of them attached much importance to self-education. After self-education, they preferred agricultural education through village level workers and then through programmes of the block officers. The agricultural institutions came last. 5. Instruction through the agriculture teacher of the primary/secondary school was given the least importance. None of them attached any importance to youth clubs or young farmers' clubs.

1327. RAJYALAKSHMI, K., *An Evaluative Study of Certain Aspects of Non-formal Education Programme for Children Aged 9-14 Years in Rayalaseema Area*, Ph.D. Edu., SVU, 1986

The objectives of the study were (i) to ascertain the composition of the NFE learners in terms of sex, age, caste, occupation of parents, size of land-holding of parents and development of locality, (ii) to find out the difference in the inputs such as physical facilities, teaching-learning materials and kind of instructors available at the NFE centres, and to know the attitude of teachers towards NFE, (iii) to find out the reasons for attending the NFE centres and dropping out from them, (iv) to ascertain the learning outcomes of the NFE centres in terms of the performance of the learners in Telugu, arithmetic and problem areas test, (v) to find out the influence of the variables relating to the learners, instructors and the NFE centres on the academic achievement of the NFE learners, (vi) to identify the factors relating

to the learner, instructor and the NFE centre which predicated the performance of the learners, and (vii) to compare the performance level of the IV stage NFE learners with those of V standard formal primary school pupils.

The main sources of data were the responses of a sample of 400 learners, 160 dropouts from NFE centres and 80 instructors of NFE centres, and 200 formal primary school pupils. The tools used were Telugu test, Arithmetic test, test in problem areas, Academic Achievement Motivation Inventory and a checklist meant for the NFE learners, an interview schedule, a checklist meant for dropouts from NFE centres, a questionnaire for instructors, an attitude scale to measure the attitude of the teachers towards NFE. All the tools were developed by the investigator following standard procedures.

The major findings were: 1. The largest occupational group represented among the NFE learners was that of agriculturists and labourers. 2. A little less than one-fourth of the instructors were women. 3. The instructors largely belonged to the younger age group (below 30 years). 4. A majority of the instructors was from backward and forward castes. A small number of instructors were from SCs and STs. 5. A large number of NFE instructors were SSC holders. There were a few graduates. There was no postgraduate. 6. Two-thirds of the instructors were without any professional qualifications. Others possessed higher grade, secondary grade and B.Ed. qualifications. None had postgraduate teaching degree. 7. The attitude of male and female NFE instructors towards the NFE programme was not significantly different. 8. The attitude of the young and old NFE instructors towards the NFE programme did not significantly differ. 9. The primary school stood out at the most prominent place for the NFE centre. 10. In more than three-fourths of the centres, the learners sat on the floor. 11. Workbooks, maps, charts, globe, flash-cards and playing materials were not available in all centres because they were not supplied to any NFE centre. 12. The roll-up black boards and textbooks—Telugu and arithmetic, were adequately available in all the centres. 13. The maximum number (300) of respondents checked the reason 'To be able to read and write lessons' as the first and foremost reason for their attending the NFE centres. 'To read bus name boards', 'To read story books', 'To read the newspapers', 'To maintain cleanliness', 'To teach other young children', 'To speak politely', 'To read names of the cine actors' were ranked second, third, fourth, fifth,

sixth, seventh and eighth respectively, as the reasons for their attending the NFE centres. 14. There was significant agreement between/among (A) boys and girls, (B) two age groups of learners, (C) the three caste groups of learners, (D) learners from different occupational groups, (E) learners from families with different size of land-holding, (F) learners from different levels of development of locality, and (G) learners from different districts in checking the reasons for attending the NFE centres. 15. The performance of NFE learners in general in all the three tests was neither high nor low. Each test was for a maximum score of 70. The highest mean score (36.13) was in the problem areas test and the lowest mean score (33.38) was in Telugu. The difference between the highest and lowest mean scores was negligible. The mean score in arithmetic was 34.84. 16. The performance of formal learners in general in all the three tests was more than average. The highest mean score (46.13) was in problem areas test and the lowest mean score (41.63) was in arithmetic. The mean score in Telugu was 45.75. 17. Engagement in the household work, getting exhausted due to day-to-day work, family problems, ill-health, migration to another village, looking after children, feeling shy in going to centres, fear of coming at night, ridicule of people, were some of the important reasons for dropping out from the NFE centres.

1328. SHARMA, R.C., *A Study of the Opinions of Parents of Out-of-School Children*, SIERT, Rajasthan, 1984

The objective of the study was to find out the parents' reasons as to why children did not go to school.

