ANNUAL ACADEMIC REPORT

of

SCERT

1991 & 1992

GOVERNMENT OE NAGALAND
COUNCIL OF EDUCATIONAL
SEARCH & TRAINING
NAGALAD : KOHIMA.

ENGLISH CELL

Introduction :

English has been introduced as a compulsory subject in the schools of Nagaland. As it is the medium of instruction, the teachers need to improve the standard and quality of teaching as far as English is concerned. It is not possible to mould the child, if the teacher himself is untrained. It is, therefore, imperative that the teacher should undergo training so as to teach the students in a systematic way of teaching. With this end in view, we conduct Orientation Programme in English so that the teacher will improve proficiency in English with reference to methodology and contents. We devise certain training strategies to cope with the need. In fact, a will-conceived training programme of 5 days' duration seems to be worthwhile in training the teachers for the classroom situations.

Strange as it might seem, English is the only subject that is taught by non-trained teachers in Primary and High schools. It should be taken for granted that English can be taught at the primary/high school level by a teacher who is specialised in the subject. Any teacher cannot be asked to teach English if he or she is not trained. Naturally, the task of identifying teachers of English as well as helping to improve their competence is basically needed. Further, the non-availability of specialised teachers of English in sufficient number makes it more necessary to train the teachers through Orientation Programmes.

More and more teachers are being recuited to teach English, who have not had much background in English. Most teachers who enter the profession do not therefore have the necessary competence in English. Furthermore, they are not always aware of the latest techniques in teaching. Although the task of training the teachers is a massive one, the dimensions of the prob'em are not so unweildy that cannot be tackled by time-bound training programmes.

Activities carried out under the English cell :

1. Mrs Chubala attended a Seminar as Resource person organised by Ao Baptist Church at Dimapur on 2nd and 3rd May '92.

2. Mr. F. C. Dutta & Mrs Chubala attended the seminar organised by Comprehensive Rural Development Services, Dimapur on 7th and 8th August '92.

3. Orientation Programme in English for Primary teachers was held at Kohima from 14th to 18th July '92. This programme covered the districts/areas of Wokha and Tseminyu. (Consisting of 25 trainees each).

4. Orientation Programme in English for primary teachers was held at Kohima from 15th to 19th Sept. '92. This programme covered the district of Phek. (Consisting of 50 trainees).

5. Orientation Programme in English for primary teachers was held at GHS, Dimapur from 20th to 24th Oct. '92. This programme covered the districts/ areas of Dimapur, Peren and Mon. (consisting of 15 trainees from Dimapur, 15 from Peren and 20 trainees from Mon respectively).

6. Reviewed the manuscripts for Class VI Reader for onward submission to the Director, School Education for publishing.

7. The manuscripts for class VII. Reader are being written/complied on the basis of the structures laid down in the curriculum. The manuscripts are almost getting ready for proof reading and typing.

SOCIAL SCIENCES CELL :

Apart from participation in various educational programmes the main areas of activity are in In-service teachers' training, development of curriculum and text-books writing. A brief report on these works are given below :

1. In service Teachers Trainning :

One of the most vital areas for improving the standard of education is training teachers. Accordingly, SCERT places great emphasis in this aspect of educational activity. However, due to budget constraints the number of training programmes had to be reduced. Consequently, about 250 teacher were trained. In this training programmes, special stress was given to the methods and approaches, of teaching the subject.

2. Curriculum :

Following the NPE, '86, a thorough revision of the curriculum became necessary. Accordingly, curriculum for Environmental studies (classes I-IV and Social Sciences (classes I-IV) and Social Sciences (classes V-VIII) have been developed and reviewed. Special reference has been made on Nagaland by including one unit at every class level.

3. Textbooks :

Textbooks for class VI was developed. Earlier, class V textbooks had been developed. The books are already being used in schools. Manuscripts for class I, II and VII are being developed. Efforts are being made so that these textbooks will be free of factual errors, written in correct and simple language with clear and relevant pictures and diagrams

MATHEMATICS CELL :

The mathematics cell attends to various wholesome programmes at the State level. Its functions are : (i) In-service training, (ii) Research work, (iii) Publication.

