CHAPTER V

CONCLUSION

As seen from the preceding sections, the present study is purposely designed to understand the existing state of work-experience programs, which have been implemented in certain schools of nursing to lay down guidelines for better implementation. In this chapter, the efforts are intended to give the summary of the research adopted for the collection of data. The findings, suggestions, and objectives of which points for the improvement of the program are suggestions for further research.

1. SUMMARY OF KEY FINDINGS

The objectives set for the study are given below:

1. To collect information regarding the general set up of the organization and amount of work-experience in the program.

2. To get the reactions and suggestions of pupils about the current organizational set up of the conclusion of work-experience programs.

3. To organize selected guidelines for work-experience by analyzing and listing both positive points as well as negative points by the students and organization.
CONCLUSION

As seen from the preceding chapters, the present study is purposively designed to understand the existing state of work-experience programme which has been implemented in certain schools of Kerala and to suggest guidelines for better implementation in future. This chapter is intended to give the summary of the procedure adopted for the study, important conclusions based on findings, suggestions of action points for the improvement of the programme and suggestions for further research.

I. SUMMARY OF PROCEDURE ADOPTED

The objectives set for the study are given below.

1. To collect information regarding the general set up, organization and conduct of work-experience in the schools.

2. To get the reactions and suggestions of pupils about the present organizational set up and the conduct of work-experience programme.

3. To appraise selected guidebooks for work-experience by analysing and noting down positive points as well as negative points in the content and organization.
4. To collect firsthand information about the working of selected outstanding institutions of South India, where work-experience is an integral part of education.

5. To gather opinions and viewpoints and suggestions from experts with a view to preparing guidelines for the better organization and conduct of work-experience in schools in future.

6. To take photographs, slides and a 16 m.m colour film on work-experience in action in selected outstanding institutions for the preparation of guidelines.

The study envisages information from instructors, headmasters, students and experts. So one questionnaire to instructors and headmasters and another questionnaire to students, and guidelines schedule to experts were prepared. The questionnaires and the schedule were administered in person. The data thus collected were analysed using simple statistical techniques.

The investigator visited four institutions - three in Tamil Nadu and one in Kerala and made all possible study of the functioning of their programme.
The photographs of their work were also taken. A short documentary colour film on work experience in action at Mitra Niketan was made by the investigator jointly with Mr. Luke from Amsterdam Film Institute.

Three guidebooks, namely (1) Home Science Practical Studies, (2) Work Experience through Workshop Experience by Bhaskara Poduval and (3) Study of Physics through Work Experience published by the State Institute of Education were analysed on the basis of selected guidelines.

II. SUMMARY OF FINDINGS

Part I. Work Experience Programme in Schools

The analysis of the responses of teachers and instructors in the schools where work experience programme was implemented led to the following conclusions.
Current status of work-experience programme

a) Selected activities

1. Number of schools following work-experience/tool programme

The Kerala State Institute of Education has prescribed a work-experience programme/tool practice for the schools of the state from 1974. 149 High schools follow the programme while among the Upper Primary Schools only 76 have work-experience and 54 have tool practice. 10 High Schools and 42 U.P. schools have both work-experience and tool practice. The work-experience programme was not introduced in private schools which are more in number than government schools.

2. Number of schools, which followed different activities before introducing State Institute Programme

Even before 1974, 38% of High Schools followed unspecified crafts. Tailoring, Gardening, Book-binding, Carpentry, Coir Work and Agriculture are the other activities followed by a few schools. 40% of the U.P. Schools also had some kind of crafts. In both High and U.P. schools, these activities were not called by the name "work-experience".
3. Areas of work-experience followed

Among the High School sample, areas like Horticulture (24.5%), Agriculture-Tailoring and Fabric Painting (21%), Sheet Metal (7%), Plastic Weaving (7%), Home Science (6%) are followed. Commercial painting, Bamboo and Cane work, Photography, Photo framing are the other areas. Some schools give work-experience directly connected with professions, e.g., Fishnet making and Coir work. In almost all schools, cleaning and room decoration are done.

In the U.P. schools workshop training (32%), cardboard work (21%), kitchen gardening (5.8%), Carpentry, fitting wiring etc. (7%), Needle work (4%) and Coir work are the areas of work-experience/tool practice.

In high schools the areas of horticulture and agriculture are much favoured.

4. New areas which can be included in addition to the existing areas

66% of High School and 33.2% of U.P. School instructors see no possibility of including new areas. Book binding, garment making, brick-making, smithy, cooking, wood work and radio engineering are suggested by a few instructors. Paper sculpture (50.5%) and
Plastic work (16.3%) are the new areas suggested for U.P. Schools.

(b) **Instructional strategies**

1. **Status of work experience**

   91% of High School and 96% of Upper Primary School instructors stated that work-experience is not given equal importance with other school subjects.

2. **Teaching the operating principles of work or producing finished goods**

   Teaching operating principles and producing goods is preferred by the majority of schools. 66% High Schools and 13% Upper Primary Schools offer Work-experience for children to attain the operating principles of work and to produce goods. But .87% of the U.P. schools are teaching the operating principles only. In a few High Schools new methods of cultivation and cooking (11% and 1%) are taught.

3. **Training in the same trade from the beginning to the end of schooling**

   In the sample schools, according to 80% of High School and 10% of the Upper Primary school instructors, the students could continue in the same trade till the end of their schooling, 88% of the U.P. Schools are giving
general training which may include book binding, tool practice, paper work, etc.

3. Reasons for giving training in different trades

8.5% of High School instructors believe in giving training in the skills of more than one trade. 12% could not give continuous training due to lack of facilities.

4. Working of "Earn-while-learn" programme

77% High School and 80.8% Upper Primary School have no "Earn-while-learn" programme. The reasons stated for this by 7.5% High Schools and 5.8% of Upper Primary Schools are lack of encouragement by teachers and students' dislike. Another reason is the ignorance of the students about the programme.

5. Co-ordination of Work-experience with other subjects

93% of High School and 98% of U.P. School instructors reported that work-experience is not co-ordinated with other subject teaching.

6. Frequent inservice/orientation courses for work-experience teachers

Cent percent of High School and 93.5% of U.P. School instructors really desire for frequent inservice/orientation courses.
(c) **Methods of Evaluation**

1. **Examination for work-experience**

   97\% of the High schools do not conduct any examination. No U.P. Schools responded in favour of this item.

2. **Criteria of student selection for work-experience programme**

   90\% of High Schools and 91\% of U.P. Schools do not adopt any selection criteria to admit students for work-experience programme. 10\% High schools and 9\% of U.P. Schools reported that they conduct interviews.

3. **Introduction of Examination for work-experience programme**

   95\% of High School and 71\% U.P. school instructors favour examination system for work-experience programme.

4. **Examination as an evaluation procedure**

   95\% High School and 99\% U.P. school instructors gave affirmative answer for this item.

5. **Different kinds of examination for Work-experience**

   Grading (28\%), Continuing assessment (25\%), Year end practical test (17\%) termly practical test (15\%) and external assessment (9\%) are the types suggested by the High School instructors.
The U.P. School instructors are for External assessment (22%), grading and termly practical test (21% each) continuing assessment (18%) and year end practical test (17%).

(d) Organizational and Administrative approaches

1. Prescribed number of periods

In all the sample schools, 2 periods a day are allotted for work-experience.

2. Duration and frequency of periods

81% of High School and 89% of the U.P. School instructors are not satisfied with the present number of periods.

3. Continuity of work-experience periods

44.5% of High School and 69% of U.P. School instructors report that they have a week's interval between the periods and long interval respectively. Only 11% of High Schools and 30% of U.P. Schools have continuous periods.

4. Effect of long intervals

76% of High School and 56% of U.P. School instructors state that long interval between work-experience periods does have a negative influence on the effectiveness of the programme.
5. **Strength of students in a batch**

   60% High Schools and 39% U.P. schools have 40-50 students in a batch.

6. **Place of work-experience in the present syllabus**

   81% of High School and 99% of U.P. school instructors do not consider work-experience as a part of the syllabus.

7. **Separate syllabus for Primary, Middle and High Schools**

   92% of the High Schools and 99% of the U.P. schools do not have a separate syllabus for work-experience.

8. **Making work-experience an integral part of education**

   84% of High School and 97% of U.P. School instructors want to make it an integral part of education.

9. **Staff-pattern**

   It ranges from 1 to 6 instructors per school.

10. **Production of marketable goods**

    73% of High Schools and 42% U.P. schools produce marketable goods.

11. **Items of marketable goods produced**

    Highest percentage of High schools (30.9) and U.P. schools (15) cultivate vegetables. In the High schools (21%) garment making is a good item. Low
Low production of coir, wood and plastic articles is done in both the categories of schools.

12. **Sale of the products**

35.3% of High Schools sell products by auction. 22 U.P. schools also do this, while 12 U.P. schools sell their products through school co-operative societies, some sell the products to the education department.

38 High Schools and 3 U.P. schools utilize their products.

13. **Utilization of sale proceeds**

5% of High Schools and 17.4% of U.P. Schools use the money for school maintenance while 68% of High Schools and 7% of U.P. Schools buy tools for work experience.

