CHAPTER - II

REVIEW OF RELATED LITERATURE

Content

| 2.0 | INTRODUCTION | 75 |
| 2.1 | REPORTS OF THE COMMITTEES AND COMMISSIONS | 76 |
| 2.2 | STUDIES PERTAINING TO WORK EXPERIENCE | 96 |
| 2.3 | STUDIES PERTAINING TO sociaLly USEFUL PRODUCTIVE WORK | 105 |
| 2.4 | STUDIES PERTAINING TO VOCATIONAL GUIDANCE | 107 |
| 2.5 | STUDIES PERTAINING TO VOCATIONAL EDUCATION AND VOCATIONALISATION OF EDUCATION | 110 |
| 2.6 | STUDIES PERTAINING TO VOCATIONAL ENVIRONMENT | 120 |
| 2.7 | STATUS OF VOCATIONALISATION OF EDUCATION IN DIFFERENT STATES OF INDIA | 134 |
| 2.8 | STATUS OF VOCATIONALISATION OF EDUCATION ABROAD | 138 |
| 2.9 | CONCLUSION | 138 |
2.0 INTRODUCTION

The previous chapter highlighted the background of the present study. The present chapter gives a review of literature relevant to the topic under study. The review comprises eight sections. Section 2.1, describes reports of the Committees and Commissions in India chronologically. Section 2.2, pertains to Work Experience. In Section 2.3, studies on Socially Useful Productive Work have been given. Section 2.4, deals with studies relating to Vocational Education and Vocationalisation of Education. Section 2.6, deals with studies on Vocational Environment. Section 2.7 deals with Vocationalisation of Education in the different states of India. Section 2.8, indicates the brief summary of the status of Vocationalisation abroad. It is followed by a chapter conclusion.

The review of the related literature was done with the following objectives:

i) The review gives specific direction to the research work.

ii) It is helpful to identify the problem and its significance.

iii) It also helps to find out the gaps in the research work, the current trends in educational research and also the priority areas of research.

iv) It is helpful to generate the hypotheses to be tested in the investigation.
v) It facilitates the interpretation of the findings of the study.

vi) The information available from the review regarding the design of the studies, the sample and the tools used are immensely useful to the investigator for avoiding wastage of time by trial and error method.

vii) Finally the review is also useful to delimit the research area and problem and to organise the research report precisely and meaningful.

2.1 REPORTS OF THE COMMITTEES AND COMMISSIONS

1. The Woods Despatch (1854)

The Woods Despatch (1854) says, "This knowledge must teach the natives of India the marvelous results of the employment of labour and capital, rouse them to emulate us in the development of the vast resources of their country, guide them in their efforts, and gradually, but certainly confer upon them all the advantages which accompany the healthy increase of wealth and commerce, and at the same time, secure to us a large and more certain supply of many articles necessary for our manufactures and extensively consumed by all classes of our population, as well as an almost inexhaustible demand for the produce for the British labour."

The Despatch referred to the introduction of Vocational
Education in Secondary schools. The Despatch wanted new schools to provide more opportunities to improve education and it can be more useful to the members of society.

2. Indian Education Commission (1882)

The Indian Education Commission (1882) gave great attention to the provision of Vocational Education.

The report recommended that in the upper classes of high schools there should be two divisions, one leading to the Entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial or non literary pursuits. The recommendation was accepted and alternative examinations came to be organised in every province.

3. The Hartog Committee (1929)

The Hartog Committee (1929) observed, "The whole system of secondary education is still dominated by the ideal that every boy who enters a secondary school should prepare himself for the University examination. This indicates a great waste of effort. Such attempts as have been made to provide vocational and industrial training have little contact with the educational system and are, therefore, largely infructuous."
The committee suggested that the retention in the middle vernacular school of more of the boys intended for rural pursuits, accompanied by the introduction of a more diversified curriculum in those schools; and diversion of more boys to industries and commercial careers at the end of the middle stages, for which provision should be made by alternative courses in that stage, preparatory to special instruction in technical and industrial schools.

4. The Sapru Committee (1934)

The main objective of the Sapru Committee (1934) was to find out ways and means of solving unemployment problem. The Committee recommended 11 years of school education with Vocational studies commencing after 11 years of Education.

5. Abbot-Wood Report (1937)

Abbot and Wood (1937) submitted a report on the organisation of Vocational Education in India. On account of lack of time and with a view to having an intensive study of a limited area, the two experts visited only three provinces, viz., Delhi, Punjab and the United Province. They submitted their report on the 10th June, 1937.
The report suggested a complete hierarchy of vocational institutions parallel with the hierarchy of institutions imparting general education. One important result of their recommendation was that a new type of technical institution called the 'Polytechnic' came into existence. Technical, Commercial or agricultural high schools also started conducting non-literary courses.


In 1944 the Sargent Report of the Central Advisory Board of Education on Post-war Educational Development in India recommended that there should be two main types of schools - The Academic and the Technical. It also recommended for making adequate provision for the efficient training of all these types of workers. Over and above this, the Report pointed out that there was an urgent need in India of what is called the part-time system. Part-time day classes constitute a factor of great importance in any modern scheme for technical Education. The students of these classes will be working in factories and other industrial or commercial concerns as paid workers and they will be given due facilities for improving the knowledge and skill required for their daily work.

One of the major objectives of the educational reforms in India after independence was based on Vocational Education.
Therefore the importance of the committees and commissions should be stressed.

