Chapter - VI

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Chapter - VI

SUMMARY AND CONCLUSIONS

6.1.0 INTRODUCTION

A brief summary, major findings, recommendations and suggestions for further study are presented in this chapter.

The Formal system of education is very much institutionalised. It is structured and graded. If Universalisation of Primary Education has to succeed, it will not be possible through formal system of education. It has to be achieved by adopting alternative systems like Non-formal Education. The Concept and definitions of non-formal education are discussed in Section 1.1.0. In whatever way, the term non-formal education has been defined, the accepted form is any organised educational activity carried outside the formal system to provide selected types of learning to particular sub-groups in the population, adults as well as children.

The formal system of education has proved inadequate for catering to the needs of growing number of children. The reasons for failure of the formal system have been discussed in Section 1.2.0. In view of the difficulties in expanding facilities of formal education and the failure of the
formal system of education to attract to its fold, the alternative non-formal education has emerged. The emergence of non-formal system of education and its potentialities in meeting the challenges that are existed in the formal system were discussed in Section 1.3.0.

The main objectives of non-formal education are: to provide alternative education to non-starters, to bring all the dropouts into the stream of education and help them to continue/complete their education.

The aims and objectives of non-formal education have been described in Section 1.4.0. NFE is regarded as an alternative to the formal system education and an instrument of development. It helps in improving productivity, it is also called as part of the skill development programme.

Need for non-formal education and various uses of non-formal education have been discussed in Section 1.5.0 and 1.6.0 respectively.

Non-formal education programme was launched in October 1977 as a centrally assisted scheme to achieve the goal of Universalisation of Elementary Education. The NFE scheme was revised in 1987-88. The details such as clientele, models adopted, implementation of the programme, strategies for strengthening of the scheme, achievements, etc. were discussed in Section 1.7.1 to 1.7.5.
The Non-formal education programme was implemented in Andhra Pradesh which is one of the 10 educationally backward states in India. It was reported that there are about 254 projects are functioning in all the 23 districts of Andhra Pradesh. Besides the Government projects, 60 voluntary organisations and all the Zilla Saksharatha Samithies (23) were participated in the implementation of NFE projects. About 7000 centres were being organised by all the above voluntary organisations.

Organisations of the programme in the State, Stages under Phase-I, Curriculum, financial support, etc, were presented in Section 1.9.1. Many voluntary agencies throughout the country have received assistance and implemented the scheme of non-formal education. One such organisation was Rashtriya Seva Samithi (RASS) which was implemented the NFE Scheme since 1983 in Chittoor and Kadapa districts of Rayalaseema Region of Andhra Pradesh. The details such as enrolment of children, model adopted, monitoring and supervision, training of functionaries, teaching/learning materials and evaluation were described in Section 1.10.1.

6.2.0 REVIEW OF LITERATURE

The studies conducted in the Formal education setting are reviewed under Section-I. The main studies include: Ramana Sood (1990), Indian

The comparative studies of formal, non-formal and open school systems are reviewed in Section III. The researchers viz., Naidu Jayachandrama (1986), NCERT (1986), Venkataiah and Naidu (1990), The Evaluation Committee (1993) and Rathore Jyoti (2000) have conducted the comparative studies.

The studies on the Impact of Socio-economic variables on the academic achievement have been reviewed under Section-IV. NCERT (1986), Naidu (1986), Sampoornam (1996), Jacob Aikara (1997) by taking 'Caste' as factor; Jagannadhan (1986), Chugani (1987) have taken income as factor; Jagannadhan (1986) has taken factors such as education, occupation and academic achievement; and the demographic variables such as age
and sex were taken into account by Naidu (1986), Chugani (1987), Sampoornam (1996) and Jacob Aikara (1997).

Most of these studies have conducted at micro level by taking a limited sample population and covering a few variables. Thus an attempt has been made in the present study to evaluate the Academic performance of NFE learners in relation to socio-economic factors in Chittoor district of Rayalaseema Region, Andhra Pradesh.