14. **Payment to the children for their marketable goods**

No uniform policy is followed regarding payment to children for their marketable goods. 53% of the High Schools and 81% of the U.P. Schools do not pay the students for their products. 5% of the High Schools return the products to the students.

II. (a) **Degree of acceptance of the programme by the pupils**

1. **Interest of pupils**

Only 36% of High School students and 43% of U.P. Students show full interest in work-experience while 57%
of students in each category of schools are only partially interested. 7% of High School students have no interest at all.

2. Reasons

The main reason given by 34.8% of the High School and 37.8% of U.P. School instructors for the lack of interest is "absence of examination". The reason given by 14.6% and 19.2% of instructors is the non-acceptance of work-experience as a subject.

3. Student awareness of the programme

61% of the High School and 78.9% of U.P. School instructors agree that students are not made aware of the programme.

4. Possibility of creating awareness through the introduction of work-experience in the syllabus

The possibility of creating student awareness about the importance of work-experience by mere introduction of it in the syllabus is affirmed by 32.3% of High School and 11% of U.P. School instructors. But no response from majority of schools in both the categories and 5.5% of high schools and 6% of U.P. schools denoting the impossibility show that the positive responses do not have much value.
(b) Degree of acceptance by the teachers

1. Attitude of other subject teachers

Most of them either ignore the programme or do not consider it as an important part of education. Very few co-operate with this programme and some others take it as an undignified work while a few want it to be an integral part of education.

(c) Degree of acceptance by the parents and the public

1. Parents' attitude towards work-experience programme

Only 10% of High School instructors state that parents are co-operative. 41.4% of them and 34.8% of U.P. school instructors believe that parents are not aware of the programme. 42% of High School and 52.2% of U.P. School instructors think that parents are aware but give no seriousness about it. Some (6%) believe that lack of examination is the cause for lack of seriousness on the part of the parents.

2. Attitude of the public

According to 53% High School and 45.5% of U.P. School instructors, the public is unaware of the programme. But 33% and 29.5% of High School and U.P. School instructors opine that the public supports to make work-experience a part of syllabus itself. A few believe that the public consider this as a mere waste of time.
3. **Incentives for work-experience students**

50% of High School and 86% of U.P. School instructors agree that they give no incentives. Those who answered in the affirmative mentioned the types of reward given, such as certificates, cash awards, exhibition of their products, etc.

(d) **Difficulties experienced by teachers**

1. **Assistance from the State Institute of Education**

62% of High School and 45.8% of U.P. School samples are getting financial assistance. Other schools get assistance in the form of technical advice, tools and materials and technical personnel, while 28% of High Schools and 40.7% of U.P. Schools are not getting any assistance.

2. **Financial assistance from the State Institute of Education**

Financial assistance is given only to the Government schools and not the Private schools.

3. **Assistance from the Department of Technical Education**

Only 12% of High Schools and 2% of U.P. Schools get assistance by cash while the rest do not get any assistance at all.
4. **Existing facilities**

94% of High School instructors disagreed with the adequacy of the existing facilities, while 6% feel satisfied. No U.P. Schools responded in this matter.

5. **Funds to buy necessary tools and materials**

96% High Schools and 100% of U.P. Schools have no adequate funds to buy necessary tools and materials.

6. **Existing staff pattern**

Only 8.5% of High School and 25.2% of U.P. School instructors feel that the existing staff pattern is adequate. Out of those who are against this view, the majority have given various reasons such as "shortage of given time" and "the unwieldy number in each batch". 63% of High School and 45.3% of U.P. School instructors feel that individual attention is impossible with the existing staff pattern.

7. **Difficulties in implementing work-experience programme**

A large number of schools have to "cope with the difficulties of lack of funds, tools and materials. In the High schools (30.5%) lack of proper worksheds seriously affects the programme. Not a single High School felt the difficulty in marketing while 3% of U.P. Schools have this difficulty."
8. Individual attention to children

Only 3.7% of High School and 1.6% of U.P. School instructors feel that individual attention is possible. The main reasons cited by the others are the overcrowded classrooms, lack of sufficient instructors, lack of time (only 40 to 50 minutes are available for a class - 100 minutes only a week) and the inadequacy of workshop facilities.

9. Handling students with no interest

66% of High School and 24% of U.P. School instructors propose alternate programmes of academic work to students while 32% of High School and 76% of U.P. School instructors believe in giving inducements to handle disinterested students of work-experience.

10. Exploitation of local resources

71% of High School and 90.5% of U.P. School instructors never exploit local resources. The rest report that they take students to workshops, kitchen gardens and local agricultural farms.

(E) Difficulties experienced by pupils

1. Effect of work-experience programme on learning other subjects

Work experience programme is not a hindrance to learning other subjects. 93% of High School and 86% of
U.P. School instructors say that work-experience does not affect the learning of other subjects. The reasons cited by few others are that children become tired after work, much time is consumed by work-experience and work-experience causes distraction (3% each).

2. Sharing of tools and materials among students

Only 5% of High Schools and 1% of U.P. Schools have tools for all the students. 8% of High Schools and 73% of U.P. Schools report that when a few students work with tools, others waste time. 66% High Schools and 15% U.P. schools agree that when a few use tools others watch. 27% of High Schools and 11% of U.P. Schools report that when a few use tools others do some other work.

Publications on Work-experience

94% of High Schools and 95% of the U.P. Schools do not have any publication on work-experience.

Separate working facilities

32% of High Schools and 52.3% of U.P. Schools have no separate working facilities. 24% of High Schools and 3% of U.P. Schools have plots for agriculture and horticulture class rooms are for 14% and 11.6% rooms are for 17.5% and hall for 4% (U.P.)
Sufficiency of existing facilities

93% of High School and 91% of U.P. School instructors are dissatisfied with the existing facilities.

Part II. Students' Reaction to Work Experience Programme

Analysis of responses from work-experience students revealed the following findings.

Students' Preference of subjects Studying at Present

Regarding the order of preference of subjects, majority of students' first preference goes for languages. This is again suggested with other subjects. Work-experience comes next in the case of boys and girls too. There is much variation in the preferred subjects sex-wise and locality-wise. This may be due to the variations in teaching.

Practice of sitting in the class for study from morning till evening

Out of the 300 student samples, 60 from the urban and 107 from the rural schools did not agree to the practice of sitting in the classroom for study from morning till evening, while 82 from the urban and 51 from the rural schools agreed to it. From among the 167 students 71 boys and 96 girls disagreed to this practice while 75 boys and 58 girls agreed to it. More rural
students and more girls disliked while lesser urban students showed dislike. More boys liked to sit in the classroom from morning till evening while girls (96) disliked this practice.

Reasons

167 students out of 300 do not prefer the practice of sitting in the classroom for study from morning till evening giving three major reasons. They feel bored (125 - highest score), want more activity (22) and it is a strain (20).

Interest in the present work-experience classes

133 urban and 155 rural students are interested. Only 9 urban and 3 rural students do not like the programme.

137 boys as well as 151 girls declared their interest while 9 boys and 3 girls responded negatively.

The very low number of students with negative answers indicates that the work-experience classes at present have a good general appeal to the students.

Reasons for disinterest

The greatest complaint from more urban students is that teaching is uninteresting. Dry repetitions and lack of equipments are the other reasons cited by urban
and rural and boys and girls. No rural child is for dry repetition and no urban child and girl is for lack of equipments.

**Sufficiency of time allotted**

165 students - 69 urban and 96 rural - stated that the time now available for work-experience is enough. Out of these 86 were boys and 79 were girls. 60 boys and 75 girls wanted more time.

The case of more urban students seeking more time for work-experience reveals the fact that they do not have much interesting work at home because of environmental inadequacies. Rural students have more freedom and facilities to move about in the locality and have some interesting activities, perhaps their own play or some work for the home.

**Hindrance of work-experience classes in the learning of other subjects**

258 students - 131 urban and 127 rural; 122 boys and 136 girls - stated that work-experience classes do not hinder the learning of other subjects. Only less than 1/6 of the total students maintained the opposite view. $x^2$ values show significant rural-urban difference.
Scheduling of work-experience programme

More than half of the students liked to have it in the morning. More rural students (107) and more boys (91) agreed to this. Among the 136 students who wanted it in the afternoon, 85 were urban and 51 rural and 81 girls and 55 boys. $X^2$ values show significant differences in the response of rural-urban and boys and girls.

Effect of work-experience programme on students' health

Majority of urban students and boys do not feel tired to learn other subjects after work-experience. The same is the case with the rural students and girls. More rural students than urban and more boys than girls out of 82 students felt tired after work-experience to proceed to learn other subjects. $X^2$ values show significant rural-urban difference.

Reaction towards text-oriented studies, work-oriented studies or both

Learning from both book and work is generally favoured by students. Out of 300 respondents, 274
including 124 urban and 150 rural students and 141 boys and 133 girls stated that they liked learning from books and doing some work with the studies. Only 16 students preferred learning from books. Work separate from studies is liked by only two students. No girls and rural students had any opinion about it. 8 students liked work as a practical subject.