7. The University Education Commission (1948-49)

In 1948-49 the University Education Commission emphasised the need of establishing rural universities for teaching agriculture and allied subjects. The Commission also recommended for making medical education, teachers' training and education in law more progressive.

8. The Secondary Education Commission (1952-53)

The Secondary Education (1952-53) recommended the incorporation of Vocational courses in the secondary curriculum. It recommended that multipurpose schools should be started to provide varied courses of interest to students with diverse aims, aptitude and abilities. Technical schools in industrial areas and agricultural schools in rural areas should be set up. It suggested the introduction of diversified courses of instruction for the pupils. In the opinion of the commission the diversified courses should begin in the second year of the high school or higher secondary school stage. The Commission's recommendations do open up a new era of reconstruction and reform of education has also been made at the secondary stage.

A Committee under the Chairmanship of the late Sampurnanand was appointed to study the problem of emotional and National Integration and to suggest positive educational measures. The Committee submitted its report in 1962. One of its recommendations was directly relevant to the present study. "That education be designed to suit the aptitudes and abilities of people and also meet the socio-economic needs of the country and that the pattern of education be related to the employment potential of the country and the educational and Vocational guidance services of the secondary stage be intensified."

10. The Indian Education Commission (1964-66)

The Indian Education Commission (1964-66) recommended (1) a broadly uniform pattern of education, (2) extension in the total period of schooling to bring about a general rise in the standards of attainment and (3) Vocationalisation of Education. Polytechnics are to be located only in industrial areas. Those in rural areas should give priority to agriculture and agro-industries, alongside polytechnics, clerical, scientific and industrial trades and in areas of special interest to girls.
11. National Policy Education (1968) on Vocationalisation of Education

Under the head 'Secondary Education' the Policy States, "There is need to increase facilities for Technical and Vocational Education at this stage. Provision of facilities for Secondary and Vocational Education should conform broadly to requirements of the developing economy and real employment opportunities. Such linkage is necessary to make Technical and Vocational Education at the secondary stage effectively terminal. Facilities for Technical and Vocational Education should be suitably diversified to cover a large number of fields such as agriculture, industry, trade and commerce, medicine and public health, home management, arts and crafts, secretariat training etc."

12. International Commission on Education and Development (1972)

The greatest event of the nineteen seventies was the release of the report of International Commission on education and Development (1972) under the auspices of UNESCO. The Commission critically assessed the educational situation in 1972 that is, "looking at the world as a whole, to try to discern common features, many of which can only be accounted for in terms of the past,
like the new trends which seems to be emerging in most countries and systems...."

According to the Commission rigid distinction between different types of teaching - general, scientific, technical and professional - must be dropped and education at primary and secondary levels must become theoretical, technological, practical and mental at the same time. Professional and technical training centres must be developed in conjunction with the Secondary Education system. The instruction they give must be followed by practical training at places of work, all of which must above all, be completed by recurrent education and vocational courses.


The Committee under the Chairmanship of Shukla and Singhal (1972) recommended Vocationalisation of Education at the higher secondary stage (Class XI and XII). The curriculum should provide two streams, i.e. (1) Academic stream (2) Vocational stream.

Vocational stream at the higher secondary stage should be taken to supplement the existing facilities for Vocational Education provided by the ITIs, Polytechnics, and Vocational schools.
The Vocational streams should provide specific job-oriented courses in one vocation carefully chosen out of the areas of work relating to agriculture, industry, trade and commerce, public services, e.g. Secretarial, para-medical, insurance, banking, marketing, education, etc.

The course content should include training and practical work to enable the student to get a job or establish himself as a self-employed person depending upon his choice and circumstances. Courses should be locally oriented. The course content of each vocational subject should include the relevant theoretical knowledge of the allied branches on the academic side.

Vocational guidance is required for effective vocationalisation of higher secondary education, some reorganization and strengthening of the existing educational and vocational guidance service in educational institution should be made.


The Curriculum Committee Report (1976) under the Chairmanship of Ahmed, R., Suggested that:
Vocationalisation of Education require district-wise surveys of economic activities and potentialities and consequent opportunities of work, or some kind of manplanning at the district level and assessment of manpower needs.

Adequate provision will have to be made for the students to further improve their qualifications and competencies in suitable higher vocational institutions, and vertical mobility in general.

The public examination system should be dispensed with and a system of continuous evaluation be adopted. The performance of students should be indicated by grades. The National Council of Vocational Education should determine equivalence among vocational diplomas and certificates issued by various agencies.

The following pattern and division of time were suggested -

A. Language General Studies
   25% time for all streams.

B. Science, Social Science and humanities courses including literature
   75% time for the academic stream. Students may offer courses from (C) also.

C. Science, Social Science and humanities courses designed to understand the basis and scope of various vocations.
   25% time of the vocational stream.

D. Vocational and Practical Works
   50% of the Vocational stream.

Report of the Adiseshiah Review Committee (1977-78)
Vocationalisation of Higher Secondary Schools
The Adiseshiah Review Committee (1977-78) submitted
a report which was entitled as 'Learning to Do' — towards a learning and working society. The major recommendations of the Committee are as follows:

i. Work-based learning:- Learning must be based on work either through what Iswarbhai Patel Committee calls Socially Useful Productive Work or through Vocationalised Courses.

ii. Vocationalised Course:- Vocational Courses should be in agricultural and related rural occupational areas and in managerial, commercial, health and paramedical vocations and not through opening vocational courses at this level in the manufacturing, industrial and engineering occupations. These should be flexible streaming courses.