6.3.0 THE PROBLEM AND PURPOSE

The problem and purpose were discussed in Chapter III. The title of the study (Section 3.1.0), Definitions of Certain terms, viz., Non-formal education, NFE Programme, Phases and stages, Learners’ academic performance, Variables which are include in the study (Section 3.2.0), Scope and objectives of the study, Hypotheses (Section 3.3.0) were discussed in relevant sections. However, the main objectives of the study are termed as: (1) to evaluate the programme aspects such as Motivation, Teaching methods, Teaching/Learning materials, Administration, Curriculum and Physical facilities in the Centres; (2) To examine the relationship between the achievement levels of different socio-economic groups based on sex, age, caste, education, father’s income, occupation and
family type; (3) to analyse the academic performance of NFE learners in the subjects of Telugu, Mathematics, Problem areas and English in relation to their socio-economic status; (4) To establish the relationship between the socio-economic factors and the academic performance of NFE learners; and (5) to suggest suitable measures to improve the functioning of the programme and to achieve good academic performance by the NFE learners.

The need and importance of the study which would help the implementing agencies in identifying the weaknesses so as to revise their methods and approaches for strengthening the NFE programmes; identifying the variables which are contributing for the academic performance of learners etc., were discussed in Section 3.4.0. The limitations of the study are explained in Section 3.5.0.

6.4.0 METHOD OF INVESTIGATION

The Method of Investigation has been explained in Chapter-IV. The tools used for the study are: (a) The Rating Scales and (b) Achievement tests in the subjects viz., Telugu, Mathematics, Problem area and English were described in Sections 4.2.0 and 4.2.21 respectively.
The Sample population of 250 NFE learners and 300 NFE Instructors were drawn from the three projects viz., Tirupati, Srikalahasti and Pulicherla and the selection of sample population was explained in Section 4.4.0. The procedure adopted in administration of tools was explained in Section 4.6.0. The procedure adopted in scoring and tabulation of data was explained in Section 4.7.0. The Socio-economic and demographic variables chosen as independent variables and the academic performance measured in terms of marks in Telugu, Mathematics, Problem area and English were taken as dependent variables and their description was given in Section 4.5.0. The tabulated data was suitably inferred by using the statistical techniques such as percentages, mean and standard deviation 't' test, ANOVA and chi-square test.

6.5.0 MAJOR FINDINGS OF THE STUDY

The results of the study are presented under five sections in Chapter V. They include: Section-I - Evaluation of NFE Programme; Section-II - Influence of socio-economic factors on the academic performance of NFE learners; Section-III - Influence of programme aspects on the performance of NFE learners; Section-IV - Relationship between the socio-economic factors and achievement levels of learners and Section-V - Evaluation of
programme aspects as perceived by the NFE Instructors. A brief summary of results are presented here under:

6.5.1 EVALUATION OF NON-FORMAL EDUCATION PROGRAMME

(a) The mean evaluation scores of males for all the programme aspects except curriculum are lower than the female learners, but in the case of curriculum, the mean score of male is higher (10.635) than the female learners (10.630). However, the obtained 't' values for the programme aspects such as motivation, teaching methods and physical facilities are significant at 0.05 level.

(b) The Mean scores of Senior learners for all the programme aspects except Curriculum are higher than the Junior learners. But in case of Curriculum, the mean score of Junior learners (10.650) was higher than the Senior learners (10.560). However, the obtained 't' values for all the programme aspects are not significant.

(c) The mean evaluation scores of Low income group are higher than their counter parts for all the programme aspects except physical facilities and curriculum. However, the obtained 't' values are not significant for all the programme aspects except teaching methods.

(d) The mean evaluation scores of Learners from nuclear family for all the programme aspects except teaching/learning materials and
curriculum are lower than the Learners of joint family. The obtained 't' values for all the programme aspects between the learners of joint and learners of nuclear family are not significantly differ. This indicates that there was no significant difference in the perception of programme aspects between the learners of two groups.