In order to bring about qualitative improvement both at the primary and secondary' level, the mathematics cell conducted a series of decentralised training programmes for different categories of in-service teachers handling mathematics.

Aims and Objectives :

The aims and objectives are :

(i) to acquaint the teachers with the easy and the latest trend in teaching of mathematics.

(ii) to acquaint the in service teachers with how to teach their existing text books.

(iii) to foster development and interest towards learning of mathematics at school level.

(iv) to improve the standard and quality of in-service teachers handling mathematics

The mathematics cell had already trained 250 teachers of the State out of the proposed 450 during the financial year 1991-92 and 1992-93. As per the calendar of Activities of SCERT, the cell could conduct six (6) training programmes during 1991-92 and only two programmes in 1992-93 for the different categories of in-service teachers teaching mathematics. The teachers who participated in the programmes during the periodswere from Kohima, Mokokchung, Wokha, Phek, Tuensang, Tseminyu, Mon, Peren and Dimapur under D.I.S. Kohima, Dimapur, Wokha, Mokokchung and Peren. The in-service teachers of primary, middle and secondary schools handling mathematics were given training on the contents and methodologies so as to enable them to teach the subject in the classroom situation confidently for the better understanding and interaction between the teacher and the taught. In most of the centres, the attendance of the teachers trainees were really satisfactory and encouraging except in one or two.

The activities performed by the Mathematics cell during the periods 1991 and 1992 are as follows :

(i) conducted training programmes entitled "Teaching of Mathematics" for Middle school teachers for 5 days at SCERT, Kohima.

(ii) conducted "Enrichment Programme in Mathematics" for Primary school teachers at SCERT, Kohima.

(iii) conducted short course training programme entitled "Teaching of Mathematics" for primary school teachers at Govt. High School, Wokha.

(iv) conducted training "Teaching of Mathematics" for B.Sc teachers of Govt. Middle schools at J. T. T. I. Yimyu, Mokokchung.

(v) conducted "Enrichment programme in Mathematics for B.Sc teachers of Govt. High schools at SCERT, Kohima.

(vi) conducted training for primary school teachers entitled "Teaching of Mathematics" at Govt. High school, Dimapur.

(vii) conducted training "Teaching of Mathematics" for primary teachers at Govt. High school, Peren.

(viii) conducted training for B.Sc. teachers of Govt. middle schools entitled "Teaching of Mathematics" at SCERT, Kohima.

A series of "Teachers' Guide" on Mathematics were developed by the academic staff of the cell under the experts guidance and distributed to the teacher trainees for their future reference.

In the coming years, the cell aims to provide the training for the in-service teachers of the areas left during the periods mentioned above.

EDUCATIONAL AND VOCATIONAL GUIDANCE CELL AND WORK EXPERIENCE.

The general objectives of Educational and Vocational Guidance cell are as follows :

(i) To help the pupil understand himself better, i.e. to recognise his aptitudes, intelligence, abilities and interest.

(ii) to assist the pupil in making careful choice of subjects and courses.

(iii) to assist the pupil in making realistic choice of occupations.

(iv to help the pupil in developing better personal, social and emotional relationship.

(v) to provide special help to the gifted slow learners and the handicapped.

Activities conducted :

In vocational guidance and counselling the number of teachers trained during 1990-1991 were, 26 in primary, 48 in secondary totalling to 74. In 1991-92, 101 were from primary while there was 25 from secondary altogether there being 126. During 1992-93, at the primary level 44 were trained, while 26 were train d at the secondary level, the total being 70.

The general objectives of work experience are Knowledge and Understanding to help the Child :

indentify his needs and those of his family and community in respect of food, health and hygiene, clothing, shelter, recreation and social service.