The higher secondary stage should consist of both general educational spectrum and vocationalised spectrum. The Committee recommended for the setting up of National Council of Vocational Education and all agencies such as the Indian Council of Agricultural Research, All India Council for Technical education, the Nursing Council, the Dental Council, etc. should be members of this apex body.


A Working Group on Vocationalisation was appointed under the Chairmanship of Sahanayagam (1978) made the
following recommendation.

i. Vocational surveys should be conducted to identify the vocations having good employment potential, to locate good schools where the new vocational courses can be introduced and to assess the local assistance for on-the-job training. Vocational surveys should be conducted, in a phased manner before introducing vocationalised courses and only those courses which have good employment potential should be started.

ii. During the next 5 years, vocational facilities should be provided in a minimum of 2000 schools/colleges in a phased manner of which 50 should be new ones.

iii. There should be new vocationalised schools in rural areas.

iv. Adequate incentives in the form of scholarship should be offered to the students of Vocational streams at the secondary stage.

v. In all vocational schools/colleges, where vocationalisation are implemented, either the Head of the School or College or the Deputy Head should possess vocational qualifications in at least one major vocation, to look after proper implementation.

vi. Preparation of curricula centrally should be done away with. Curriculum Committee consisting of Professional experts, future employers and academics should be set up for each region. They should be
entrusted to frame the curricula. The accent should be more on preparing students for self-employment than wage employment.

vii. The programme of vocationalisation in rural areas should be linked with various programmes of rural development. In urban sectors, more stress should be laid on the courses in the areas of commerce and trade, textiles, para-medical electrical and other technical subjects.

viii. Socially Useful Productive Work should be integrated with general education in the academic stream to equip all the students with certain elementary skills.

ix. Creative Work Centres/Hobby Centres should be established to encourage creative faculties of the youngsters and to promote productive impulses.

x. Steps should be given to provide vocational guidance and counselling facilities for careers and courses to all the students.

xii. Since Vocationalisation of Education falls into the purview of 12 years school education, it is necessary that it remains under the administrative control of a Senior Officer, at least of the rank of a Bureau Head, whose staff should be adequately strengthened to enable the Bureau Head to discharge his responsibilities effectively and expeditiously.

The NCERT prepared this document to act as guide to the existing institutional structure for the curriculum research, development and dissemination. It explains the significance of Work-experience, Socially Useful Productive Work and Vocationalisation of Education.

It stressed on the great need of a comprehensive set up for the management of Work-Experience, Socially Useful Productive Work and Vocationalisation of Education programmes within and outside the system of formal education.

Introduction of Pre-Vocational courses based on local trades and occupations under Work-experience and Socially Useful Productive Work at the upper Primary level and Secondary stages may prove to e a source of motivation in the rural and tribal areas. Introduction of these courses in schools may improve th theoretical and technical foundations of these productive activities and services through the mobilisation of professional inputs in these programmes.


The Government of India took serious note of the tardy implementation of the policy of vocationalisation,
the importance of which had been emphasized time and again by various committees. With a view to accelerating the progress of Vocationalisation and revitalising it so that it can meet the massive challenge of unemployment on the one hand and reduce the overcrowding in higher education on the other, the Government of India appointed a Working Group headed by Kulandaiswamy (1985).

The Working Group was called upon to formulate the concept of Vocationalisation at different levels, recommend the nature of courses and linkages among different agencies, and prepare an action for the promotion of Vocationalisation in the country.

The group submitted its recommendations on all the points and urged the Union Government to come forward in a big way to support the programme of vocationalisation in the country. Besides being responsible for policy making, coordination and standardisation, development of curriculum guidelines and review and evaluation of the programme, it should provide full financial assistance for the achievement of the stipulated targets.


The National Policy of Education (1986) dealt with Vocationalisation in its fifth Chapter which contains
The introduction of systematic, well-planned and rigorously implemented programmes of Vocational Education is crucial in the proposed educational reorganisation. These elements are meant to enhance individual employability, to reduce the mis-match between the demand and supply of skilled manpower, and to provide an alternative for those pursuing high education without particular interest or purpose.

Vocational Education will be a distinct stream intended to prepare students for identified occupations spanning several areas of activity. These courses will ordinarily be provided after the secondary stage, but keeping the scheme flexible, they may also be made available after Class VIII. In the interest of integrating Vocational Education better with their facilities the Industrial Training Institutes will also conform to the larger vocational pattern.

Health planning and health service management should optimally interlock with the education and training of appropriate categories of health education at the primary and middle levels will ensure the commitment of the individual to family and community health, and lead to health-
related vocational courses at the +2 stage of higher secondary Education. Efforts will be made to devise similar vocational courses based on Agriculture, Marketing, Social Services, etc. An emphasis in Vocational Education will also be on development of attitudes, knowledge, and skills for entrepreneurship and self-employment.

The establishment of vocational courses or institutions will be the responsibility of the Government as well as employers in the public and private sectors; the Government will, however, take special steps to cater to the needs of women, rural and tribal students and the deprived sections of society. Appropriate programmes will also be started for the handicapped.

Graduates of Vocational courses will be given opportunities, under predetermined conditions, for professional growth, career improvement and lateral entry into courses of general, technical and professional education through appropriate bridge courses.

Non-formal, flexible and need-based vocational programmes will also be made available to neoliterates, youth who have completed primary education, school dropouts, persons engaged in work and unemployed or partially employed persons. Special attention in this regard will be given
to women.