(e) The mean performance scores of BC learners are higher than the OC, SC/ST learners for Motivation (13.92), Physical facilities (14.57) and Curriculum (10.70). The obtained F-ratios for all the programme aspects are not significantly differ between the three caste groups.

(f) The mean evaluation scores of the Learners whose parents are of illiterate are higher in motivation, Teaching/Learning materials than the learners of literate and primary level of parents. The obtained 'F' ratios for all the programme aspects are not significant between the three groups of learners based on parental education.

(g) The mean evaluation scores of learners whose parents are daily labourers were higher than the learners of cultivators, and petty business holders for the aspects such as Teaching methods (24.99), Teaching/Learning materials (14.85) and Administration (6.26). The obtained 'F' ratios for all the programme aspects are not significant
between the three groups of learners categorised based on parental occupation.

6.5.2 SOCIO-ECONOMIC FACTORS AND ACADEMIC PERFORMANCE

The influence of socio-economic factors on the academic performance of NFE learners has been discussed in Section-II. The major findings of the study are as follows:

(a) The mean overall performance scores of female learners (198.004) are higher than the male learners (155.409). The obtained 't' value was significant at 0.01 level of probability.

(b) The mean performance scores of female learners are higher than the mean performance scores of male learners for all the subjects. The mean performance scores of male and female learners for the subjects viz., Telugu and English differ significantly at 0.01 level and Problem Areas and Mathematics differ significantly at 0.05 level.

(c) The mean overall performance scores of Junior learners (175.240) are higher than the Senior learners (165.730). However, the obtained 't' value was not significant at 0.05 level of probability. But with regard to the performance scores in all the subjects viz., Telugu, Problem area, Mathematics and English, there was no significant difference between
the junior and senior learners. Though the obtained 't' value was not significant, the 't' values for Telugu (1.266) and Mathematics (0.765) are higher than the Problem areas (0.631) and English (0.568).

(d) The mean overall performance score of the Learners from nuclear families was higher (175.165) than that of the mean performance score of the Learners from joint families (163.321). Though the obtained 't' values for the subjects viz., Telugu, Mathematics and Problem area were not significant at 0.05 level of probability the 't' value for English was significant at 0.05 level.

(e) The mean overall performance scores of Learners whose parental income was high, are higher (172.500) than the Learners of low income (166.354). The obtained 't' value (0.634) for the two income groups in their academic performance was not significant.

(f) The mean performance scores of Learners whose parental income was higher than the mean performance scores of learners of low parental income for all the subjects except English. But the performance score of the learners of low parental income in English is higher than the high parental income.
(g) The mean performance score of SC/ST learners (169.140) is higher than the mean performance scores of BC (168.807) and OC (164.101) learners. However, the obtained ‘F’ ratio (0.157) for different caste groups was not significant.

(h) The mean performance scores of SC/ST learners for Telugu (44.33) and Mathematics (42.97) are slightly higher than the other two groups of learners. But the mean performance scores of BC learners for problem areas (42.82) and English (41.50) are higher than the performance scores of OC and SC/ST learners. The obtained ‘F’ ratios for all the subjects are not significant.

(i) The overall mean performance scores of learners, whose parents are agricultural labourers, are higher (171.632) than the cultivators (169.416) and petty business holders (149.216). But, the obtained ‘F’ ratio (2.004) for different occupational groups was not significant.

(j) The mean performance scores of Learners, whose parental occupation was daily labour (43.985), are higher than the mean performance scores of learners of petty business holders (36.324). The obtained ‘t’ value for Telugu is significant at 0.01 level. But the obtained ‘t’ values
for the other subjects viz., Mathematics, Problem Area and English are not significant.

(k) The mean performance scores of learners, whose parental occupation was cultivation, are higher than the mean performance scores of learners belong to petty business for all the subjects. But the obtained ‘t’ values are not significant.

