Doing research has its problems, and research on pre-school institutions and its evaluation is no exception. There are difficulties in designing a feasible and satisfactory methodology, in selecting criteria for evaluation, and also in the interpretation of results.

In this final chapter, it is attempted to evaluate the general approach adopted in these studies and to the limits to the generality of the findings.

12.1 Summary of results of separate studies

The situation of young children

It is observed that the proportion of child population is not likely to decrease in the next decade. The general literacy has improved, but not as substantially as hoped for. Over the last decade, it was 24 per cent in 1961 and 30 per cent in 1971 *. The family size continues to be large among low income groups, notwithstanding family planning programme. The mortality rate is very high in this age group of 0 to 6 years.

The interplay intrasectoral and intersectoral integration of various services for improvement of child situation has assumed greater importance from plan to plan. It was found that the various departments of the Government such as Medical and Public Health, Education and Social Welfare are independently organising child welfare services within their purview. Voluntary Organizations are also found to be engaged in similar activities.

* Census report, 1981 of Assam is N.A.
The Child Welfare Services through pre-primary education in various states of India and in abroad are fairly good. A comparison of enrolment ratios of pre-primary education of various major countries shows that the enrolment ratio of 5 years old children is highest on an average.

A study of the terms of reference and recommendations of the various expert bodies appointed by the Government of India would reveal no dearth of informations about the needs of pre-school children have been examined from various dimensions, and many appropriate measures to improve them qualitatively and quantitatively have been suggested.

**Pre-school Teacher Education**

The pre-school teacher education is an all important one for the success of pre-primary education.

A review of pre-school teachers education reveals that in 1930, the first full-fledged training institute was set up. The contribution of Madam Montessori gave further impetus to its programme. Anne Besant and Arundales in the South and Gijubhai Bhadeka and Tarabai Modak in the West gave lead for the movement of the programme. Gandhiji's philosophy on basic education also gathered momentum around the same line.

Pre-school teacher programme in one way or other is linked up with various institutions to qualify a person. There are training colleges run by the State Department of Education exclusively for teachers training. In addition to this, there are private institutions recognised by the State Government, Balsevika Training Programme by ICCW, CSWB, KGNMT for pre-basic teachers and sponsored training programme by the Association Montessori International etc. The teachers' training through correspondence course
are also found to exist sponsored by different organizations other than the state of Assam. Even the courses related to pre-primary teachers' training are incorporated in the syllabus of certain subjects (education sociology etc.) in the university level.

All the syllabus include courses relating to Child Welfare, Panchayat and Community Education, Nutrition, Health and Hygiene, History and Method of Education and Child Psychology etc. Practicals, practice teaching and field work are given due emphasis in the training programme.

There is a dearth of trained teacher educators in various training institutions. The qualified persons would not be attracted to the institutions because of variations of teachers' pay and working conditions.

Present Status of Pre-primary Institutions

Most of the pre-primary schools are housed in the building that is not specially constructed for the purpose. There is no provision for sufficient space both indoor and outdoor for free play activities. The set up of the building and physical facilities of the pre-schools are inadequate specially in the rural areas.

The comparison of urban pre-primary schools with the rural pre-primary school gives a negative picture on their general look where the cleanliness of children and surrounding of the school building is concerned.

The poor attendance of children observed in the rural pre-primary schools shows negligence of parents towards this early education. In general, it is found that as the education and income increased, the importance of the pre-primary education is also increased.
Different nutritious food items are provided to the pre-school children in the governmental feeding programme. In almost all the rural schools, feeding programme serves as an incentive in improving the attendance of children. Urban parents are more satisfied with the school conditions and existing programme, whereas rural parents are dis-satisfied with it.

Records of children's health, immunization, feeding programme and home visit are not seen in almost all the urban pre-primary schools. On the whole, the maintenance of various records are found in a better position in rural pre-primary schools, because of pressure of higher authority responsible for the school management.

Observations of the pre-primary schools reveals that sufficient number of play materials are not utilized by the pre-primary schools of both rural and urban areas. Few of the pre-primary schools in urban areas have play materials for educational and creative activities under the Montessori method of teaching to the children.