Tertiary level courses will be organised for the young who graduate from the higher secondary courses to the academic stream and may also require vocational courses.

It is proposed that vocational courses cover 10 per cent of higher secondary students by 1990 and 25 per cent by 1995. Steps will be taken to see that a substantial majority of the products of vocational courses are employed or become self-employed. Review of the courses offered would be regularly undertaken. Government will also review its recruitment policy to encourage diversification at the secondary level.

20. Programme of Action On Vocationalisation of Education 1986

The programme of Action on Vocationalisation of Education 1986 is given in brief.

In 1976 the National Council of Education Research and Training (NCERT) Document "Higher Secondary Education and its Vocationalisation" was presented to the country setting out a model conceptual framework for implementation. The programme for Vocationalisation of higher secondary education was initiated in 1976. Since then it has
been implemented in 10 states and 5 Union Territories. A number of other States are likely to introduce Vocationalisation in the academic year 1986-87. The current intake in the vocational stream is the order of 72,000. Only about 2.5 per cent of students population entering higher secondary stage is covered by vocationalisation so far.

Being aware of the importance and need for diversification of secondary education - its vocationalisation, the Ministry of Human Resource Development, Govt. of India and NCERT have initiated many actions and made many proposals. Evaluation studies of vocational programmes in most of the States were conducted to provide the findings to the States for improving implementation.

In spite of all these efforts, the scheme of Vocationalisation of Education has not yet picked up. There have been many factors responsible for the slow progress, such as, absence of a well coordinated managements system, unemployability of vocational pass outs, mis-match between demand and supply, reluctance in accepting the concept by the society, absence of proper provision for professional growth and career advancement for the vocational pass outs, etc. Renewed effort are being made in the States to accelerate progress. Urgent steps to strengthen the
Vocational Education System are therefore imperative.

While the factors contributing to the rather unsatisfactory progress on the vocationalisation front may be many, the single most important aspect is the inadequate organisational structure to the task and its consequent inability to implement the accepted policies.

At present the management systems for various sectors of Vocational Education work in isolation and with hardly any coordination either at the National, Regional or State level.

At the National level, the post-secondary Vocational Education (Vocationalisation) and Vocational Education for the out-of-school population are looked after by many organisations under different ministries without having proper coordination and linkages. At the State level the system is still fragmented and inadequate. A few states have a full time Director etc. the others have a middle level official looking after the vocationalisation programme in addition to his other responsibilities. No mechanism is available to coordinate the vocational programme at district levels and to undertake activities like, district level need surveys for identification of manpower requirements, for developing need
based vocational courses etc.

Keeping in view the variety of functions performed in planning and implementing programmes of Vocational Education and the scale of operations commensurate with the desired change at post-primary, post-secondary and post-higher secondary stages it is necessary to organize an effective management systems.

Socially Useful Productive Work (SUPW), Work Experience should form an integral part of the curriculum in many states at the primary, middle, and especially at the secondary stages. These activities at secondary stage are expected to enable students to opt for vocational programmes at the +2 level with better appreciation and understanding.

2.2 STUDIES PERTAINING TO WORK-EXPERIENCE (WE)

1. Nagaraju (1971) studied the attitude of teachers working in secondary schools of Bangalore city towards WE programme. The Likert attitude scale was used in the data collection. Seventy-five high schools were selected giving due representation to Government, Corporation and Aided Schools. Six hypotheses were formulated and tested. A chi-square technique was used to find out the significant difference between the observed and the expected
frequencies of responses.

The findings of the study were:

i. With regards to the three aspects of attitudes, namely belief (cognitive) feeling (affective) and behavioural (conative), there was marked difference in response towards the three aspects.

ii. There was agreement to both positive and negative statements reflecting the same type of confusion.

iii. Teachers in general were found to have positive beliefs but are having unfavourable responses towards the Statements concerning actual practice.

iv. There is a discrepancy between favourable verbal response and actual practice.

v. There is a gap between belief, action, and behaviour as a serious handicap to the successful implementation of the WE programme.

2. Sharadama (1972) has made a survey of the problems of introduction of WE. The objective of the study was to find out the extent of awareness among the teachers and Headmasters about the WE programme. A rating scale and a questionnaire form was used as a tool for data collection. A sample of thirty schools were selected and stratified into Government, Corporation and Aided.
The tools were administered to the teachers and headmasters in the sample and data was collected. Chi-square was used to test the hypotheses and their level of significance, percentages were also worked out to support the findings of the Chi-square values.

The major conclusions of the study were:

i. Most of the Headmasters had not taken any initiative in introducing this programme.

ii. There is no proper equipment.

iii. The teachers did not volunteer to help the sponsor teacher; and

iv. They have not conducted any survey of the We activities implemented in the community.

3. An interesting study was undertaken by Dharmadhikari (1973) in Jalgoan District on 'A Critical Education of Teachers' Handbooks for WE. This study was confined to the analysis of three handbooks, namely, Repairs and Care of Electrical Appliances, Repairs and Care of Electrical Appliances, Repairs and Care of Stores and Bookbinding.

   The result of the study showed that (1) the handbooks, in general, contained sufficient information and appropriate work charts for achieving the relevant educational
objectives. (ii) The figures given in the book needed to be revised. (iii) British weights and measures used in the handbooks had not been replaced by the metric measures. (iv) The Original English technical terms existed in the handbooks. (v) In some schools, the time schedule did not permit demonstration and practical work specified in the handbooks.