- acquaint himself with productive activities in the community,
- understand facts and scientific principles involved in various forms of work.
- know the sources of raw materials and understand the use of tools and equipment in the production of goods and services.
- understand the utility of productive work and services to the community.
- understand the needs of a technologically advancing society in terms of productive processes and skills.
- understand the process of planning and organizing productive work,
- conceptualize his role in productive situation,
- develop an awareness of social evaluation of his performance.

Skills to help the child

- develop skills

i) (a) for selection, procurement, arrangement and use of tools and materials for different forms of production work,

(b) to observe, manipulate and participate in work practice

(c) for the application of problem-solving method in productive work and social service situations,

(d) for greater productive efficiency.

ii) enhance his working competence sufficiently so as to enable him to earn while he learns.

(iii) use his creative faculties for devising innovative methods and materials.

Attitudes and Values
to help the Child.

- develop respect for manual work and regard for manual workers,
- inculcate socially desirable values such as self-reliance, helpfulness, co-operativeness, team-work, perseverence, tolerance etc,
- develop proper work ethics such as regularity, punctuality, honesty, dedication, discipline etc.
- develop self-esteem through achievements in productive work and service,
- develop a deeper concern for the environment and a sense of belonging, responsibility and commitment to the society.

Activities conducted :

In Vocationalisation of Education/Work Experiences during 1990-91, 26 at primary and 23 at secondary level were trained, the total number being 49. During 1991-92, 43 at primary and 23 at secondary level were trained, totalling to 68. In 1992-93, 46 teachers were trained with 28 at primary and 18 at secondary level.

SCIENCE CELL :

Introduction :

The objectives of teaching Science are essentially the same from the primary through the elementary to the secondary level. The degree of attainment and the level of competency vary according to the development, interest and abilities of young learners. Although there is a wide variety of objectives, they all fall into two categories : (1) those that pertain to the product of science and (2) those that pertain to the process of science.

The product of science refers to science content which consist of different classes of statement : definnitions, knowledge statements, theory statements, principles, laws etc. We may call them 'Key concepts', 'major concepts', 'representative ideas' etc.

The process of science refers to the methods of science that make it possible for the children to learn science. These include all those abilitees, skills and attitudes that make critical thinking and problem solving.

In an effective science teaching, great emphasis is placed upon process of science because Process is the means whereby real learning of the structure or content or Product of science takes place in the class room. However, all too often, the major emphasis has been on product of science, and process of science has been ignored by the teachers. This has resulted in memorisation rather than thinking and in the learning of facts rather than concept formation. It is due to traditional method of teaching of science such as verbal communication, 'chalk and talk' method etc. Where nature of science is not considered : children memorise the factual information which are meaningless in their real life situations.

Keeping in view of the above mentioned state of affairs with regard to teaching of science at diffe ent levels, various traning programmes in science for primary, elementary and secondary teachers were taken up by the science cell to boost the professional efficiency of teachers.

A. Primary Level :

For successfully teaching primary science (Environmental Studies Part II) it is necessary that the teacher should have a good background of knowledge in science and also the correct method of imparting the same to his pupils.

At resent a vast majority of the teachers who teach science at primary level have little or no background in science. The training programmes taken up during 1991 and 1992 aimed at imparting training to teachers on content as well as method to enhance their professional competence. A total number of 99 teachers during 1991 and 42 teachers during 1992 were given enrichment training on both content and method of teaching science. Roughly 40% of the total time during the training programmes was devoted to provide the teachers with suffiicient background of science and the remainig time to the methods of teaching science with special reference on how to use learning situation available in the environment.

B. Elementary level :

The teacher is by far the most important factor in teaching of science. If the teacher is not qualified, trained and motivated to carry out science teaching, the teaching is unlikely to have any effect on the children. In order to develop and maintain a high level of competence, they should be provided with opportunities for in-service training. At present, in most of the elementary schools, teaching aids in the form of concrete materials tools, equipments which are essential for the development of science concepts and also the scientific

method and attitude, are not available. However, being given to understand that the education department is supplying Intergrated Science Kits to Elementary schools, the science cell of SCERT felt it essential to expose the teachers who handle science to the utility and the multipurpose nature of the kit items. Accordingly training programmes entitled "Effective Utilitsation of Integrated Science Kit" was organised and 20 elemantary school teachers in 1991 and 31 teachers in 1992 were trained. A large number of activities in which the kit items can be used and also improvisation of teaching aids using local resources were discussed. Due weightage was given to demonstration classes by participating teachers using kit item and local resources.