**Different types of work liked by students**

Among the urban students, 34 preferred handicrafts and Tailoring while 50 rural students preferred Agriculture, Horticulture, Pottery, Drawing and Bee-keeping. 48 boys preferred the same items noted by the rural students whereas the girls preferred the items noted by the urban students. Where the urban students gave second preference to Mechanics and Electricity the rural set preferred Handicrafts and Tailoring. When the boys preferred secondly Mechanics and Electricity girls gave second preference to Agriculture. Horticulture, Pottery, Drawing, and Bee-keeping.

**Encouragement for students to do the work**

Urban and rural as well as boys and girls have agreed that maximum encouragement is from teachers, parents coming next. In both these cases rural students
and girls' scores are much significantly greater than those of the urban and boys. Friends and relatives come next in the order of encouragement given. Urban students and girls get more encouragement from friends. 39 urban and 20 rural and an equal number of boys and girls do not get any encouragement from anybody.

**Examination for work-experience**

243 liked to have examinations of which 132 are rural and 111 urban, 128 girls and 115 boys. 57 did not like to have examinations. A low number of rural students and girls belonged to this group.

The $x^2$ values show that the responses of the rural and urban students and of boys and girls do not differ significantly.

**Types of tests or evaluation**

300 students responded to this question. For the rural-urban category, the maximum number (139) is for termly practical test. Next comes the group for daily assessment and the last for final practical test. Same preference is noted by boys and girls. Least preference is for final examination.
Suggestions for more areas of work-experience

Most of the areas suggested are mere repetitions of what is usually practised under work-experience in the schools. Perhaps these may not be in certain schools. Out of these Handicrafts (89) are the most preferred suggestion. Next comes Electricity and Engineering (34) and third item is Agriculture-Horticulture-Pottery-Beekeeping group. (28).

Only two new items are suggested viz. Research and Experiments (1) and Hypnotism (1), only by the urban student and the boy. Though this number is low, it is an indication of the high aspiration and preference of a student in this age of science and technology. Preference for Hypnotism may be due to the thrill experienced in seeing magic performances. Cultural influence might be the reason for girls not to think about Research and Experiments or Hypnotism.

Exhibition of the student-made items

180 students said "yes" to this item while 120 noted "No". The largest number of rural students and girls had affirmative responses. Still the urban students and boys have a liking for white collar jobs and hence their lack of seriousness in preparing items worth exhibiting. The rural-urban, boy-girl differences are significant.
Vocationalization of Education

Students are generally favourable to vocationalization of education. 268 students out of 300, are for vocationalization. Of these 140 are rural children and 128 urban. Boys and girls equally voted for this. 31 students are against this suggestion. Only one student doubts in its applicability.

Part III. Book Analysis

Analysis of three guidebooks on work-experience published by the State Institute of Education, Trivandrum indicates the following details of appraisal. The three books selected are:

1. Work-experience - Home Science Practical Studies
2. Work-experience through Workshop Experience and
3. Study of Physics through Work-experience

Positive as well as counter examples are given against selected guidelines.

I. Home Science Practical Studies

This is a curriculum guidebook and it deals with the content in three columns. In the first different kinds of activities, in the second different skills to be derived from these activities and in the third a list of needed tools and equipments are listed. In many cases
there is no correlation between the items given in the three columns. The skills have been written by different persons and these are not edited properly. There are several instances of absurdities in this book. This book is not likely to be very useful to anybody.

II. Work-experience Through Workshop Experience (Workshop)

III. Study of Physics Through Work Experience (Physics)

(1) The language used in a guidebook should be simple, clear and straight avoiding difficult terminology. But in 'Workshop' there are several instances of using English transliterations for tools and descriptions avoiding familiar Malayalam words. "Physics" is better in this aspect.

(2) A guidebook should be a help to any person who uses it without the help of a teacher.

There are many examples in "Workshop" (e.g. metal work and electricity) which become useless unless the person who uses the book is a master in these fields. "Physics" gives a clearer understanding.

(3) Purposive activities should give way to mere mechanical tool practice.

In "Workshop" most of the activities are exclusively on tool practice e.g., Treatment of joints in the chapter on Woodwork for Stds. VI and VII.
(4) Making useful articles should be given preference rather than formal drills in workshop operations.

Some good examples of useful products are in "Workshop" e.g., Cloth hanger, Chappathi maker, sitting wood, lavatory brush, book rack, etc.

(5) Step-by-step instruction should be given for each item showing the various stages of production.

Both 'Physics' and 'Workshop' do not observe this point well. Almost all the items are shown in a completed form.

(6) Directions for demonstration should clearly distinguish between a classroom situation and workshop—work-experience situation.

This is not followed in "Workshop".

(7) A guidebook should have clear and explanatory diagrams.

"Workshop" lacks this quality. "Physics" shows experiments very well illustrated. But not a single diagram of the relevant tools is given in the whole book.

(8) Work-experience to be given as a means to learn the procedure in handling tools.
There are many examples in "Workshop" to prove that this is not followed, e.g., In the chapter on Woodwork for Std.V a list of tools is given without any directions for their use.

(9) Specific chain of skills should be developed with reference to the making of specific articles.

"Workshop" does not follow this.

(10) Work-experience should sensitivize one to certain crucial situations favouring discrimination.

In "Physics" the example of the calipers does not focus on the work. Situations forcing the need for discriminative use of these are lacking.

(11) Work-experience class should never be presented as a theory class.

Many practical experiments are given in "Physics". Treatment of Electricity in "Workshop" is merely theoretical. Relevant concept like insulator is not brought out.

(12) Work-experience can be presented as an opportunity to concretize subjects where experiments and demonstrations are often skipped.

Chapter on Electricity in "Workshop" (for Std.VI) focusses not on work-experience but only on theoretical aspects.
(13) Work-experience presented must be more than mere practical work related to any school subject.

Out of the 70 activities given in "Physics" all except 4 to 6 items are simple cases of direct practical work and not work-experience.

There are several examples of mere practical work in "Workshop" evident in topics presented for Standards from V to X.

(14) Precautions of using tools and in other experiences should be given in clear, simple and objective style. Warning should not frighten students.

"Workshop" tools are presented with no precautionary directions. In "Physics" though there are several examples of clear cut precautions, under "Heat Energy" pompous and oversanskritized directions about electricity are sure to frighten children.

(15) Work-experiences presented should help us to have a look at the world around and learn from it.

In "Physics" chapters on gravity and pendulum, solar eclipse, eclipses, etc., help children look around and learn.

In "Workshop" such experiences are not frequent.
Work-experience guidebook should keep in view the well-equipped schools as well as the ordinary and the disadvantaged schools.

"Workshop" seems to be written for fairly well-equipped schools at Trivandrum.

**Part IV. Visits to Institutions**

Visits to three famous institutions at Tamil Nadu and one in Kerala led to the following findings.

At present when the Indian youths are blindly after the western ways of education and living, and woefully forgetting Gandhian values, when they are strike-prone and involved many a time in antisocial activities and when heads of institutions cannot even think of a peaceful disciplined control, visits to Sri Ramakrishna Vidyalaya, Gandhigram, Mani's High School and Mitraniketan give an extremely desirable relaxation to the mind. The work and education of the youth for a socially useful productive life woven into the functioning of these institutions strike a note of wonder and satisfaction in the visitor's heart. As a resident of Mitraniketan for a few years the investigator has become deeply convinced as to how an institution can send out fully developed personalities worthy of Indian citizenship and how it can foster international brotherhood irrespective of caste, creed, religion or language.
Part V. Guidelines

The analysis of the ratings of 77 statements under the dimensions 'importance' and 'practicability' yielded the following findings which would be the guidelines for the improvement of the present work experience programme.

1. Curriculum

   a. General

   This dimension consists of four items:

   (1) status of work-experience in the U.P. and High schools; (2) awareness of pupils that any work done in the school is a part of work-experience; (3) allocation of periods for work-experience and (4) the work-experience is a part of general education.

   The respondents consider the above items important and practicable with a group average of 1.53 and 1.45 respectively. The importance rating is invariably higher than the practicability rating, though the difference is not very marked except in the case of item No.1. The inter-item difference is quite high within the group. The item regarding 'the number of periods' has got the lowest rating (1.23).

   The urban rating for the practicability of equal importance for work-experience in U.P. and High schools
is significantly higher ($p \leq 0.01$) than that of the Rural
while in importance the NWET have significantly higher
rating ($p < 0.01$) than that of the WET. The urban rating
for the importance of the second item is significantly
higher ($p < 0.01$) than that of the Rural group, while the
WET rating is significantly much higher than that of the
NWET in both importance ($p < 0.01$) and practicability
($p < 0.01$). For the item "two periods a day for Work-
experience", Rural group rating is significantly higher
for practicability whereas the WET group ratings for
importance and practicability are significantly higher
than that of the NWET at 1% level. For the integration
of work-experience with general education (item 4) the
Rural ratings are significantly higher for both importance
($p < 0.01$) and practicability ($p < 0.01$) than that of their
counterparts.