Although few of the teachers are trained in pre-primary education, the utilization of locally made play materials are not seen in any of the pre-primary schools. In rural schools, the use of charts on different themes to enhance children's learning have been observed and found to be satisfactory to certain extent.

The teachers of the urban pre-primary take interest in activities and are found to be enthusiastic, resourceful and knowledgeable as compared to the rural teachers. The urban teacher treats children with love and gives proper attention to each of them. Thus, urban pre-primary schools occupy comparatively a better status in the state.
Teaching Method in the Pre-Primary Institutions

The teachers reported various factors that are considered suitable for programme planning for the pre-primary schools. The programme should be flexible by considering the developmental level of the children and there is a need to have balance of various activities included in the programme. The trained and experienced teachers are in a better position to report such responses.

The various major items are generally planned for the whole year followed by short term planning for minor items. It shows, training and experiences of the teacher is an added factor for proper planning in a systematic manner and hence perform the task in a better way.

The trained and experienced teacher evaluate the school programme to judge how far the objectives have been achieved and also to see the impact of schooling. The teacher finds evaluation to overcome past difficulties and to help in efficient planning.

A varied types of activities are included in the programme to enhance childrens' learning. Comparatively a lesser percentage of teacher without experience and training reported to include such activities like the trained and experienced one. Lack of proper knowledge on this special kind of non-formal education, the other teachers are incapable of proper planning.

The common teaching aids used for pre-school children are found to be with Flash Card and Flannel graph. The pictorial materials, puppets and motion picture are placed in the second, third and fourth places respectively.
The most effective method in providing the interest and concentration of the children is story telling method followed by role play, recitation, observation and discussion method of teaching young children in the pre-primary schools.

The playway method is most popular among various pre-primary institutions followed by Montessori method of teaching in urban areas, mostly under trained and experienced teacher.

A fair number of responses have been received on advantages of teaching methods emphasising on the Montessori, Playway and Kindergarten methods of teaching for pre-school children. The poor conception of the teacher without experience and training make them incapable of giving proper comments. A very few of the limitations of the various teaching methods have also been reported by the trained and experienced group of teacher.

All the teachers are found to be equally competent in the use of different motivational procedure with the children at different times to keep them active throughout the schools programme.

Teachings in the pre-primary Institutions

The urban pre-primary schools gives a clear idea of teaching 3R's to the pre-schoolers followed by other areas of teaching language, motor and sensory education respectively. A higher percentage of urban schools have fixed hours for reading, writing, simple arithmetic and language teaching as compared to rural schools when teaching is confined to play and educative songs.
Most of the urban pre-primary schools have prescribed books on cursive, alphabet, number, rhyme and creative work. Thus, there is a vast difference in the content of teaching both in urban and rural pre-primary schools.

The examination happened to be the basis of promotion in most of the pre-primary schools of urban areas. The oral and written test are also conducted to evaluate the ability for promotion.

The teacher feel pressurised by the parents to provide a formal teaching which seems to be the main cause for imparting reading and writing in the pre-schools. Other fairly common reasons are to prepare children for formal teaching, to discipline the child, and to give a learning atmosphere in the school.

Introduction of reading habits which varies from simple to complex manner, starts from recitation and reading after the teacher, slowly introduce to recognise alphabets from picture books and thus gradually the child develops the reading habits to the extent of one to three lettered words.

Writing usually starts by making simple design followed by emphasising the child on writing over printed and lined alphabets. Many a time the movement of the hand is guided by the teacher. In the upper grade, the child is able to write from book and develops the habit of self writing as and when ask for.

The counting up to 100, and writing up to 50 are commonly practised among the pre-school children in the urban areas, which the rural schools do not follow.
To enrich the school teaching, the teacher opines in introducing variety of experiences to the children and have suggested not to introduce it mechanically. The patience with the children and not to resort the child to corporal punishment are highly stressed. The teachers also felt not to use formal teaching and emphasising on 3R's for these young pre-school children.