(l) The mean performance scores of the learners whose parents are agricultural labourers are higher than the cultivators for all the subjects except in Mathematics. The obtained ‘t’ values for all the subjects are not significant even at 0.05 level.

(m) The mean performance scores of learners whose parental occupation was daily labourers are higher than the mean performance scores of learners of petty business for all the subjects. The obtained ‘t’ values are significant at 0.01 level in the subject of Telugu.

(n) The mean performance scores of learners whose parental occupation was cultivators have higher for the subjects of Telugu, Problem area and English. But the mean performance scores of learners of daily labour have higher for Mathematics than the learners of cultivation.
The overall mean performance scores of learners whose parents are literate are higher (173.494) than the illiterates (165.387) and primary level (158.524). The mean performance scores in Telugu, Mathematics, Problem area and English subjects for learners, whose parents are literates, are higher than the other groups of learners. But the obtained ‘F’ ratios were not significant.

6.5.3 INFLUENCE OF PROGRAMME ASPECTS ON THE ACADEMIC PERFORMANCE

In the present section, the influence of each one of the programme aspects on the overall academic performance has been studied and the relationship has been established between the programme aspects and the overall academic performance.

(a) As the obtained Chi-square value (4.333) is not significant, there was no significant relationship between the motivation of the learners and their academic performance.

(b) As the obtained chi-square value (10.659) is significant at 0.05 level, there was a significant relationship between the teaching methods and the academic performance of learners.
(c) As the obtained chi-square value (19.515) was significant at 0.01 level, there was a significant relationship between the teaching/learning materials and the academic performance of learners.

(d) As the obtained chi-square value (11.451) is significant at 0.05 level, there was a significant relationship between the physical facilities available in the centre and the academic performance of learners.

(e) As the obtained chi-square values are not significant for the curriculum and administrative aspects, there was no significant relationship between the academic performance and the curriculum and the administrative aspects.

6.5.4 RELATIONSHIP BETWEEN THE SOCIO-ECONOMIC FACTORS AND ACADEMIC PERFORMANCE

The relationship between Socio-economic and demographic factors and academic performance of learners in different subjects are discussed in section IV.

(a) The obtained Chi-square values for all the socio-economic and demographic variables were are not significant. Thus there was no significant association between socio-economic and demographic
variables except the parental income and performance of learners in English, Problem areas, Mathematics and Telugu.

(b) The obtained Chi-square values for all the socio-economic and demographic variables were not significant. Thus there was no significant association between the demographic variables and the performance scores of learners in problem areas.

(c) The obtained Chi-square values for the variables such as parental education (10.776) and type of family (8.386) were significant at 0.05 level. Thus, there was a significant relationship between the variables viz., parental education and type of family and the overall performance of learners.

6.5.5 EVALUATION OF PROGRAMME ASPECTS AS PERCEIVED BY THE NFE INSTRUCTORS

Evaluations of programme aspects based on the perception of instructors in relation to their socio-economic factors were discussed in Section V.

(a) As the obtained 't' values for motivation was significant at 0.01 level, there was no significant difference between male and female instructors for all the programme aspects except motivation.
(b) The mean evaluation scores for the programme aspects of instructors belong to Hindu are higher than the Non-Hindus, except the Teaching/Learning materials. But in case of teaching/learning materials, the mean evaluation scores of non-hindus are higher (28.250) than the Hindus (28.215). As the obtained 't' value for all the programme aspects was not significant at 0.05 level, there was no significant difference between the Instructors of Hindus and Non-Hindus in the programme aspects.

(c) The mean evaluation scores of instructors of 26-30 years of age are higher for all the aspects than the mean evaluation scores of Instructors of below 25 years and Instructors of above 36 years except the teaching/learning materials. The obtained 'F' ratios for all the programme aspects are not significant even at 0.05 level. Thus, the evaluation scores of different age groups of instructors have no significant difference.