The group average shows significantly higher
urban rating ($p < 0.01$) for importance while both in
importance and practicability WET score significantly
higher at 1% level than the NWET.

b. Correlation of work-experience with other subjects

In comparison with the grand averages, the
respondents have given very low ratings for importance
and practicability of this item.

* NWET = Non-work-experience teachers
* WET = Work-experience teachers
Only Rural group and WET have given significantly higher (5% level) ratings for importance while no significant difference is noted for practicability.

(c) Curriculum: Continuity in training the trades

The ratings of the continuity dimension are much lower than the overall means of both importance and practicability indicating that this is not a priority dimension.

Though the Rural group gives significantly higher (p .05) rating than the urban group for the importance of reducing the interval between work-periods to have trade training continuity, this trend is not noted in the practicability dimension.

2. Implications of interest in work-experience

(a) Serious consideration of student interest in the implementation of the programme.

(b) The testing of student's interest before the allocation of work.

The group averages of the two items (1.50; 1.47) are slightly higher than the grand averages (1.48:1.36).

The Rural group rating for the importance of the interest consideration item is significantly higher
(p < .01) than that of the urban group. The WET group gives significantly higher rating (p < .01) in both importance and practicability than the NWET group.

When the urban group rating for practicability of interest test (item 2) is significantly higher at 1% level, WET group ratings are significantly higher at 1% level in both practicability and importance than the ratings of their counter groups.

In the group average importance ratings by the Rural and WET groups are significantly higher (p < .01) than those of the Urban and NWET groups, whereas only WET group rating is significantly higher (p < .01) than the NWET in practicability.

3. Relevance of examination in work-experience programme

This subgroup contains three items:

1. Tests of attitude, aptitude and physical fitness as a pre-requisite for giving work-experience.

2. Examination as encouragement for work-experience.

3. Use of different assessment modes such as practical test, continuous assessment to give grades and termly practical test.
The group averages 1.52 and 1.45 are slightly higher than the grand averages (1.48: 1.36) both in importance and practicability.

Within the three items the highest importance score (1.55) goes to attitude-aptitude-tests as a prerequisite to selection for work-experience. The other two items have identical scores (1.51) in importance, which is slightly higher than the overall means. Examination as encouragement gets fairly high practicability score (1.50). The lowest practicability score (1.36) is for the practical test and multiple assessment mode.

For the first item the Rural group rating for importance is significantly higher ($p < .01$) than that of the urban group. For examination-motivation item and multiple-assessment-mode item the WET group gives significantly higher ($p < .05$) importance rating as compared to the NWET rating.

4. School-community co-ordination in effective work-experience organization

Four items are included under this.

(a) Parent awareness about the importance of the programme.

(b) Seminars and discussions by Parent Teacher Associations about the objectives, philosophy and importance of the programme.
(c) Work-experience students to spend their afternoons in farms and industries near the school.

(d) Student contact with the socio-cultural activities.

The highest mean scores go for the importance of parent awareness (1.56) and Parent Teacher Associations as information giving agency (1.48). The score of 1.44 of student contact with socio-cultural activities gets the third place. The lowest rank of importance goes for student involvement in community work (1.30). Incidentally this item gets the lowest practicability score (1.15), while the other three items get scores closer to the overall means.

While no Rural-Urban significant difference is seen in the importance of parental awareness, the WET ratings are significantly higher both in importance and practicability ($p < .01$ and $p < .05$) than the ratings of NWET. The urban rating for practicability also is significantly higher ($p < .05$) than the Rural rating.

The Rural and WET groups rated the importance of Parent Teacher Associations as information agency significantly higher ($p < .01$ in both the cases) than that of their counter groups. The WET rating is significantly higher ($p < .05$) for practicability than that of the NWET.
The Rural group rating for the third item is significantly higher (Importance: \( p < .01 \)) than that of the urban group.

For the item of student contact with socio-cultural activities the WET rating is significantly higher (\( p < .01 \)) than that of the NWET.

Among the group averages the Rural group and the WET group ratings are significantly higher in importance (\( p < .05 \) and \( p < .01 \)), while for practicability the WET rating alone is significantly higher (\( p < .01 \)).

5. Implications of school-industry in work-experience

Two items are included in this sub-group.

(1) On-the-job-training

(2) Students' touch with local trade unions.

The group averages (1.46: 1.28) are slightly higher than the overall means in importance and appreciably lower in practicability.

The trade unions contact item has ratings close to the overall means. As regards 'on-the-job-training' while the importance rating is close to the overall means, the practicability ratings are appreciably lower.
In the importance of student chances for on-the-job-training there is no significant Rural-Urban differences while in its practicability the urban rating is significantly higher ($p < .01$) than that of the Rural. The WET rating about the importance of this item is significantly higher at 1% level than that of the NWET rating while there is no significant difference between them for its practicability.

The importance of trade union contact of students is rated by the Rural group significantly higher ($p < .05$) than by the urban group while both the groups are in agreement about its practicability. For this item the NWET group has significantly higher ($p < .05$) rating only in its practicability than the WET group.

6. Administration

(a) Enlightened Administrative Practices in Work-experience

Four items are included under this sub-group:

(1) Exploration of work around the school; (2) division of work-experience areas into different units for suitable selection by the schools; (3) relating existing crafts to work-experience and (4) avoidance of red-tapism.

The group means of this dimension are much lower than the overall means. The experts rated 1.55 for importance and 1.40 for practicability.
The Rural group places significantly greater importance than the urban for all the items ($p<.01$; $p<.01$; $p<.05$; and $p<.01$). The WET group records significantly greater importance for the pre-exploration of work around ($p<.01$), clear divisions of appropriate units ($p<.01$) and linking with the existing crafts ($p<.01$). Regarding the avoidance of red-tapism, NWET gives significantly higher ($p<.05$) score in the practicability dimension.

(b) Teacher Status.

There are two items coming under this dimension.

1. Salary, qualification and position of work-experience teachers comparable to that of other subject teachers.

2. Teacher freedom for effective implementation.

The overall means (1.49: 1.37) agree with the ground averages (1.48:1.36). The second item gets higher ratings than the first item, both in importance and practicability. The experts ratings are much higher than the above ratings for importance and practicability (1.67: 1.57).

WET group gives significantly higher rating for the first item for both importance and practicability ($p<.01$: $p<.01$) than the NWET group while urban rating
is significantly higher \((p < .01)\) than that of the Rural in its practicability.

The practicability score of the urban group for the second item is significantly higher \((p < .01)\) than that of the Rural group. In the importance of this item significantly higher scores are obtained \((p < .01)\) by the WET group over the NWET.

Among the group scores practicability score of the urban and WET groups are significantly higher at 1% levels than the scores of their counter groups, while the importance scores of the WET are significantly higher \((p < .01)\) than that of the NWET.

(c) **Finance**

Three items are given here.

(1) Minimum financial help from the State Institute of Education causing the failure of the programme (external source).

(2) Gradual withdrawal of initial expenses as the programme gets momentum.

(3) Capital to be formed by the schools (internal source).

The group average for this item is lowest among the several groups.
The most important and practicable way for the success of the programme is the school's own capital (1.31 and 1.16); because the respondents consider that the reason for the failure of work-experience programme is the least financial help from the State Department of Education (1.28 and 1.17). The respondents are not in favour of the gradual withdrawal of the initial expenses as the programme goes well (1.18 and 1.06).

Experts also show the same trend: low rating for importance (1.21) and practicability (1.07).

The urban rating (practicability) for minimum help as the reason for failure of the programme is significantly much higher ($p < .01$) than that of the rural group while same is the case with WET ratings about its importance and practicability ($p < .01$ in both cases).

The importance and practicability of the gradual withdrawal of initial expenses are rated much significantly higher by the Rural group at 1% level than the urban; WET ratings are significantly higher ($p < .05$) than those of the NWET only in its importance.

The capital investment by the schools is rated significantly higher by the WET than the NWET in its importance and practicability at 1% level.
Among the group averages the Rural group rating is significantly higher ($p < .01$) than that of the urban while for practicability and importance the WET ratings are significantly higher at 1% levels than those of the WET.

(d) **Role of Society**

There are three items included here.

(1) Listing fully the details of local resources by a committee of members from the school, public and Agro-industrial units; (2) help from the society to implement the programme and (3) consideration of local needs.

The mean scores of this sub-group for importance (1.46) and practicability (1.35) are very close to the grand averages (1.48 and 1.36).

The maximum ratings are for the local needs consideration (1.52); requesting help from the society comes next in importance (1.45) and listing local resources (1.40) is the last in importance. The same sequence is seen for the practicability dimension too (1.40; 1.36 and 1.30).

Expert ratings are very high (1.60) for importance and maintains almost the same scores for practicability (1.36).
The Rural and WET groups (work–culture group) rate significantly higher in the importance \( (p<.01 \text{ and } p<.01) \) of requesting local help than the urban and the NWET groups while they are not very optimistic about its practicability.

The Rural group importance rating of local-need-based work–experience planning is significantly higher \( (p<.01) \) than the urban rating.

The group averages indicate significantly higher ratings \( (p<.01) \) by the Rural and the WET than those of the urban and the NWET about importance.