4. Kulkarni, (1975), investigated into the attitudes of pupils, parents and teachers towards WE. The objectives of the investigation were (i) to measure the attitudes of pupils, teachers and parents towards WE (ii) to compare the attitude towards WE among boys and girls, and among rural and urban pupils, (iii) to find out pupils' preferences for different crafts included under WE and (iv) to assess how far the objectives of WE were realised in schools.

The study included the analysis of WE Programme prescribed for standards I to VII. However, pupils of Standard IV to VII only were considered for studying the attitude. An attitude scale was prepared following the Likert method of summated ratings. The scale consisted of ten positive and ten negative items. Means and Standard Deviations were calculated for different categories of respondents, critical ratios were computed in order to
compare the scores of urban and pupils and of boys and girls.

The major findings and conclusions of the study were:

i. About 90 per cent of the pupils had a favourable attitude towards WE.

ii. About 96 per cent teachers and 88 per cent parents had a favourable attitude towards WE.

iii. The majority of the respondents expressed that WE was effective in inculcating in the pupils the love of labour, curiosity, scientific attitude and such other characteristics.

iv. Among the different crafts introduced both boys and girls gave first preference to drawing, boys gave second place to gardening while girls chose sewing; neither boys nor girls liked spinning as a craft.

v. There was need to develop a handbook for teachers of WE and to provide them suitable training.

vi. In Standards IV and V only the rudiments of WE should be introduced and it would be treated as a fullfledged and compulsory subject in Standards VI and VII.

vii. Availability of raw materials should be a basic criterion for selecting particular crafts under WE.

5. The State Institute of Education (1977) investigated
on 'Working Holidays in Rajasthan,' on fifty pupils of Classes VIII, IX and X. One of the findings showed that the pupils profited through systematically planned Work Experience activities and remedial teaching.

6. A critical study, conducted by Tharyani (1978), on the 'Effectiveness of the Revised Curriculum for Classes VIII, IX and X in Maharashtra State,' found that, the programmes of WE and Social Philosophical, Psychological and Educational service included in the new curriculum were not properly integrated with the programme of general education.

7. An investigation conducted by Sali (1978) on 'We in the secondary schools and the Teaching of Optional Subjects pertaining thereof' in Maharashtra, revealed that,

i. Most schools included two WE subjects; a few schools offered more than two subjects.

ii. There were eleven schools without any provision of WE;

iii. Only 1,405 (57.58 per cent) schools offered agricultural subjects under WE; of the 1,405 schools offering these subjects 1,395 schools were in rural areas and 310 in urban areas.

iv. Four hundred and fifty-four schools most of which were in urban areas, had facilities for technical subjects.
v. The number of periods allocated for the teaching of the subjects was adequate.

vi. The training provided to most of these teachers (70 per cent) was through in-service workshops.

8. 'A Study of the Problems Bearing on Teachers Education in the context of the 10+2 pattern' was conducted by Goyal and Chopra (1979). One of the objectives was to find out the problems faced by the various agencies in the preparation of teachers for the new pattern.

The finding revealed that since the syllabus of various subjects in the new pattern of school education had been enriched and a number of new activities had been added, there was an urgent need for in-service training of existing teachers working in the schools under the new pattern. Such areas were environmental studies, arts, music and other aesthetic activities, development of moral values, WE, SUPW etc. Some teacher Education institute in the State were not offering WE activities and SUPW.

9. One of the findings of Somaiah (1980) in the study on 'Effective cost of Education in Karnataka' revealed that the higher percentage of wastage between Classes V and VII indicated that the curriculum should include WE and SUPW.
10. Lahi (1981), in a critical study of the WE Programme in Secondary Schools of Kerala made the following objectives: (i) to study the functioning of the WE Programme and the difficulties experienced in its working, (ii) to study the advantages the pupils get from the programme and their difficulties in participating in it, (iii) to find out pupils' attitude towards WE Programme and their interest in it, (iv) to find out parents' attitude towards WE programme, and (v) to find out the improvement needed for the proper function of the WE.

Questionnaires, attitude scales and an interest inventory were prepared and used to collect data. Interviews and observations were also used to supplement the data.

The major findings of the investigation were: (i) Most of the schools made the WE programme compulsory during 1975-79, but participation in the programme by pupils of Standard IX was not compulsory. The School subjects were given more importance than the WE Programme. (ii) Heads of Schools faced difficulties in organizing the WE Programme for want of accommodation, funds, trained teachers and text books. (iii) Cleaning and maintenance of the school building, beautification of classroom and gardening were found the most common activities
in all schools. (iv) The aversion towards work was reduced considerably. They acquired basic practical knowledge in various kinds of work. (v) Pupils had keen interest and positive attitude towards WE programme even though they were not found aware of the importance of work. The schools had no programme of evaluating pupils' attitude towards WE (vi) Parents also had very favourable attitude towards WE, and (vii) The WE Programme was considered as important as other subjects in the school curriculum.

11. Srivastava and Srivastava (1983) conducted a study of Attitude towards WE. The objectives of the study were (i) to study the attitude of students towards WE, (ii) to measure and compare the attitude of students towards WE belonging to different socio-economic status. A sample of 100 students has been selected randomly from Class VII, VIII and IX who have experience of studying one or more years in WE programme in Kendriya Vidyalaya. A Likert attitude scale was developed by the authors to measure the attitude towards WE.