(d) The mean evaluation scores of B.C. Instructors are higher for all the programme aspects except training. As obtained 'F' ration for all the programme aspects were not significant even at 0.05 level, thus the
instructors' caste has no significant effect on the evaluation of programme aspects.

(e) The mean evaluation scores of instructors with intermediate qualification are higher than the other two groups of instructors except for Teaching/Learning materials. As the obtained 'F' ratios for all the programme aspects are not significant at 0.05 level, the evaluation scores of instructors with different educational qualifications have no significant.

(f) The mean evaluation scores of instructors with tertiary occupation are higher than the other two groups of instructors. The calculated 'F' ratios were not significant for all the programme aspects except teaching method. Hence, it was concluded that the tertiary occupation of the instructors was not significantly influenced.

6.6.0 MAJOR RECOMMENDATIONS OF THE STUDY

Based on findings of the study and also the observations of the investigation, a few recommendations are made hereunder:

1) The obtained 't' value for the motivational aspects has differ significantly between the two gender groups. The 't' values obtained for the other variables in the study are not significant. Thus,
appropriate motivational campaigns have to be initiated suitable to all the gender groups and their parents irrespective of their educational level so as to take initiation by both gender groups, and all the parents of the target group.

2) The obtained ‘t’ values for the aspects of teaching methods are differ significantly among the variables of gender and parental income. But the obtained ‘t’ values for the other variables in the study are not significant. Thus appropriate teaching methods should be adopted suitable to both the gender groups (male and female) and income level of the learners so as to acquire knowledge in all the subjects prescribed under Phase-II of the Stage-II.

3) The obtained ‘t’ value for the physical facilities has differ significantly between the two gender groups. But the obtained ‘t’ values for other variables in the study are not significant. Thus, the physical facilities should be provided in the centres suitable to both male and female learners so as to attract the learners to the NFE Centres.

4) The ‘F’ ratios for mean performance scores of three occupational groups have differ significantly in the subjects of Telugu,
Mathematics and Problem area. Hence, it is recommended that the academic performance of learners belonging to petty business has to be improved in the subjects of Telugu, Mathematics and Problem area.

5) The mean evaluation scores for the programme aspects viz., Administration and Curriculum for all the variables such as gender, age, income, family type, caste, parental education and parental occupation are low. Hence, it is recommended that the organisation and administration of the programme should be systematized and proper infrastructure facilities for implementing the programme may also be created so as to improve the quality of the programme. Curricular aspects of the programme should also be revised so as to make the learning units more meaningful and relevant to the lives of the target groups.

6) The overall mean performance scores of the male learners, OC learners, learners belonging to petty business, learners belong to illiterate parents in the study are lower than their counterparts viz., female learners, SC/ST learners, agricultural labourers and learners belong to literate parents. Further, the obtained ‘t’ value was also
significant for the variable gender. Hence, it is recommended that the efforts should be made to improve the academic performance of NFE learners in general and with particular reference to male learners, OC learners, learners belong to petty business and learners belong to illiterate parents.

7) The obtained ‘t’ values for the mean performance scores of male and female for all the subjects are significant. Hence, it is recommended that overall academic performance of learners in all the subjects should be improved. However, special measures may be taken for improving the performance of male learners.

8) The obtained ‘F’ ratios for mean performance scores of three occupational groups of learners are not significant for all the subjects. However, the ‘F’ ratios for Telugu was higher than the other subjects. Hence, it is recommended that the overall academic performance of learners in all the subjects should be improved. Further, special measures may be taken for improving the performances of learners belong to petty business.

9) The obtained ‘t’ values for the mean performance scores in the subject of English differ significantly for the variables – gender and
type of family. Hence, it is recommended that the overall academic performance of learners in English subject should be improved.

Further, special efforts should be made for improving the performance of learners belongs to joint family and male learners.