(e) Grouping

There are two items under this:

1. Limiting the number of students to face the programme–implementation difficulties.
2. Reducing the number to 10 to 15 students.

The group mean scores for the first item are much lower than the scores in the grand averages. For the item of reducing the number of students to 10 to 15, the score gets a mean close to the overall means. The first item gets the lowest ratings for importance \( (1.19) \) and for practicability \( (1.03) \).
Experts also have the same pattern of ratings -
1.39 for importance and 1.06 for practicability.

The Rural and WET group ratings are significantly
higher at 5% levels than those of the urban and NWET about
the importance and at 1% level about the practicability
of the first item. While the urban group shows signifi-
cantly higher rating ($p < .01$) than the Rural group about
the practicability of the second item, reverse is the
case with the WET about its importance.

Among the group averages, the WET group shows
significantly higher rating ($p < .01$) about importance only.

(f) **Link with the different departments**

Under this, there are three items:

(1) Seeking maximum help from the Department of Technical
    Education

(2) Serious attention of professional and non-professional
    agencies from the planning to the evaluation levels
    of the programme.

(3) Seeking help from Keltron, Engineering College and
    Polytechnics.
The group means for this area lie close to the overall means. The third item gets low ratings particularly on practicability (1.24). Expert ratings are very low: 1.22 for importance and 1.26 for practicability.

There is a systematic pattern among the significant differences. Item No.1 regarding help from the Department of Technical Education reveals no significant differences. For items 2 and 3 and in the group means, the Rural group gives significantly higher rating \((p < .01)\) than the urban in importance and NWET group scores significantly higher \((p < .01)\) than the WET in practicability.

(g) **Decentralization**

There are two items: (1) Work-experience syllabus preparation by the school with reference to the local resources;

(2) Decision by the schools about the time and periods for work-experience.

The overall mean scores are almost the same as of the grand averages (1.48 and 1.35). But the second item of period arrangement gets higher ratings than the first both in importance and practicability.

Experts give very high scores on these items - 1.70 for importance and 1.56 for practicability.
While the urban group rating is significantly higher \((p < .01)\) for practicability of the first item, the Rural group rating is significantly higher \((p < .05)\) for the importance of the second item. The ratings of the WET group are significantly higher for the importance and practicability of the first item and for the importance of the second item at 1\% levels, than the ratings of the N WET group.

Among the group averages, WET rating is significantly higher \((p < .01)\) than that of the NWET in importance only.

\(\text{(h)}\) **Facilities Utilization**

(1) Maximum utilization of available place, tools and other equipments.

The importance of this item among the total list of guidelines is attested by the high ratings obtained by this single item, as compared with the grand averages.

Experts also give very high ratings for importance \((1.80)\) and practicability \((1.70)\).

The urban group gives significantly higher rating \((p < .01)\) for the practicability of exploiting all the local resources than the Rural group.
7. **Academic: Supply of book materials**

   (1) Supply of adequate publications on work-experience
   (2) Mobile library by the Government/Department of Education.

   The group means are very close to the grand averages. The means of the items within the group are also very close.

   Regarding the need for the supply of adequate publications to the students Rural and WET groups give higher ratings for its importance, than the urban and NMET groups. On the practicability dimension Rural and WET show significantly lower ratings.

   For the item of mobile library the Rural group gives significantly higher rating \((p<.05)\) than the urban group in importance. Among the group averages the importance of rating of the Rural group is significantly higher \((p<.01)\) than that of the urban group and reverse is the case for practicability.

8. **Development of Awareness Through Principles of Work and Use of Audio-visual Aids**

   Three items are included here.

   (a) Awareness of different kinds of equipments, raw materials, etc.

   (b) Audio-visual aids as an enlightening medium for work-experience.
(c) Awareness of principles of work through play and simple works (for Primary school children).

The group averages (1.53: 1.39) are slightly higher than the grand averages. All the mean scores are close in importance. In practicability, the Audio-visual item gets a low score (1.29).

Experts give almost similar scores: 1.54 for importance and 1.37 for practicability.

The importance score about the student awareness of different kinds of equipments, raw materials, etc., of the Urban group is significantly higher \( (p < .05) \) than that of the Rural group.

The importance of Audio-visual aids as an enlightening medium is rated significantly higher \( (p < .01) \) by the WET than by the NWET.

Among the group averages the practicability score of the Urban group is also significantly higher \( (p < .01) \) than that of the Rural group while the importance rating is significantly higher \( (p < .01) \) in the case of the WET than in the case of the NWET.

9. Improvisations in Work-experience
(a) Students to make equipments except complex ones.
(b) Collection of discarded materials by students.
The group averages are higher (1.53: 1.42) than the grand averages in both the dimensions. The first item gets distinctly higher ratings in both the dimensions (1.59:1.44) than the second item, where the means are almost equal to the overall means. Experts give a close rating for the importance (1.54) and practicability (1.42) of this item.

The NWET group ratings for the practicability of the two items are significantly higher at 1% level. Their practicability group mean score is also significantly higher (p<.01) than that of the WET group.

10. Facilities: Local Resources in Work-experience

There are two items:

(a) Full exploitation of workshops, farms and industrial units around the school.

(b) Collection of information regarding the local resources.

When compared to the grand averages (1.48:1.36) the group averages for importance and practicability are slightly lower (1.44:1.32).

Both the items have almost the same mean scores. Experts give scores of 1.48 for importance and 1.33 for practicability.

The Rural group gives significantly higher importance than the Urban group in the group means (p<.01)
and in the individual means (\( p < .05 \) and \( p < .01 \)).

The NWET group practicability rating for the first item is significantly higher (\( p < .01 \)) than that of the WET group. The WET group ratings for the importance and practicability of the second item are significantly higher at 1% levels and their group average for importance is significantly higher at 5% level than the NWET group.

11. Motivation and Return Sharing in Work-Experience

Five items are included under this:

(a) Giving some reward for work experience students.
(b) Implementing "Earn-while-learn" programme to inculcate economic conscience.
(c) Introduction of prizes and awards to retain student interest.
(d) Exhibitions of student made exhibits and sending selected items at district and state levels.
(e) Information through stories, incidents etc.

The group average for motivational item is much higher than the grand average for importance (1.59) and practicability (1.46).

In the case of experts, the importance rating is slightly higher (1.62) than the above rating and a little lower for practicability (1.45).
The first three items deal with material motivation. But the item which gets the highest rating both in importance (1.64) and practicability (1.56) deals with non-material motivation, viz. providing the incentive of exhibiting the produced materials. The item with lowest rating in importance (1.52) and in practicability (1.41) is close to a non-material type.

The item of giving some rewards to students is considered more important by the Rural and WET groups (significant at 5% level) than the urban and NWET groups. NWET seems to be more confident about practicability though it is not significant.

There are no significant differences among the groups about the introduction of prizes and awards to retain pupils' interest, or about the role of stories or incidents.

The Rural and NWET groups give significantly higher ratings at 1% levels than the urban and WET groups for the importance of district and state level exhibition item. About its practicability NWET rating is significantly higher ($p<0.01$) than that of the WET.

Among the group averages the Rural group rating is significantly higher ($p<0.05$) than that of the urban,
in importance, while the importance and practicability ratings of the NWET are significantly higher \((p < 0.05; p < 0.01)\) than that of the WET.

12. **Educating the Teacher and the Participants in work-experience**

Three items are included under this:

(a) All work-experience teachers to be given basic training

(b) Students, teachers, parents, headmasters, inspectors and trade unions to know well about the programme.

(c) Scarcity of trained work-experience teachers never to occur.

The group averages \((1.53:1.42)\) are only slightly higher than the grand averages in both importance and practicability.

Among the three, the third item gets distinctly higher scores in importance \((1.60)\). Experts give distinctly higher rating for importance \((1.72)\) and a very close score \((1.46)\) for practicability, when compared with the above group scores.

Rural and WET ratings about the importance of basic training are significantly higher at 1% levels than that of the urban and NWET.
The importance of avoiding the scarcity of trained teachers is accepted more highly (significance $p < .01$) by the Rural group than the urban, reverse is the case in its practicability score. NWET group score is also significantly higher ($p < .01$) than the NET in practicability.

The urban group rating of importance of all persons involved in work-experience to know about the programme is significantly higher at 5% level while their practicability rating is higher at 1% level. The NET group score about the importance of this item is significantly higher ($p < .01$) than that of the NWET.

Among the group averages the urban and the NWET groups ratings are significantly higher at 1% levels than those of their counter groups.

13. **Marketing in Work-experience**

Three items are included under this:

(a) Local and school need-based production of goods in work-experience.

(b) Work-experience classes to produce marketable goods also.

(c) Avoidance of delay in quality control, cost estimation etc.
The overall mean scores (1.46:1.26) are slightly lower than the grand averages in importance and practicability.

Expert ratings are 1.48 for importance and 1.14 for practicability.

The general marketability item stands in the middle with slightly higher score than the overall mean scores in importance (1.48) and distinctly lower score (1.24) in practicability. The item of need-based production of marketable goods, gets the lowest score in both the dimensions (1.38:1.19). The item of quick quality control and cost estimation gets the highest ratings (1.52:1.34) in the group.