Seventy-four families of six villages of two panchayat samitis of Udaipur and Chittorgarh and the concerned Block Development Officers and Education Extension Officers were covered by the study. Parents whose children did not go to school were asked to give their opinions in a pro-forma with columns like general information about the family, its academic and economic status, questions related to the school, the teacher and education of children.

The findings of the study were: 1. In rural areas the child was an economic unit of the family, a helper in agriculture and animal husbandary, and an important contributor to family income. 2. About 88 per cent of the parents were ready to send their children to school if their problems were solved. 3. About 36.5 per cent

of the educated parents were indifferent to the education of their children. They were of the opinion that it would have been better if, while making the arrangements for teaching, their convenience had been taken into consideration. 4. The reasons for the low enrolment girls were: girls needed for household chores, early marriage and the feeling that it was not worthwhile to educate girls as they were not an integral part of the family.

1329. SHUKLA, N., *Evaluation of Instructional Material of NFE Centres*, Departmental of Pre-school and Elementary Education, NCERT, 1985

The main purpose of the study was preparation of suitable evaluation tools for evaluation of instructional materials like textbook materials, post-primer materials, mathematics books, supplementary reading materials, local specific materials, and environment and science education materials for non-formal education centres. The evaluation materials were developed on the basis of analysis of the conceptual framework of non-formal education in the Indian context and content analysis of reading materials used in classroom teaching only. The content analysis was done keeping in view the instructional objectives aspects of instructional material, steps involved in preparing the materials and study of contributing factors.

The content analysis of Hindi-speaking areas instructional materials revealed: 1. In preparation of NFE materials two objectives were kept in mind: to prepare children at the primary level through a condensed version of the curriculum (in Madhya Pradesh) and to prepare some need and problem based material for out of school children and give them education through their surrounding and local environment. 2. Under the second category of objectives, three sets of materials were developed such as non-formal education material by the NCERT, CAPE material under the UNICEF-assisted project and the DACEP material under another UNICEF-assisted project. 3. All the instructional materials had two aspects—academic and physical. While the academic aspect of the material exercises, illustrations, etc., the physical aspects took care of size of the book, type, paper, binding, etc. 4. In the process of preparation of material, problem areas were to be identified through an extensive survey of the concerned region (CAPE project). 5. In most of the cases, materials were prepared by a group of writers



and authors who were very much involved in the education of the target group children. 6. The contributing factors identified in the preparation of materials were instructional objectives, needs and problems of learners, national and local objectives, teaching techniques, curriculum community, local resources and utilization, etc. 7. The evaluation tools prepared on the basis of the above analysis were of two forms, viz., analysis sheet and evaluation pro-forma. The analysis sheet was primarily meant for analysis of lessons and evaluation pro-forma looked at the description of the material as a whole. The evaluation pro-forma included both the academic aspects as well as the criteria of evaluation.

**\*1330.** SINGH, D.P., *An Investigation of Natural History Museums of India as a Medium of Non-formal Education, including Evaluation of Exhibit Effectiveness with special reference to creating Scientific Temper among School Children*, Ph.D. Edu., JMI, 1985

The objectives of the study were (i) to survey the various dimensions of the non-formal educational contribution being made by the museums of natural history in India, (ii) to study the gaps between the expectations and actual satisfaction of the school children from their visits to museums of natural history, (iii) to study the level and extent of information which got communicated to school children by visiting museums of natural history, (iv) to study the level and the impact of various social factors (such as social class, rural urban differentiation, occupational background of parents, etc. on the extent and quality of education acquired by schoolchildren in museums of natural history, (v) to study the effectiveness of museum exhibits with special reference to schoolchildren, and (vi) to suggest appropriate methods of improving exhibit effectiveness in the museums of natural history to increase their communication potential.

The survey method was employed. The study had two phases. The first investigated the Natural History Museums of India and the second evaluated the effectiveness of exhibits of the museums. The first sample of the study was represented by 40 directors or officers in charge of museums from different parts of India. The second sample consisted of schoolchildren of age group 14-16 years. In all, 280 children were used as a target audience from museums at Madras, Bangalore,

Trichur and Trivandrum. Apart from this, 400 students from the National Museum of Natural History, New Delhi were also used as the sample. The tools used were a questionnaire for the directors of the Natural History Museums of India, an observation sheet to determine the attracting and holding power of the exhibits, a questionnaire for general evaluation of study students' interest in life sciences and wild life exhibits, a questionnaire for exhibit evaluation, and a gallery layout sheet to know the traffic pattern of movement of students and the general effectiveness of the whole gallery. The data were analysed through percentages.