**Space and Play Equipment**

The sociometric structure showed stability in the friendship pattern among pre-school children. The older group of boys and girls are found to be more sociable than the younger ones.

Three space conditions and three equipment condition are co-varied independently. The main effect are on choice of activity. It is found that the availability of space mainly effect the kind of physical activity. In the larger space conditions, there are more running and unusual use of play equipment. In a smaller space, there is more use of play equipment and more physical contacts with the children. Further, it is observed that with more the equipment, children played in smaller sub-groups and often few of them play in parallel group. There is less sharing of play apparatus among children. The tricycles, dolls and sandpit are found to be popular items among pre-school children.

With the less equipment in the area, there is more sharing of over play materials and sometimes children switch/to less popular items such as books and block play etc. Group activity is among children with less equipment.

Sometimes aggressive behaviour among children is also noted in sharing play equipment specially over popular items.
Teachers' Views on Pre-school Education

The level of education of the teachers of pre-primary institutions have some kind of influence on the development of proper attitudes of parents towards pre-primary education. The consciousness of parents for health care and providing nutritious diet to the pre-school children is commonly observed by the rural teacher.

The pre-primary section attached to the primary school is quite beneficial with an increase number of children enrolled in the school as older children brings younger one alongwith. Thus, it helps to check the dropout among children.

As viewed by most teachers, the feeding programme in the pre-primary schools serves as a supplement to the normal diet and rarely it serves as a substitute in some cases.

The experience of the teachers with the feeding programme brought out suggestions of food items specially for fruits, milk and milk product, cereals and other pulse preparation mentioned by the low qualified teacher working in the lower economic group. Dry fruits and biscuits are suggested by the qualified teacher working in the urban areas with children from higher economic group.

The educated teacher working in the urban areas are not found in favour of feeding programme and health services reported to effect the regular schedule of the school.

Awareness on the Part of the Parents for Pre-school Children

The report from the parents on height, weight and mid-arm circumference of the children shows a lower level than that of the standard one.
The health habits of the children are fairly developed by the time he reaches the pre-school stage. The bowel and bladder control of the children in the higher economic group developed slowly at a later stage as compared to the lower economic groups.

The mostly common preferred food items among pre-school children are sugar and jaggery and dishes carrying fatty and oily ingredients. It is also found that comparatively less priority has been given to major food items.

The majority of the pre-school children eat themselves with improvement in their food habits and practice. The children in the higher economic group sometimes play with the food items when they do not prefer it to have.

The common diseases among children are found to be fevers, cold and cough and other diarrhoeal diseases.

The higher economic group of parents are found to be conscious for immunization of their children against different diseases as compared to lower economic group who are deprived of such facilities.

The parents recognise the benefit of pre-school programme on their child's growth. The lower economic group of parents found supplementary and immunization programme as an important one which otherwise would not have reached this section.

From the above study, it is evident that the Pre-school institutions do not have a proper method of teaching and the responsible factors congenial for the growth of Pre-school education is far from satisfactory for successful implementation of the programme.
The review of the situation of young children on various services are found unsatisfactory although greater importance has been laid from plan to plan. The other important factors for improvement of child welfare services through Pre-school education are also found neglected in this field. The dearth of trained teacher educators in various Pre-school institutions is the result of poor status of Pre-schools in Assam. In course of study, it is observed that schools may have attained a better position with the training and experienced teacher along with a planned curriculum. There is no proper method in teaching Pre-school children in majority of the Pre-primary schools. In a few schools in the state it has been seen imparting teaching in Playway method followed by Montessori method. The use of formal teaching is mainly due to parents' expectations for imparting reading and writing in the Pre-schools. At the same time, parents as well as teachers have a greater influence on the proper functioning of Pre-school institutions and for the total fulfillment of the programme.

Hence, it is considered that the hypothesis already set for the Pre-school institutions of Assam is confirmed.