C. Secondary level:

In secondary schoools of Nagaland, a science teacher is expected to teach the topics of all the three areas such as Physics, Chemistry and Biology irrespective of his specialization of subject during graduation. This, very often, make a teacher handicapped while handling certain disciplines of science. Therefore, to familiarise the teachers with the new contents and the new trends in the approach, an orientation course was organised and 25 science teachers from different schools could be trained. The services of subject experts from Science College and Nagaland College of Education were profitably utilized to enrich the content knowledge of teachers in different disciplined such as physics, chemistry and biology.

D. Other activities :

(1) Science Quiz

A science quiz contest at school, District and State level was organised by the science cell for the

students of classes IX and X with a view to enrich themselves and to supplement the classroom learning in science. The main objectives of the quiz contest was to help the students develop the concepts in science skills in method of science and create enthusiasm for scientific enquiry and critical thinking. The timing of the science quiz at different levels was fixed in such a way that the preparation by students for competition would also help them in their performances in science in the Board Examination.

Two students each from all, the seven districts participated in the State Level Science Quiz held on 20th Oct. '92 in the premises of SCERT, and cash prizes of Rs. 900/-, 600/- and 300/- was given as first, second and third prizes respectively. Students of Kohima district bagged the first prize.

(ii) Development of teacher's guide :

In the new 10+2 curriculum, the instructional materials in science for classes III, IV and V has been published in the form of text books entitled "Environmental Studies Part II". However, text books in Environmental Studies by their very nature tend to be too prescripetive and provide a rigid core of the facts of science Moreover, most of the teachers who handle science at primary level do not have enough science background. There is thus a pressing need for a teachers' guide which can bring about greater flexibility in the teaching and wider acceptability of the present text books.

Keeping this in view, the science cell has taken up the task of developing a teachers' guide in science which covers the contents of Environment Studies Part-II of classes III, IV and V. The manuscript of the same is expected to be ready for printing by the end of 1993.

EARLY CHILDHOOD EDUCATION CELL :

The specific objectives are :

(i) conducting research activities relating to the problems in primary Education.

(ii) developing learning materials for the children at pre-primary and primary stage.

(iii) conducting training programmes and workshop for different functionaries of ICDS and school Education on early childhood Education and care.

(iv) To consolidate linkages among the departments involved in the project.

The SCERT has undertaken a UNICEF assisted Project entitled Early Childhood Education. The main focus is given to different functionaries responsible for Early Childhood Education for 3-6 years olds. Activities in the following areas were accomplished during the calendar years of 1991 and 1992.

1991

PERSONAL DEVELOPMENT :

A 5 days orientation programmes for Anganwadi workets of Kohima on 'Child to Child'. 20 Anganwadi workers were trained. Two 5 day orientation programme for class IV teachers of Government Primary Schools of Tuensang District. The project trained 48 teachers in three programmes.

1992.

1 Planning and Organisation.

A one-day Advisory Committee Meeting drawing members from the department of SCERT, School Education, Social and Security Welfare, Representatives from UNICEF.

. A one-day Technical Committee meeting involving personel/experts in the field of Early Childhood Education.

. Two one-day co-ordination Committee meeting to consolidate the linkage among the agencies and department involving in the implementation of the project and also bringing out the tentative activities to be carried out during the calendar year.

2. Personnel Development.

A. ICDS Functionaries.

. A Base-line survey of 40 Anganwadi Centres (ICDS) of Kohima and Jalukie Blocks.

. Four Training programmes for Anganwadi workers of Kohima and Jalukie Blocks where 78 Anganwadi were oriented.