10) The obtained 't' value for the mean performance scores of Daily labour and Petty business in Telugu was significant. Hence, it is recommended that the overall academic performance of learners belong to Petty business in all the subjects should be improved. Special efforts should be made for improving the performance in Telugu subject.

11) As the Chi-square value was significant and proved that there was a relationship between teaching methods and academic performance of learners, it is recommended that the use of teaching methods in transacting the curriculum in simple and effective manner by the instructors. Thus, appropriate teaching methods should be adopted suitable to both the gender groups (male and female) income level of the learners and occupation of the families so as to impart knowledge in all the subjects.
12) As the Chi-square value was significant and proved that there was a significant relationship between the teaching/learning materials and the academic performance of learners, it is recommended that appropriate teaching/learning materials such as text books, note books, pencils, pens, attractive books, which contain good printing and size of letters, proper exercises should be used. These types of teaching/learning materials will enable the teaching/learning process more effective. Inadequate or late supply of teaching-learning materials to the NFE centres will affect the teaching/learning process. The possibility of providing work books, maps, charts, globe, flash cards and materials should be explored by the State Government. The teaching-learning materials like books and pencils should also be supplied adequately to all the NFE Centres.

13) As there was a significant relationship between physical facilities and academic performance of learners, it is recommended that the centre should be located nearer to the residences of learners, provided sufficient space to sit by all the learners, lighting, and ventilation arrangements, placing of black board and chalks, etc.
14) As there was a significant relationship between the curricular aspects and the academic performance of learners, it is recommended that the curricular aspects that are useful to the learners in their daily life should be included.

15) The obtained Chi-square value for the performance scores in English was significant between the income and performance of learners. Hence, it is recommended that the academic performance of learners in English should be improved. However, special measures may be taken for improving the performances of learners belong to low parental income.

16) The obtained Chi-square values for the overall performance scores of learners have significant relationship between the three groups of parental education and learners belonging to type of family. Hence, it is recommended that academic performance of learners belong to the literate and primary level parents should be improved. Measures may also be taken for improving the performance of the learners of nuclear family.

17) The obtained 't' value for the motivational aspects differs significant between the two sex groups. But the 't' values obtained for the other
variables in the study have no significant difference. Further, the mean evaluation scores of female instructors are lower than the male instructors. Thus the female instructors are not known about the various motivational campaigns undertaken by the programme managers and perhaps they could not participate in those campaigns. Hence, it is recommended that all the instructors should be actively involved in the motivational campaigns organised for mobilising and stimulating the learners' interest.

18) The obtained F ratio for the evaluation scores of different occupational groups of instructors for the aspects of Teaching methods was significant. Further, the evaluation scores of instructors belonging to business and tertiary occupation are less than the instructors belong to cultivation. Hence, it is interesting to note that the instructors who are involved in business and tertiary occupation do not usefully the aspects of teaching methods. Thus it is recommended that the persons belonging to the cultivation and who can spare their time and energy may be selected as instructors so as to make the NFE programme more successful.
6.7.0 SUGGESTIONS FOR FURTHER RESEARCH

1) The present study was restricted to three projects which are implementing in Chittoor district of Rayalaseema region, Andhra Pradesh. Thus it is suggested that a similar study may be carried out by drawing more sample from different projects implemented in other districts of the region.

2) In the present study, the sample was drawn from Learners and Instructors to evaluate the programme aspects. Some other significant personnel like the Supervisors, Assistant Project Officers and Project Officers may also be drawn so as to have a comprehensive study. The size of sample particularly the number of learners drawn may be increased in a similar study.

3) The present study was conducted to know the performance of NFE learners in relation to certain Socio-economic and demographic variables. Further research may be conducted by including more variables. A comparative study may also be carried out to know the differences or similarities between the achievement of NFE learners and formal school children.
4) Case studies regarding active involvement of Instructors, Supervisors, Community members and Parents in day to day functioning, planning and management of NFE centres may be conducted.