12.2 Implications of the Findings

The various child welfare policies and programmes have to be reoriented based on the urgent need of the young children in the present context. The philosophy of the pre-school education is to be based on Developmental and Preventive approach. The efforts should be made on the development of child's personality in the environment of Five-Fold Dimensions of personality i.e. physical, social, emotional, intellectual and moral.
A National Policy for young children with emphasis on Developmental and Preventive services should be formulated and implemented on a wider basis covering the most needy people of the entire country. The experiences in the Child Welfare Services reveals that lack of initiative of the state with a policy in the proper lines has hampered the development of child care services.

The pre-primary institutions should be made responsible to work with the philosophy of development and preventive care of children and it should be aimed at the balanced growth of a child. It should not be aimed for preparing children for primary school through learning 3R's in the formal atmosphere. In organising such services, the claims of children from lower sections of the community should be accorded higher priority, since these basic services would be beyond their knowledge and reach.

The pre-school education and welfare should go hand in hand consisting of package of services which broadly include Health Care, Supplementary feeding, Non-formal education and recreation of children. In addition, the parents' education programme should be a part of the school curriculum to make the parents well informed on the needs and care of children and to act as an informative Bureau.

The involvement of various department and organisation is to be reviewed throughly so that with some marginal support the programme could be implemented. The support from local people through the key leaders cannot be denied for the success of such a programme.

The existing organizations in the state, such as College of Home Science, University Department of Education and other social science
disciplines including different training institutions such as National Institute of Public Co-operation and Child Development, Institute of Pre-primary teacher education and Institute of Rural Development and such other would be able to train the various functionaries linked up with the programme. The necessary administrative arrangement at the Central and State level would have to be either created or strengthened for effective control of the programme.

12.3 Recommendation and Follow-up Actions

The existing pre-primary institutions, as viewed from the findings of the study, indicates some glaring inadequacies primarily due to the negligence of the authority, limited understanding of the concept of pre-primary education and other administrative difficulties for management and thus effect in the proper implementation of services.

The capacity of the functionaries of the pre-primary institutions at the field level is becoming limited without moral, technical and financial support of local community and the management authority. As the implementation of the programme has remained at the level of starting an institution without any supervision and guidance, the workers have not succeeded in enlisting the parents and members of the local communities for promoting such services. The quality of services has remained low, except in a few cases of selected pre-primary schools. The pre-primary institutions needs to be reorganised keeping in view the inadequacies reflected in this findings.

The following suggestive measures are recommended for reorganisation and improvement of the pre-primary institutions at the state level.
The Status of Pre-primary Institution and the Need

(1) The provision for proper facilities for pre-primary education is urgently needed specially in the rural areas. The educational opportunity for all sections throughout the state should be equalized.

(2) The heavy capital expenditure should be incurred for construction of pre-primary schools. Even open-air schools of Low Cost Structures be considered adequate for the use of children.

(3) By taking care of the physical well being of the children in a congenial atmosphere, the development of good health can be achieved.

(4) It is essential to undertake an extensive scheme of school meal to serve the basic need of children not only from the point of view of nutrition but also from the point of view of social training through this activity.

(5) The introduction of School Medical Service to the extent of pre-primary school level should be strengthened by the state Department of Health especially for the young vulnerable section of the community.

(6) The maintenance of Commulative Records in the pre-primary institution should be made compulsory for future planning.

(7) A person appointed as a pre-primary teacher should be a female with required training in the line. The aptitude of the teacher for working with the children should be carefully examined.

(8) The pre-primary section should be attached to the primary school in rural areas. An extra accommodation of simple nature should be provided. The pre-primary section should function as separate administrative unit with special aims and objects and with a specially trained teachers.
(9) The pre-school should as far as possible be located near places where a large number of families reside; as far as possible they may belong to regional communities and may be entrusted to their care and management.

Pre-school Teacher Education

(10) The minimum qualification of the pre-primary teacher should be Higher Secondary or its equivalent. However, one condition should be that the selected person should have Home Science or Education as an elective subject in her Higher Secondary course.

(11) The helpers in the pre-primary institutions should also be trained. A certificate course of minimum of one month should be conducted in the pre-primary teacher institutes.