B. School Education Functionaries :

. Two 15-day First Level Orientation Programmes for key Resource Personnel drawing from Primary teachers of Peren, Kiphire, Dimapur, Kohima, Longleng and Tuensang. The project has trained 34 key Resource Personnels and 5 (five) Sub-Inspectors of schools.

- Two 15-day 2nd Level Orientation Programmes for Pre-Primary Teachers of Govt. Primary Schools of Kiphire and Peren blocks In these programme the project has trained 62 Pre-Primary Teachers.

3. Monitoring and Supervision.

   A-15 day intensive Monitoring/Supervision was undertaken by the Project for Anganwadi centres of Kohima and Jalukie Block.

4. Material Development.

   Learning packages for pre-primary teachers based on developmental objectives of Early Childhood Education.

6. Learning packages in various area of child Development to be exhibited in the National Level Exhibition of Early Childhood Education at Delhi.

7. Pictoral Report of Early Childhood Education project in the State.

EVALUATION CELL.

Evaluation has wide concept and differs from examination. It deals with instructional procedures and performance assesment. It has a great role to play in the teaching learning process. It is indeed indispensible for giving feed back to every one involved in the system. A good teacher becomes a better teacher with the knowledge of evaluation. Hence organisation of Workshops on evaluation and development of manual form is important function of the SCERT.

Activities :

During the Calendar years 1991 and 1992, training and orientation in Evaluation programmes were conducted. Teachers of the Primary, Middle and High School levels were trained in the 7 districts of Mokokchung Zunheboto, Tuensang, Mon, Wokha, Phek and Kohima Altogether the teacher participants trained at different phases were 125.

In 1991 a Project entitled "Attainment of Primary School Children" was jointly undertaken with the Department of Measurement, Evaluation, Survey and Data Processing, NCERT, New Delhi. This Project was undertaken with the aim to ascertain how much a child learns in the area of Mathematics, English and Language after passing Class IV. The three districts of Kohima, Phek and Wokha were selected for administering the questionaires.

a) Total number of schools selected — 71 schools.
District-wise break up
Kohima (Rural and Urban) — 24 schools.
Phek „ — 20 schools.
Wokha „ — 20 schools.

b) Total number of students tested — 2065
District-wise break up Kohima — 1360
Wokha — 300
Phek — 405

c) Total number of
Teachers questioned — 142

The cell is presently involved in preparing the draft manuscripts for the second edition of tho "Evaluation Manual for School Teachers".

POPULATION EDUCATION CELL :

Population Education is "an educational programme which provides for a study of the population situation in family, community, nation and the world, with the purpose of developing in student rational and responsible attitude and behaviour towards population". Some of the important objective of population education are : (I) To enable the student to understand that family size is controllable, that population limitation can facilitate the development of a higher quality of life in the nation, and that a small family can contribute materially to the quality of living for the individual family. (II) To enable the student to appreciate the fact of preserving the health and welfare of the members of the family to ensure the economic stability of the family and to ensure good prospects for the younger generation. It is generally agreed that population education is the process of helping people understand the nature causes and implication of population processes as they affect individual families, communities and nation. It focuses on family and individual decisions influencing change at the micro level, as well as on broad demographic changes.

Population education is a new innovation in the field of education and it has assumed the focus of National and International deliberation. Keeping in view the above fact and realising the necessity of introducing population education in the formal system of education, Nagaland joined the National Population Education Project in 1986.

The major thrust were on training of teachers and development of material for the successful implementation of the project.

During the year 1991 and 1992, the cell performed the following activities :-

1. Training of Teachers :- During 1991, one hundred twenty (120) Primary/Middle school teachers were trained and in 1992, 60 (sixty) primary teachers were trained.

2. Materials Development :- During 1993—A Question Bank on Population Education and Lessons to be incorporated in the existing Text books were developed.

3. Co-curricular activities :- District level and state level-symposium, essay writing and quiz competition were organised on population education.