Rural group rating for the importance of the first item is significantly higher ($p < .01$) than that of the urban group. The importance and practicability ratings for the second item by the WET are significantly higher ($p < .05; p < .01$) than the ratings by the NWET group. For the third item, the NWET practicability rating is significantly higher ($p < .01$) than that of the WET.

Among the group averages for practicability, urban rating alone shows superiority at 1% level against the Rural group rating.
14. **Individual Attention and Work-experience**

(a) Arrangement of Work-experience classes for individual attention of the pupils.

The means (1.50:1.37) are very close to the grand averages. The importance mean is slightly higher than the overall means.

The experts give a very high rating (1.72) for importance and a low score (1.14) for practicability.

There are no significant differences among the Rural-Urban and WET-NWET groups about importance or practicability.

15. **Implications of Creativity in Work-experience**

There are two items included here.

(a) Work-experience as a chance to show students' creativity.

(b) Work-experience classes for detecting and developing students' talents instead of overemphasizing production.

The group averages (1.50:1.35) are close to the grand averages. The second item gets relatively high rating (1.55) for importance. Here the experts give a higher rating for both importance (1.64) and practicability (1.52).
The urban group rating is significantly higher in the importance \( (p < .05) \) and practicability \( (p < .01) \) of the first item than that of the Rural group. Among the group averages, only NWET rating is significantly higher \( (p < .01) \) than that of the WET in importance.


Two aspects are included under this:

(1) Services of trained and experienced persons in different trades.

(2) Conduct of lectures and discussions in the school by experts.

The group averages \( (1.53:1.43) \) are only slightly higher than the grand averages. So the respondents prefer services of technical persons to simply conduct lectures and discussions by experts as seen from the relatively high score for item No.1. For importance only experts give a higher rating \( (1.63) \) and their practicability score is 1.42. Regarding the services of technical persons, the NWET give a significantly higher \( (p < .01) \) rating than that of the WET in its practicability. But WET give a higher rating \( (p < .05) \) for the second item than the NWET for importance.
Among the group averages WET rating is significantly higher \((p < .05)\) for importance and NWET rating significantly higher \((p < .05)\) in practicability than their counterparts.

17. Research in work-experience

(a) A field adviser in each school to explore the possible areas of work-experience.

(b) Research in work-experience with the help of experts.

The group averages \((1.42: 1.33)\) are lower than the grand averages in both the dimensions.

Among the two items the expert research acceptance is close to the overall means \((1.46: 1.32)\). Experts give a very low score for this item, 1.34 for importance and 0.97 for practicability.

In the practicability of both the items the NWET ratings are significantly higher at 1% levels than those of the WET. In practicability of the first item the Urban rating is significantly higher \((p < .01)\) than that of the Rural.

Among group averages the practicability ratings of the urban and NWET groups stand significantly higher \((p < .01; \ p < .01)\) than their counter group ratings.
18. Guidance in Work-experience

(a) Starting of vocational and guidance bureau in the three regions of the State.

The group ratings are 1.49 and 1.35. Expert ratings are 1.12 for importance and 0.96 for practicability.

The urban rating for practicability is significantly higher \( (p < .01) \) than that of the Rural group while the importance rating of the NWET is significantly higher \( (p < .01) \) than that of the WET.

19. Implications of Relation with the World of Work in Work-experience

(a) Student interviews with the workers of different areas and fields.

(b) Student observation and participation in public works like road construction.

When the group means (1.51 and 1.36) are compared to the grand means (1.48 and 1.36), the importance rating is slightly higher for the group while practicability ratio is almost identical.

Low ratings are given by the experts for importance (1.40) and for practicability (1.26).

No significant differences are found among the sub-groups either in individual item means or in the group means.
20. **Liaison with School Leavers**

This dimension deals with the students whom the wording considers as 'dropouts' from the schools. It stresses the point that they are not really dropouts as far as work-experience is considered, because they are 'dropping into' some kind of work, but out of school.

Two items are included under this:

(a) teacher visits of students who dropped out from the school and engaged in works.

(b) collecting work reports of students from the employer by the work-experience teachers.

In comparison with the grand total mean scores (1.48: 1.36) of importance and practicability ratings of this dimension are slightly lower (1.43: 1.33). So in the total picture of the entire guide-lines, this dimension does not take a very prominent place. Still the respondents feel that such students should not be neglected.

The expert ratings are very low: 1.02 for importance and 0.87 for practicability.

In importance and practicability of the first item the Rural group ratings are significantly higher at 1% and 5% levels than that of the Urban. The practicability rating of the Non Work Experience Group is significantly
higher \((p < .01)\) than that of the WET. No significant differences are evident among the groups for the second item.

Among the group averages only the NWET ratings for importance and practicability are significantly higher \((p < .01\) in both cases) than the WET ratings.

21. Employment and Work-experience in Schools

There are two items under this:

(a) Use of all statutory controls for the employment of students.

(b) Giving preference for work-experience students in employment.

The group mean scores under importance and practicability \((1.53\ and\ 1.41)\) are higher than the grand means \((1.48\ and\ 1.36)\).

Item No.2 gets distinctly higher score in importance and practicability \((1.60:1.53)\) while the first item gets scores even lower than the overall means \((1.45:1.28)\).

The expert scores are also lower for importance \((1.46)\) and practicability \((1.35)\).

No significant difference is seen in the item of using all statutory controls for the employment of
students. In the second item the urban and NWET groups have given significantly higher ($p < .05$ and $p < .01$) ratings in the practicability dimension.

22. **Supervision in Work-experience**

(a) Supervision of work-experience programme by concerned personnel.

The scores 1.61 and 1.48 are clearly higher than the grand averages (1.48 and 1.37) in importance and practicability.

*Expert rating for importance is 1.62 and for practicability 1.42.*

The Rural group rating for importance is significantly higher ($p < .01$) than that of the Urban. In its practicability the NWET group gives higher rating ($p < .05$) against the WET rating.

23. **Raw Materials for work-experience**

(1) Avoidance of the scarcity of raw-materials

(2) Supply of necessary and rare raw materials by the authorities.

The group averages (1.51: 1.46) are higher than the grand averages in importance and appreciably higher in practicability.
Experts give a closer rating in importance (1.54) and a very low score for practicability (1.17).

The first item gets only marginally higher rating (1.43:1.43) than the overall means while the second item gets a clearly higher rating (1.54:1.48).

The Rural group rating for the first item is significantly higher ($p<.05$) than that of the Urban in its practicability where as in importance the WET rating is significantly higher ($p<.05$) than that of the NWET.

About the supply of needed and rare raw materials by authorities, only importance is rated significantly higher ($p<.01$) by the Rural group than the Urban group. In practicability there is no Rural-Urban difference.

In the group averages the Rural and the WET group ratings are significantly higher ($p<.01$ and $p<.05$) than that of the Urban and NWET groups in the importance dimension.

**Storage in work-experience**

(a) Storage facilities for raw materials, produces and tools.
(b) Teaching students to store finished products and raw materials.

(c) Students themselves to store work-experience products.

When compared to the grand averages, the ratings for the above items are very high (1.63 and 1.50). Among the three items, the highest ratings are obtained for the first item (1.70: 1.60).

The urban practicability rating for the second item is significantly higher than that of the rural.

The importance ratings of the WET for the first and second items are significantly higher ($p < .01$, $p < .05$) than those of the NWET while reverse is the case for practicability.

Among the group averages urban group rating is significantly higher for practicability while NWET ratings for both the dimensions are significantly higher than that of the WET (all at 1% levels).

24. Implications of Storage in work-experience

There are three items coming under this:

(a) Storage facilities in school for raw materials, produces and tools.

(b) Students to be taught to store and keep them

(c) Work-experience students to store these.
Compared to the grand averages, the ratings for
the above items are very high. The group averages are
1.63 for importance and 1.50 for practicability. Very
close ratings are given by the experts for importance
(1.60) and low rating for practicability (1.40).

Significantly higher ratings are given by the
WET over NWET for importance of the first item (p < .01)
while reverse is the case in practicability (p < .01).
The second item gets significantly higher (p < .01)
practicability rating from the urban group while in
importance rating the NWET group has significantly higher
(p < .05) score.

Among the group averages, only WET give higher
importance rating (p < .01) and NWET higher practicability
rating (p < .01).

Part VI. Audio-visual Materials

Photographs about work-experience in Mani's High
School, Coimbatore, photographs, slides and a short
documentary 16 mm. colour film about the activities in
Mitriniketan, Kerala were taken. These will give a
visual impression of the programme in action and can help
schools, if needed, to convince the parents, teachers,
students and the public about the practical success of
the programme and to inspire them for action in this line.
III. SUGGESTIONS OF ACTION POINTS FOR IMPROVEMENT OF WORK-EXPERIENCE PROGRAMME

I. General

Status of work-experience

It is evident from the responses of instructors and headmasters that work-experience was not made an integral part of school education. It was not given equal status with other school subjects. It is high time that work-experience was made an integral part of general education. The positive response of majority of instructors/headmasters and all the experts is a good indication for this move. During the present study only government schools are having work-experience programme. It should be extended to the private schools also, which occupy the largest sector under public instruction.