(12) The provision of school mother should be made in addition to the usual staff for over all responsibility of the children as a mother substitute having good personality and older enough to handle the children.

(13) The special course of training for pre-primary teachers should be one year duration on an average with a standard syllabus. It should mainly include Child Development Method of Pre-primary Education, Child Health and Nutrition with emphasis on practical work and practice teaching.

(14) The Syllabus of the pre-primary teachers' training needs modification to strengthen the area of health, nutrition and social welfare so as to focus on the integrated care of children of the pre-primary institution.

(15) The imbalance in the number of trained teachers should be reduced by making the teacher education as a compulsory one.
(16) There should also have provision for refreshers course for trained teacher and need for follow-up studies. It is desirable to set-up an extension unit in every training institute for organising such refresher courses.

(17) Workshops on pre-primary teaching method, developing play materials and repairing of play equipment is most essential for every pre-school training institute.

(18) The training institute is to be equipped fully with a model pre-primary school attached to it. Guide book for teachers, pictorial materials for children need to be added.

(19) Proper justice should be done in respect of the payment of the teacher in proportionate to their work load, so that qualified personnel would be attracted to the Profession.

Teaching and Teaching Methods

(20) The factors necessary for programme planning should be carefully considered for successful implementation of the programme.

(21) The teacher should be made responsible for planning the various items of the school on short term and long term basis depending upon the necessity.

(22) Activities for creative expression; such as, drawing, painting, clay work, paper cutting, cutting pictures and pasting, block building, stringing beads and flowers, digging earth and observation of the nature study should be included in the school programme.

(23) Much of the teaching aids and equipment could be made locally, using locally available materials and should be obtained in
this way. In the training course for the teachers, the trainees should receive training in the making of articles of equipment themselves and also practical guidance in getting some of the articles made with the help of local artisans. Thus, a less costly method should be devised in order to expand the programme of pre-primary education.

(24) The pre-school philosophy and principle should be appropriate to Indian conditions and needs; that the developmental approach of playway technique should be used as a means of discovery, communication and expression of children.

(25) The pre-school owners, teachers and parents should understand the need to improve the quality of pre-school education and to modify the present system suited to the young children.

(26) The object is not to introduce the children to formal reading, writing and arithmetic but to provide experience psychologically suited to the needs of children at this stage, which will make them more fit and ready for systematic learning.

(27) The practice of learning through conversation, storytelling and dramatization for developing expression; building up experiences about letters by means of their shapes and obtaining first hand experience about number, shape, size and position by means of concrete object and pictures.

(28) Personal health habits and activities for developing health habits should be included in the programme. The object is to train children to look after their personal hygiene with increasing independence in home and school and to develop permanent health habits.
(29) Children should be encouraged to keep the environment clean with different cleaning activities. The children must enjoy and develop interest in similar activities at home and school.

(30) The curricula which serves as a guide book for pre-primary education should be prepared with due consultation of the curricula of different institutions.

Monitoring of Pre-Primary Institutions

(31) The services of pre-primary institutions are required to streamline at the state level. At present more than four departments handle the different models of pre-primary institutions in the state.

If, it is not possible to introduce, co-ordinated machinery should be established at the state level under one chair, probably with the Director of State Education.

(32) Responsibilities, staff pattern, status and supportive services required for each model of pre-primary institution should be worked out in the line and to equalized its status.

(33) A monitoring cell to be established to collect data from different pre-primary institutions on their services and requirement so as to co-ordinate the data collected and to suggest suitable measures.

(34) Suggest modules on common core of teaching environment in the pre-primary institutions of the state should be examined in consultation with the Child Development educationist and suitable curricula for the institution to be worked out with the help of committees formed.

(35) The use of teaching aids should be directed to facilitate teaching and learning process, as well as for recreation of the world of children should be emphasised.
(36) The Adhoc System of grants to the Pre-primary institutions should be replaced by a Plan Period grants for five years. The grant should cover the entire cost of running of pre-primary centres.