The conclusions of the present study showed that,

i. percentage of students having favourable attitude towards WE (25%) is more as compared to percentage of students having unfavourable attitude (25%).
ii. There is no difference in the attitudes of students towards WE belonging to different socio-economic status group. The WE programme is equally liked and disliked by students irrespective of their socio-economic status.

2.3 STUDIES PERTAINING TO SOCIALLY USEFUL PRODUCTIVE WORK (SUPW)

1. Bajpai and Seshagiri Rao (1980) conducted a study on the potential for SUPW Teaching in our schools. Their inference from the study was summed up as follows:

   i. There is ample scope for utilizing the talents existing in the on-the-job school community for SUPW Programme.

   ii. These teachers may need some kind of refresher training in the area of their interest followed by some financial incentive by the school for their extra attention and overtime work, in order to get the best out of them toward effective implementation of SUPW Programme.

   iii. The help of some experts from the community may become necessary only if the school decides to impart some specialised technical skills to the students through SUPW Programme. Otherwise the existing team may very well be relied upon.

2. Savur (1980) gave a report on Socially Useful Productive Work in Gandhi Shikshan Bhavan. The report
shows that the main objectives of SUPW were:

i. to acquaint the student-teachers with the world of work and services to the community and develop in them a sense of respect for manual workers;

ii. to help them understand the principle, processes and skills involved in various forms of work;

iii. to help them understand their role in developing SUPW activities in schools as a means and medium of learning to the extent it is possible;

iv. to develop psycho-motor skills and abilities leading to desirable personal and social qualities and positive attitudes to the world of work; and

v. to provide opportunities for creative self-expression.

After evaluating, the faculty found that out of 83 students, 21 students had shown their interest in learning three to four skills and had produced excellent articles. Fifty-five students were a little slower in picking up skills.

3. A report of students' participation in Socially Useful Productive Work by Savur (1982) indicated that the main objective for introducing SUPW are:
i. to realise that there should be no dichotomy between the world of classroom learning and the world of work and service to the community;

ii. to develop initiative and dignity of labour;

iii. to get opportunities for creative self-expression;

iv. to develop a few psycho-motor skills and abilities; leading to desirable personal and social qualities;

v. to realise their role in developing SUPW activities in schools.

The conclusions of the findings indicate that,

i. the students not only enjoyed the activity, but also learnt some psycho-motor skills;

ii. they understood how learning becomes enjoyable when it is correlated with certain activities. They experienced it during their practice-teaching lessons in schools;

iii. the skills learnt during SUPW were used throughout the year for preparing projects, folders, posters, whenever required. The entire faculty of the college enthusiastically participated in their activity in giving training in different areas of work.

2.4 STUDIES PERTAINING TO VOCATIONAL GUIDANCE (VG)

1. Vasudevan and Feroze (1974) conducted a study on the awareness of vocational opportunities of students
in the S.S.L.C. class and found that:

i. Students are unable to understand certain jobs;

ii. the ignorance of vocational opportunities available and minimum qualification required to enter them is really a deplorable fact; and

iii. it is highly necessary to start courses in the secondary schools. Whenever possible, career talks may be arranged by VG Officer. Besides, each school can have one of the teachers trained as career master.

2. A study conducted by Kumar (1975) on vocational aspiration and need of VG found that:

i. Mostly highly qualified persons want to adopt academic professions rather than administrative or social occupations;

ii. Social Workers (10.90) and journalists (5.77), showed that they were 16.67% from the total sample of 156 students of Arts, Science courses at the post-graduate level. It shows that a lesser number of highly qualified persons want to be social workers;

iii. Only 15.38% from the total sample aspired for competitive jobs; and

iv. 12.82% from the total sample wants to lead independent jobs like business and law.
With regards to VG, there is a great need to introduce it even at a post-graduate level by which time one (20-21 years), almost attains psycho-physiological maturity. The need at a pre-university stage is accordingly much greater as, at that stage, the boy is far less mature and is unable to appreciate relationship between his inner urges and outer demands.

The study highlighted the fact that almost three fourth of the highly qualified students who would be ushered in the main stream of the country's socio-economic life would be there who had felt the need of VG even at the post-graduate levels. What the country would get from them would, therefore, be confused aims and a cluster of ambitions where independence of judgement and adventurism finds a place in the back-yard.

But it also strengthens the view that psychological advice at various stages of life of such persons would be welcome opportunity. It underlines the need of such a study among the selected population of white collared labourers, academicians and others who are not engaged in creative or productive work. Such population consists of guilt-ridden persons who get more (proportionately) for less work. A study of these can be made use of for discovering how this population would endeavour to free
itself of its guilt and crisis of conscience and address itself to more creative manual work through what Maslow said "peak experience."

If these services like vocational evidence and counselling start their role from the very beginning (High School/Higher Secondary level) students can be saved. It can save the parents, guardians and society from the great burden. The society can ill-afford such a wastage and should be able to spend more money to help its member to find a better use for their talents and non-talents.

2.4 STUDIES PERTAINING TO VOCATIONAL EDUCATION (VE) AND VOCATIONALISATION OF EDUCATION

1. Dewasthalee (1978) in an investigation into the present secondary Education curricula (Standard V to X) in the Maharashtra State with a view to revision in the context of Vocationalisation of Education at all levels found and recommended as follows:

   i. The academic atmosphere was in favour of Vocationalisation;

   ii. VE should begin from Standard V;

   iii. some Vocational courses should be introduced for the dropouts;
iv. Vocational courses should not be treated as extra;
v. a pupil must be given a certificate for successfully completing a Vocational courses;
vi. in Vocational courses emphasis should be on practical aspects;

vii. a comprehensive programme of Vocational Guidance is necessary;

viii. a common vocational school should be set up to meet the needs of various neighbouring schools.