Some of the major findings were: 1. Only 5 per cent the staff members were devoted to Natural History sections. More than 35 per cent of Natural History sections were without any staff while 24 per cent of multi-purpose museums had allotted only one person to the natural history section. The maximum number of museums were organizing educational programmes without any educational staff. Schoolchildren were the predominant visitors in most of the museums. Dioramas and stuffed animals were found to be very effective and educative methods of display. 2. Visitors made free movements in any direction, leaving 30 per cent of the gallery unseen. The space between two exhibits was too little. 3. The birds gallery at Natural History Museum, Trivandrum, was found very effective and attractive but it was very poor for schoolchildren. The labels were in the form of names of the exhibits. 4. The mammal gallery at the Karnataka Government Museum and Venkatappa Art Gallery, Bangalore, was found to be in a pathetic condition. All the exhibits were fragile, dusty, discoloured, unlabelled and even broken. The mammal gallery at the State Museum and Zoo, Trichur, could be converted into a very good museum with a little effort. 5. The National Museum of Natural History, New Delhi, was the only one of its kind in India and unique in its educational programmes being at par with those of museums in the USA and European countries.

**1331.** SINGH, L.L., *Impact of Non-formal Education on the People of Manipur Valley*, Ph.D. Edu., Gau. U., 1986

The main aim of the research was to study the different aspects of non-formal education and its impact on the people of Manipur Valley.

The study included mainly three valley districts of Manipur. Data were collected from the field through the participation observation method and examination of official records of the state government and other secondary sources. Different relevant aspects of non-formal education and its development were studied.

Some of the major findings were: 1. There was a vital need for non-formal education in Manipur. The existing programme of non-formal education and various types of impact in Manipur. There was impact on school dropouts and other weaker sections of the region for the development of vocational traits. 2. Different aspects of folklore had various impacts on the people in Manipur. 3. The conditions of most of the non-formal education centres were not up to the expected standards. 4. The programme had many limitations, such as unsatisfactory methods of instructions, irrelevant reading materials, unsatisfactory roles of the functionaries. The prevailing programme needed improvement. There was need for follow-up programmes, supply of proper reading materials, efficient library services, etc.

\*1332. SRIVASTAVA, L.R.N., and GUPTA, B.S., *A Study of Methods, Processes and Practices of Non-formal Education Programme for Tribal Students*, NCERT, 1985

The objectives of the study were (i) to find out the enrolment in the selected non-formal education centres, (ii) to study the structure, management, sources of finance, etc. aspects of non-formal centres, (iii) to find out the content and methodology of education and availability of physical facilities at these centres, (iv) to find out the types of skills and training being imparted to students at these centres and their relevance to tribal people's economic life, and (v) to find out the outcomes of the programme of non-formal education at these centres.

The states selected for the study were Gujarat, Rajasthan, Andhra Pradesh, Madhya Pradesh and West Bengal. Accordingly, eight centres from two districts of Gujarat, six centres from one district of Rajasthan, 14 centres from two districts of MP and 15 centres from four districts of West Bengal were included in the sam-

ple. Children in the age group 9-14 years who were either dropouts or non-starters were considered in the study. The data were obtained with the help of two Information Blanks developed for this purpose.

The major findings of the study were: 1. All the five states started a non-formal education programme to help children to join the mainstream of education. 2. In all, there were 13,362 non-formal education centres at the time of data collection. Of these centres, 3,323 were opened in tribal sub-plan areas. 3. The total enrolment in the non-formal education centres of Andhra Pradesh, MP and WB was 2,39,405. The enrolment of tribal children in these states was 52,275. Figures for Gujarat and Rajasthan were not available. 4. Out of the total tribal children studying at the sampled centres, 67 per cent were boys and 33 per cent were girls. 5. Neither at the centre's level nor at state level was a follow-up record of children kept, due to which it could not be ascertained whether students joined the mainstream of education or not. 6. No extra-curricular activities were organized by the centres. 7. By way of records, the centres maintained only one attendance register. 8. Getting the community's cooperation was not attempted by the teachers. 9. In Andhra Pradesh, Gujarat and MP, centres were run by regular primary school teachers, their qualifications were matriculate and elementary teacher-training certificates. Two teachers were trained graduates and five were middle-class pass but trained. In Rajasthan, only two instructors were matriculates while the remaining four non-matriculates. In West Bengal, one instructor was a B.Com., and one was a B.A., 22 of them were matriculates while only six were non-matriculates. 10. In Gujarat, no independent machinery was set up to exclusively look after the programme of non-formal education. 11. Andhra Pradesh, Gujarat, Rajasthan and West Bengal had developed a separate syllabus for non-formal education centres, while MP had condensed the existing primary school syllabus into 18 units for use in the centres. 12. The centres covered under this study had not been provided with any specially prepared instructional material except in the case of Gujarat. 13. The medium of instruction was the regional language in all the states. 14. The non-formal centres in Andhra Pradesh and Rajasthan got Rs. 25 per month for contingent expenditure, while in Gujarat they were paid Rs. 100 per year. In MP and WB, they were paid Rs. 100 and Rs. 1,200 per year respectively.