Examination

Work-experience as supported by the findings is not an examination subject and this is cited as a main reason for not considering it as a subject of serious study. This drawback is to be removed by making it a compulsory subject with examination and an integral part of general education.
Syllabus

Findings show that almost all teachers want separate syllabus for the U.P. and H.S. At present there is no clear cut syllabus for each level. So separate syllabus must be made available for schools.

II. Administrative and Academic Strategies

1. Exploration of local facilities

Before implementing work-experience programme exploration of the local facilities is to be made by a committee with the representatives of the school, the public and the agro-industrial units. From the resulting data, work-experience areas are to be chalked out and divided into workable units. Each school can select one or more units from these, suitable to its work-experience requirements. The importance of local resources exploration and areas-unit-classification is accepted by the expert response but its practicability is doubted. Most of the headmasters and instructors of the schools have confessed that they have never made an attempt to explore the local possibilities. Very low values obtained for linking existing crafts to the newly selected areas express a bad tendency to treat each scheme on a denovo basis cut off from its historical antecedents. Linking
the existing crafts to the newly selected areas and improving them is more sensible and advisable.

2. Facilities utilization

Regarding the in-school facilities our schools always complain about the inadequacies of working space, tools and equipments and technical advice for the effective implementation of work-experience programme. Out-of-school resources in Kerala are rich in offering (1) working environments such as local farms, livestock breeding and feeding centres, dairy units, farm machinery and repair yards, local industries, uncultivated lands, slums, hospitals, banks, hotels, shops etc., and (2) resource persons such as local blacksmith, mason carpenter, wireman, plumber, painter, auto-mechanic, engineers, doctors, technical assistants from agro-industrial concerns, and technical institutions.

3. Choice of activities for work-experience

Even before the implementation of the work-experience programme about 40% of schools had unspecified crafts. Under these crafts activities like tailoring, gardening, book-binding, coir work, agriculture, etc., were followed. After the implementation of work-experience programme agriculture and horticulture became highly favoured activities in the High Schools. In the
U.P. schools only tool practice was followed. Though the headmasters and instructors are skeptical about the possibility of adding new areas, their suggestions of activities such as garment making, brick making, woodworking, smithy, radio engineering, etc., have utilitarian value and hence such items could be included in future. Students' preference for handicrafts, pottery, bee-keeping, tailoring, horticulture, agriculture, mechanics, electricity, etc., and the rural-urban undertone of preferences for these activities indicate the necessity of choosing separate activities specially suited for the individual and environmental needs of the students.

Besides, when pollution resulting from heavy industrialization threatens man's healthy living, consideration must be given for opportunities of including small scale industries training in work-experience programme. Two new items - research and experiments - are suggested. Though this suggestion came from only two respondents, it is a good clue for giving orientation in this line to the few who are research prone through meaningful work-experience.

The respondents' preference of services of trained and experienced resource persons only in the form of lectures and discussions to practical assistance
is an indirect hint of the absence of such practical technical activities in schools. Unless useful practical activities are accepted for work-experience, utilization of local technical resource persons will be unnecessary.

4. **Socially useful productive work**

When areas and activities for work-experience are decided, the work to be done by the students must be socially useful and productive. An intelligent approach to the whole-school-programme is needed for this. For example, if work-experience activities are linked with the local community needs, innumerable avenues of socially useful work open before the students. They can clean the campus, roads, public lavatories and hospitals, dig wells in water deficient areas, make approach roads, help the slum people adopt sanitary ways of life, work on farms, uncultivated lands and the like. The local people also will co-operate. Such a co-operative and co-ordinated work will result in the local community development. The examples of the Student Service Programme at Trivandrum and the Non-Formal Programme at Bhumiaadhar, cited elsewhere in this study prove the practicability and socially useful productive nature of such integrated approach. Students themselves
have indicated that work-experience is not a hindrance to their study of other subjects. Time allotment and grouping of students will not be a problem. So inclusion of such activities and meaningful conduct of it will create in students a social sense and obligation.

5. Motivation and return sharing

Our social structure will not accept very large number of youths at work if it is not at regular wages. So when socially useful productive work is planned encourage earn-while-learn programme also to combine work and learning and to be rewarded for their students' effort. A large number of schools have reported that they do not have this arrangement. But some marketable items such as vegetables, plastic work and the like are produced. No uniform sale procedure is adopted. Some schools auction these items while others return the products to students. In no case the sale proceeds are given to the students. Money may be utilized for school maintenance or buying tools.

Providing material motivation through earn-while-learn programme and through the introduction of prizes and rewards to work-experience students is supported by the response of the experts. But this type of motivation is extrinsic and may not lead the pupils to a genuine
interest in work-experience. Even then we cannot disagree about its utilitarian value. Many school children come from very poor homes and some monetary gain for their effort will be of much financial help to them and motivation for further effort. So earn-while-learn arrangement must be there in work-experience programme.

It is interesting to note that the item which gets highest rating in both importance and practicability dimensions deals with non-material motivation (providing incentive of exhibiting their products). Also relatively higher rating is seen for the item of detecting and developing creative talents of students through the medium of work-experience activities. This indicates the view that in school, work is to be seen more in terms of development of creativity than mere production of goods. These points are to be remembered when production-oriented work-experience is designed. Such creative works when exhibited will result in a directly self-enhancing intrinsic motivation.

On-the-job training has also motivational significance. No schools have this programme now. The expert ratings accept its importance and practicability.
The appreciably higher urban-group-practicability-rating for this item reflects the presence of such possibilities in their areas than in the rural parts. The practicability-dissonant note by the work-experience teachers is an indirect hint of their awareness about the huge student population and the scarcity of job-training centres in our state. If local sources are located and if the students are sent to them on a half-day or half-week basis, the training thus given will have relevance to future career selection and this itself will be a good motivation for them.

6. Liaison with the school leavers

School leavers here are the dropouts, not in the ordinary sense. These dropouts are dropping into some kind of work but outside the school. Locating them and getting reports about them from their employers are the items which do not take a prominent place in the total picture of the entire guidelines. This may be because we do not have a system of following up such dropouts. The rural dropouts are really "drop-ins" into work-experience because they are more likely to be engaged in some useful productive work as against their urban counterparts who are more likely to be drawn into antisocial activities once they leave the school.
The rural group is more conscious about locating the dropouts and is confident about its practicability. Case histories and reports of work of successful dropouts will be an inspiration to work-experience students. Their services may be utilized for the school programme.

III. Dealing with Difficulties in Work-experience Programme

(a) Finance

Almost all of the headmasters and instructors find that the too meagre financial help ranging from Rs.100/- to Rs.1000/- per school from the State Institute of Education is the main reason for the failure of the programme. Giving initial financial help and gradual withdrawal of it as the programme gains momentum is not favoured by the respondents. Endorsing each school to find its own capital for work-experience is the most accepted way both in importance and practicability, as noted by the experts. So this suggestion itself can be recommended.

(b) Interest, aptitude and physical fitness of students

Lack of interest on the part of the students is cited by the teachers and headmasters as one of the hindrances to the success of the programme. The only selection criterion used by a few is simple interview.
Activities given are mostly common to the students. As a pre-requisite for involving students in activities or trade training, testing of interest, aptitude and physical fitness is rated very high by experts. Although there is evidence that interests change with age during the adolescent period, research findings show that these interests are permanent enough to warrant their use in assigning activities. Zim\(^1\) states that many of these interests develop through outside activities which are thus potential source of education, and these interests are more specific than general. So after testing the interests of high school students it is better to post them to suitable activities or trade training. For U.P. students general interests are to be considered.

(c) **Individual attention**

Impracticability of giving individual attention to students is also given as a reason against the success of the programme. The response of experts favours grouping with 10-15 students in a batch. Academic freedom if given to the schools can cater to this need.

---

(d) **Supply of rare and necessary raw materials**

The item of authorities supplying such raw materials gets clearly high rating and this is a reflection of the authority-dependence-attitude which often blocks self-help. But in view of the phrase "rare and necessary materials" it is a reasonable expectation because this need cannot be met from local resources. In a school system where even textbooks and note books are not supplied in time it is not surprising that work-experience teachers find its practicability very dim. Work-experience is a state-initiated programme and hence the concerned authorities should supply such raw materials.

(e) **Storage facilities**

High rating is given by the experts for the school storage facilities and its operation by students themselves through proper training. This procedure is better to be adopted in schools.

(f) **Attitude towards the programme**

For the successful implementation of work-experience programme, positive attitude of the parents, teachers and the public is very important. One of the reasons for the failure of the programme is an attitude
of apathy though not antagonism of the public, the parents and even the teachers, towards the manual nature of the programme. Another reason is the lack of initiative on the part of the teachers to create an awareness about the importance of the programme in the students, the parents and the public. The respondents do not seem to believe in any means other than the mere introduction of the programme, to create this awareness. At this juncture the experts agree to the importance and practicability of seminars and discussions initiated by the Parent Teacher Associations about the objectives, philosophy and educational value of the programme to create this awareness. This will encourage positive attitudinal change. All possible mass communication media also can be used for this.