(37) Supervisory and Consultancy services to the workers of the pre-primary institutions should be developed with the help of the Home Science Colleges, Education Department of the state and of the University.

(38) The requirement of pre-primary institutions in urban areas are distinctly different from rural and slum areas. As such separate programme needs to be worked out for children living in different localities of the region.

Other Recommendations

(39) A Board of Pre-primary Education should be set-up with an expert advisory body consisting of following persons:

(a) A Renowned Social Scientist as Chairman with basic knowledge of pre-primary education.
(b) Dean, College of Home Science as an active member.
(c) Director of Social Welfare as an active member.
(d) Principal of pre-primary training institute as an active member.
(e) Three non-official representatives working in the field of pre-primary education.
(f) Two representative teachers from pre-primary schools of the state.
(g) Secretary of the Board as Ex-officio member of the Board.
The function of the board should mainly include:

(a) To review the progress of pre-primary institutions of the state with a view to find out the outcomes of the programme and their benefit to the pre-schoolers and to send the report on behalf of the government.

(b) To bring out suggestions on the building, staff, equipment and such other needed facts for proper implementation of the programme suited to the children.

(c) To make advice on members to be adopted to make suitable literature and play equipment for children.

(d) To make suggestions for teachers' training and qualification for selection and teachers' pay scales for appointment in the pre-primary schools.

(40) A very urgent need is to start a state level branch of Indian Association of Pre-School Education (IAPE) in the state of Assam.

The objective of such an association is to develop the professional side of the teacher's work. The teachers should be encouraged to form such an association to discuss problems relating to the practical implementation of the new educational policy of the government.

11.4 Suggested Area for Future Research

Research studies should be oriented in such a way that it is based on interdisciplinary and intersectoral approaches. For convenience of the study, it may be suggested that the research should be - (1) Action oriented research and (2) Evaluation research. The former is to be designed at a smaller scale to have maximum benefit at a minimum cost. The evaluation research should be oriented towards improving ongoing programmes.
From the present study, it becomes obvious that some of the areas which are of utmost importance have not been attempted so far. These apparent research gaps in the field of study may be mentioned as under for future reference.

Statistics on Children

(1) The demographic data on pre-school children are not available in terms of sub-classifications for urban, rural and tribal children.

(2) The regional data of children on different variables are not available on all India basis is to be studied.

(3) The beneficiaries of child welfare programmes under different welfare schemes operating in different states should be traced out with geographical location of the area.

(4) The figures on mortality and morbidity of children in the underprivileged schemes of the society is to be ascertained.

Pre-Primary Education

(5) The effect of pre-school education on the growth of children in the primary school.

(6) Pre-primary education in the underprivileged areas and their content and method of teaching.

(7) No evidence exists on the categorization of pre-school centres on a regional basis in India.

(8) Based on the need of health and feeding services in the pre-primary schools, the type of infrastructure best suited to offer such services is to be developed.

(9) The cost benefit of pre-school programme vis-a-vis programmes for primary school drop out.
(10) Reliability and validity of different psychological test adopted for the Indian children is to be examined.

(11) The availability of literature on pre-school education and various studies in India and abroad are to be compiled for identification of situation of pre-primary education in the country.

Teacher Training

(12) The centre of teachers training under different categories of organisation should be analysed to have a standardized syllabus throughout the country.

(13) The extent of help received from teachers' training in the practical field of work.

(14) Satisfaction and dissatisfaction of the personnel involved in implementation of pre-school programme.

(15) The criteria for successful functioning of pre-primary institutions particularly in the underprivileged sections of the society.

(16) The availability of literature and text-books for teachers' training on pre-school education and Child Development on Indian Condition is to be traced out.

Nutrition and Health Services

(17) The relationship of level of income to practice the dietary intake among pre-school children.

(18) The experimental inclusion of feeding programme with and without nutrition and health services.

(19) Comparative studies of nutritional status between similar group of pre-school children by regional basis.
(20) Comparative analysis of the relationship between lack of environmental sanitation and child health status.