2. Chikermane (1979), in a study on 'Elementary Non-formal Education for out of school children', experimental to develop a scheme for elementary non-formal education for out-of-school children after an analysis of content and its organisation for achieving a certain level of academic standard in elementary Non-Formal Education Centres (ENFEC). The findings indicate four major educational needs. And a curriculum for six subjects was drawn up. Details of content and activities were listed.

The findings of the experiment were:

i. Universalisation could be achieved through part-time education for out-of-school children.

ii. The part-time education should be of three categories, one catering to the majority who dropped out before Class IV, the second being
general education for those who left after Class IV but would be going in for secondary education and the third being Vocational Education for those who left after Class IV, desiring to take up a vocation.

iii. Though it was not feasible to have separate classes for the small number who had studied till Class IV, they required some compulsory education and element of Vocational Education, particularly, agriculture and gardening.

iv. All education should be imparted through activities and their work on farms be related to the instructional programme.

3. In an evaluation study conducted by Desai and Patel (1981) in the Ashram schools of Gujarat found that, the daily programme of work was more or less strictly observed in all schools. Among vocational subjects taught, farming was the most prominent one.

4. Thimmaiah, et.al (1981) conducted a study on Vocational Education, problems and prospect. The main objectives of the study were:

i. To evaluate the overall demand for vocational skills in Karnataka State in relation to the vocational courses offered.
ii. To review the programme of Vocational Education in the state with respect to enrolment trends, selection, procedures, resource position, etc.

iii. To focus the problem of VE and highlight its prospects; and

iv. to make policy recommendations on the future programme of vocationalisation.

All the 45 colleges offering vocational courses in Karnataka were considered for the study. Data from all the Principals were collected through a schedule and interviews were held for intensive information. Such information was also collected from some principals through a questionnaire. The teachers teaching the vocational courses and the students - (18 girls and 118 boys from among the present students, and 20 girls and 20 boys from among those who had passed out of the vocational institutions) of these 13 colleges were also interviewed.

The major conclusions of the study were:

i. The courses offered for VE were not consistent with the skills identified in shortage category, and the shortage categories did not find a place in the list of courses identified.
ii. The proportion of the girls taking up vocational courses increased considerably from the base year 1977-78 through the succeeding years 1978-79 and 1979-80. The proportion of Schedule caste students in the enrolment also increased. The participation of the scheduled caste girls are slightly higher over the years than the scheduled caste boys.

iii. In general there was a rush for vocational courses over the years. Engineering courses were more sought after in Urban areas and business courses in non-urban areas.

iv. The colleges gave greater weightage to the parents traditional occupation while giving admission to students to various vocational courses.

v. The preception of local needs for the vocationally trained skilled personnel (by the Principal and Staff) and the relative demand by a student for a certain type of vocational course emerged as the two major criteria followed by the colleges when they offered a particular course to a student.

vi. Wastage in VE was very low as compared to wastage in the general P.U.C. course.

vii. The equipment position of the colleges offering vocational courses was quite sound.

viii. The colleges depended heavily or part-time teachers to run their vocational courses.
ix. Quite a few colleges found it difficult to get teachers for vocational courses.

5. Soundravalli (1984) in a critical study of the functioning of the VE Stream in Higher Secondary Schools in Tamil Nadu, found that the attitudes to manual and technical employment are not by any means unfavourable. Of course vocational programmes do not seem to have had any appreciable effect on the motivations or orientations in the world of work of the students taken for the study.

It was suggested that periodical public opinion survey may be undertaken in each district to find out the changing needs of the society.

The plus three stage undertaken by the universities, should include job oriented or job motivated courses. At this juncture, the universities would do well by being aware of the needs and demands of the community as well as the projected industrial trends of the locality.

Some advanced and specialised vocational courses, building on the vocational courses offered at the plus 2 stage could be included at the plus 3 stage. Some of the post higher secondary vocational courses may be offered either in the polytechnic or in the technical
institutes.

A cell for occupational research and curriculum development may be set up at the state level for collecting data on occupational needs and occupational pattern of the workforce for the whole state. Since manpower and development needs differ according to different areas within the state, planning at the district level is an important aspect of planning for VE.

There should be a VG bureau in each school complex which should keep the students know the importance of studying vocational subjects. The employment opportunities, the possibilities of self-employment and the courses, which they can seek after the completion of their higher secondary education.

The selection of students to this group should be based on an aptitude test, unless the students choose the vocational courses with proper aptitude, they would not enjoy the course and they will never become skilled technicians. They will be like square pegs in the round holes. The development of the country depends on skilled technicians in all kinds of technologies. In the higher secondary stage itself proper training should be given to the students to get skilled and interested technicians.
So when a student chooses a vocational course he should be offered the course which suits his interest. Hence aptitude tests should be conducted to students, before admitting them into the vocational course.

Schools should take more interest to find out the local needs as well as the needs of the students before introducing vocational course in their schools. New courses can be introduced based on the opinion of parents and the standard of students.

There should be wide publicity and proper motivation among the public so that they can realise the importance of Vocational Education.

The industrialists and factory owners should be made aware of the fact that the skills acquired by the vocational group students are in no way inferior to that of an apprentice, learning a trade in the factories. More job opportunities should be given to those vocational course students by the industrialists and factory owners.