In creating proper awareness in students, use of audio-visual aids is very important. Work-experience teacher group has high rating for this probably because they are more conscious about the experiential gap in the absence of such aids. Photographs, slides and short documentary film about work-experience inaction, as taken by the investigator might be very useful.
(g) Lack of tools and equipments

Teachers and headmasters complain that they do not have adequate tools and equipments for the programme in action. Responses indicate that while some students work with tools and equipments others simply look at them or waste their time. The items of encouraging students to collect discarded materials and to improvise simple equipments for use get distinctly high score.

Sachitananda\(^2\) reports that Hari and Gopi's kits (mentioned elsewhere in this thesis) prove that affluence is not necessary for effective learning and teaching. These kits now available in Physics, Chemistry, Biology, Mathematics and Electronics give basic ideas from nursery to junior college students. Some children even out did the original kits in their ingenuity and effective demonstration. With pieces of string, bits of wire, cardboard-toffee wrapping paper, scrap iron, etc., dozens of models of spring balances, telegraph sets, electric motors and other items were created by even the ill-equipped and poor schools.

Hari and Gopi got awards from NCERT and Unesco and now most of their products are exported.

Such improvisations, must be an important part of work-experience. Balasanker's study also supports this.

\(^2\) Sachitanandan, op. cit.
IV. Integration with Non Formal Education

Educating the drop-outs and illiterate adults of the local community, work-experience projects can be planned and executed. The Non-Formal Education Project done at Bhumiadhar cited elsewhere in this study stands as a model. Capitalizing the students' interests and the aspirations of the whole local community, dynamic involvement of the school takes it back to the community and the community back to the school. This will result in the total progress of the community in all its varied problems and the drop-outs and regular students will enjoy possible absorption in future labour force. Every school must take up such a project. The "drop-outs" mentioned under the item 'Liaison with school leavers' who are "drop-ins" to some kind of work could also be engaged in such a project to give them compensatory education.

V. Supervision and Evaluation

The internal assessment cannot be ignored since skills training is involved in this programme. The final skills are the result of cumulative effect of theoretical instruction and practical training which is to be best supervised by those who are directly concerned
with it. The scores throw light on the importance and practicability of this aspect. But there is a chance of subjectivity to creep in. To avoid this defect it is better to follow the practice of United Kingdom. 3

There separate supervisors in different regions help the schools to organize craft practices systematically and scientifically. They also give guidance to the craft teachers, make their experiences available to all the schools in their regions and organize seminars, refresher courses and in-service training courses. Occasionally national seminars are organized wherein the experiences of different regions are exchanged.

Students seem to prefer termly practical test for work-experience. Experts favour practical test and continuous assessment to give grades or termly practical tests equally. Work-experience teachers also favour examination as encouragement but they are doubtful about the practicability of multiple assessment modes. Any way it is better to have continuous assessment to give final grades for their achievement.

-------------------
VI. Work-experience Teacher Training

Pre-service training in work-experience is to be seriously planned and worked out, because it is in the hands of teachers that the entire success of the programme lies. Teacher trainees must be given training in work-experience scientifically. Training institutions should select the same activities for work-experience, which are done in the schools. At present there are a number of ancillary practical subjects for the B.Ed. training which are of no use for them in schools. Instead of this, small scale work-experience projects and action researches can be incorporated filling into the whole scheme of training. Proper records are also to be maintained for internal assessment and external standardization. The trainees must be aware and confident about the objectives, philosophy and practicability of work-experience when they finish the training. They must also have proper skill, attitudes, work habits and insights.

VII. Instructional Materials

A serious responsibility of the teacher training institutions is the preparation of literature for the use of work-experience teachers in schools. A systematic
programme of preparing instructional materials like guide books, handbooks, simple reading materials for children about technical aspects of crafts and trades, etc., can be followed in these institutions and made available to the work-experience teachers. We have seen the weak points of selected guidebooks now available. Training Colleges can avoid this defect while preparing such materials.

Supply of other publications about work-experience and the services of a mobile library must be available to students.

VIII. Employment

The generalized employment-opening item (work-experience students to be given selection preference) gets distinctly higher score on the importance and practicability dimensions than the specific action of giving statutory provision for employment. This preference is not conducive for social change. Much has been heard about the importance of making use of statutory controls in the preferential employment of work-experience students for specified trades, but still square plugs are fitted into round holes. The higher rating for practicability denotes optimism and this should definitely come into effect.
IX. Research

Actually field research is more important in work-experience, than expert research. The low scores from the work-experience teacher group need not be interpreted as antiresearch attitude on their part. It may be due to their awareness that thinking of researches when even teachers are not available in sufficient numbers is like eating cakes when bread is not available. Yet there is a major task to develop the right concept of functional research. Action research is also advisable.

IV. SUGGESTIONS FOR FURTHER RESEARCH

During this study certain dimensions have emerged prompting probe into further details, which could be used by the different personnel involved in work-experience programme for its effective implementation. Therefore the investigator suggests the following items for further research.

1. Exploration of local resources and utilizing them for work-experience programme is an untouched field and therefore research about the possible areas of these resources is relevant. So preparing a comprehensive list of such resources of a selected locality and studying their scope in work-experience is suggested.
2. At present community needs and work-experience programme are isolated. For socially useful education these two must be linked. Examples of such linking are rare now. So a sample study about integrating work-experience to community needs to enlighten work-experience teachers may be carried out.

3. Work-experience programme involves skill training as well as theoretical learning. When such training is about a subject which is different from the usual school subjects, preparation of guidelines for guidebooks and handbooks is advisable. This will be of much help to the headmasters and work-experience teachers.

4. When any new programme is introduced into our general education system, it is but natural that difficulties and deficiencies will creep into the implementation stage. In developed countries there are schemes of periodical assessment systematically and effectively carried out to improve the new programmes. In our state though the State Institute of Education has attempted this, nothing tangible has come out so far. Therefore a study of an effective scheme for periodical assessment of work-experience programme in our schools
to locate deficiencies and to give remedial action points may be taken up.

5. This study itself has revealed lack of awareness among the students, teachers, parents and public about the importance of the programme. Headmasters and teachers are skeptical about its practicability. To convince them and to inspire them for creative action, a comparative study of some outstanding institutions with very successful work-experience programmes and some of our schools seems to be very important.

6. When work-experience programme demands cross cutting into several other disciplines expanding its hold on the community needs, difficulties for teachers and students become inevitable. A study of the difficulties experienced by the teachers and students in the work-experience programme will help them to cross over these multidimensional hazards. Present study also reveals certain difficulties.

7. Our state enjoys only a subsistence economy. We cannot even dream of sophisticated tools and equipments for each school. Authorities are always complaining about such inadequacies. Balasankar's study (cited...
elsewhere) has revealed the scope and practicability of improvised apparatus made from cheap and discarded materials. Their superiority for classroom use is judged in 22 dimensions over sophisticated ones. So an investigation into the significance and practicability of improvisation in work-experience programme will be very useful.

8. On-the-job training is a very important aspect of work-experience programme. Yet no such attempt is being made in our schools at present. Locating sources for this and ways of utilizing them are urgent needs for the schools. Hence the possibility of on-the-job training for work-experience pupils may be studied.

9. Many of the 'drop-outs' become "drop-ins" in some kind of work and continue there successfully and joyfully. Their experiences may be studied with a view to reforming the present work-experience programme to reduce the number of 'drop-outs'.

10. At present we have evaluation suited for general education only. Technical education has a different mode of evaluation. When these two are to be combined a new evaluation system has to be evolved. In this
context a study of the possibility of implementing in work-experience the evaluation procedures adopted in agro-industrial training centres and institutions can be undertaken.

11. Studies have revealed the nature and types of interest in children. Testing and identifying their interest as a prerequisite for selection, work-experience is accepted by the respondents. We do not have an interest inventory suiting work-experience needs. Preparation of an interest inventory for school children with regard to the activities and trade training usually done in our schools is relevant.

12. The present study has shown that parents and the public do not have a positive attitude towards work-experience. This is a hindrance to the success of the programme. So a study of the attitudes of parents and the public towards work-experience may be attempted.

13. Respondents of this study revealed that there is no separate syllabus for work-experience. They also want it. Therefore preparation of guidelines for work-experience syllabus may be taken up.
14. Teacher training is very important for the effective implementation of this programme. The present system of teacher training for general education has no relevance to work-experience teaching. An investigation into how work-experience programme can be incorporated into the pre-service teacher training course in Kerala may be undertaken.

15. Frequent in-service/orientation courses are extremely necessary for the success of any school programme especially when it has multidimensional possibilities of action and guidance. Our present system of such in-service programmes is proved to be insufficient. Then an investigation into the drawbacks of the present in-service/orientation courses for work-experience teachers may be feasible.

16. At present, as this study reveals, work-experience does not enjoy an equal status with other school subjects. It is not considered as a subject of serious study. But most of the respondents feel the importance of making it an integral part of school education. Students favour job-oriented education. In such a context a study of the measures to be adopted to make work-experience an integral part of general education may be conducted.