- \*1333. YADAV, R.D., *A Study of the Programme of Non-formal Education for Children of 9-14 Years in Uttar Pradesh*, Ph.D. Edu., MSU, 1987

The major objectives of investigation were (i) to study the coverage achieved under the non-formal education programme, (ii) to study the functioning of non-formal education centres and (iii) to assess the non-formal education programme in terms of children's performance on its different dimensions.

The study was conducted in two blocks, namely, Ram Nagar and Siddhaur of Barabanki district in Uttar Pradesh. The sample of the study at the primary stage consisted of 50 instructors, 250 children and 100 village leaders, whereas at the middle stage, 15 instructors, 45 children and 30 village leaders were selected. The data were collected with the help of interview schedules for village leaders, children and supervisors. A questionnaire was used for instructors and principals, information from centres was collected through information schedules, and achievement tests were used for testing literacy, numeracy, health and hygiene, social awareness, environmental knowledge and vocational knowledge. Data obtained with the help of these tools were analysed separately for primary and middle stages. For studying the coverage achieved under the programme, percentages were calculated. In order to study the functioning of NFECs percentages and mean were calculated.

Children's performance was also assessed through mean and percentages. The significance of difference between achievement scores of boys and girls was studied through t-test.

The major findings of the study were: 1. The NFE programme started in 1980-81, covered 50 per cent of the blocks and 20.7 per cent villages of the district up to 1983-84. 2. It was found that due consideration was not given to covering the most needy blocks of the district. 3. The majority of children at both the stages were found above or below the prescribed age and belonged to scheduled castes and backward classes. 4. The main activity at the centres was reading and writing. A few of them organized games and sports and teaching through activities. 5. The overall performance of children on various dimensions of NFE at both the

stages was poor and the performance of girls at middle stage was found to be better than that of the boys.

## ALSO SEE

1354. KANTA RISHI and DUTT NARAIN, *Evaluating the Effectiveness of Adult Education and Non-formal Education Schemes in Haryana State*, SCERT, Haryana, 1984
1591. KAPOOR, M., *A Study of Extension Education Programmes for Women with special reference to Family Life Education*, Ph.D., Social Work, JMI, 1984
1420. MISTRY, V., KAUL, S., DHAR, H., *Indepth Study of non-formal Pre-school Education Component of the ICDS Project*, Dept. of Child Development, MSU, 1986
958. NAIDU, JAYACHANDRANMA., *A Comparative Study of the Academic Achievement of the students of Formal and Non-Formal Education*, Ph.D. Edu., SVU, 1986
1373. POTDAR, M.D., *Administration, Supervision and Monitoring of the Non-Formal Adult Education Centres (age group 15-35) and to Evaluate Adult Education Learners*, Ph.D. Edu., Poona U., 1986
256. PRAMUA, UNCHAI, *An Investigation into the Attitude of the Teachers Education towards the Programmes of Non-Formal Education leading to Life-long Education in Thailand*, Ph.D. Edu., SPU, 1987
854. SHINDE, Y.K., *A Study of Non-Formal Science Activities in Secondary Schools of Maharashtra State with special reference to their Impact on Scientific Attitude and Achievement in Science*, Ph.D. Edu., Bom. U., 1982
272. SOMRIT, I., *A Study of the Non-formal Education Needs of Slum Population in Bangkok Metropolitan Area of Thailand*, Ph.D. Edu., SGU, 1985
1437. TARAPORE, F.Z., DESHPANDE, K., PANDSE, S., *Study of Non-formal Pre-school Components of ICDS Project*, JUNAR, SNDT College of Home Science, Pune, 1986