From the investigation, it is revealed that the functioning of VE stream in higher secondary schools is satisfactory to a great extent.

6. A project evaluation of arts and crafts, under
the chairmanship of Bareh (1989), was conducted at a few places around Shillong and Jowai in Meghalaya under the aegis of the Centre for Creative Arts, NEHU, Shillong.

The project was undertaken to make an assessment of traditional arts and crafts in the framework of art criticism and vocationalisation. The project covered the traditional enterprises in blacksmithy, handloom-weaving and pottery.

It was found that blacksmithy still existed on a large scale at Sohryngkham, Mongkynrih, Kmai-Shnong, Tuber and Mylliem besides other minor villages. The blacksmiths produce iron tools and implements required for mining, masonry, construction work, agriculture and other purposes. Several iron grades are used for forging and modelling the tools, implements and instruments. While blacksmithy confines itself mostly to production of implements of daily use, the processes of operation in gold smithy involve delicate and intricate workmanship for making ornament and jewelleries. The gold and silver smiths exhibit considerable skills in moulding and giving shape to precise designs and symbols which are highly aesthetic. Goldsmitheries are still noticed in towns and a few villages.
Activities in traditional handloom weaving operated through a throne shuttle have dwindled to a large extent. Traditional weaving which involves the rearing of the silk cocoons and the cultivation of cotton especially in the hot damp places, has become more and more limited. The processes of genning, spinning, extraction of thread and dyeing of skins have been on the wane. Consequently, weaving and dyeing are decreasingly practised in only a few villages. The flying shuttle introduced in a few government weaving extension centres and units, on the other hand, has assumed considerable importance in the case of the weavers engaged in the production of a few models of aprons, bed clothes, bed quilt covers, towels and curtains etc. Items of festive dresses with colourful designs mostly of silk, errandi and cotton have become fewer. Most of the colourful, precious costumes including jainsem, Dhara, Muka and turbans are now brought from the mills outside the state.

As regards pottery, it was found that the local potters were busy producing several models of jars, basins, dishes, kettles bowls and other items. Some of the earthen pot and bowls have had considerable demand both inside and outside the state. But it was a matter of regret that pottery, which existed for hundreds of
years at Larnai and Tyrshiang met its abrupt end because recently the potters have been prohibited from using the black loamy soil they were accustomed to use for ages by the processes of twisting, modelling and surfacing. The potters are thus deprived of the means to continue the trade. Pottery, thus has been destined to extinction.

The bamboo and cane works are still widely practiced because of the fact that bamboo baskets, trays, canes, cages, sun and rain caps and mats are even now considered essential for commercial purposes and domestic uses. Besides most of the bamboo baskets have considerable demand to be used as market storages and containers of agricultural crops, grains, meat and fishes.

2.6 STUDIES PERTAINING TO VOCATIONAL ENVIRONMENT

1. Rai (1971) while studying the Vocational Preferences of students of Class X in the state of Haryana, found that high school students of Haryana had given their first preferences for nine different professions, viz. Medicine, Teaching, Law, Military, Engineering, Business, Management, Politics, Agriculture and Science.

2. Urmila (1976) indicated that mostly urban students
preferred Engineering, Medicine, Law and Military services, whereas majority of rural students preferred agriculture and teaching.

3. Sahoo’s study (1977) on vocational preferences of secondary school pupils say that the nature of vocation is related to the status of students and the difference in vocational preferences have been masked accordingly. The students showed first preference for agriculture because 80 per cent of the rural inhabitants depended upon their vocation. All the groups of students showed preference to this vocation, with low income group students showing more preference than other two income groups. Mechanical jobs, stenography, fine arts, book-binding, carpentry, and masonry are not considered as good vocations in the state. These vocations, except mechanical jobs, did not draw more attention to students in general, but in comparison to higher and middle class students, lower class students showed more preferences. Vocations like Electronics, Electricals, Home Science, Fishery, Nursing and Music were preferred by all the groups of students and no differences were marked among the three income group.
4. In one of the findings in a study of Relationships between Values and Vocational Preferences of Adolescent by Yadav (1980) indicates that the students have shown the highest preferences for executive work and least for music. The same thing has been observed in the case of the Arts and Commerce students. The science students have shown the highest preference for jobs related to the area of physical sciences. Agriculture students have given highest preferences for executive work and least preference for music.

5. Raina (1987) conducted a study on vocational preferences of secondary school pupils of Kashmir Valley. The objectives of the study was -

i. to find out the most preferred vocation of Class X students;

ii. to study whether there were any differences in the vocational preferences of economically well-off and backward children;

iii. to find out the differences in the preferences of rural and urban boys.

A sample of 400 students of Class X of the 12 selected schools, i.e. 200 urban and 200 rural, were taken for the study. A questionnaire listing 100 items on 25 vocation was developed by the investigator. The
findings of the study revealed that (1) there was no significant difference between rural and urban boys of Kashmir valley in their choice of 25 vocations. In other words, vocational choices were almost similar in both the cases; (2) the higher income group students preferred mostly the vocations of Engineering, Medicine, Tourism, Hotel Management, Police, Business, Announcing and Composing, while the boys belonging to the low income group preferred teaching, agriculture, typewriting, forestry, arts and crafts, dairy farming, packing and embroidery. On the other hand the middle income group boys preferred the professions of fisery, police service, medicine, typewriting, tourism, hotel management, announcing and composing and radio, T.V. mechanic; (3) the vocational choices of Class X students in rank order showed that professions like, Engineering and Medicine with the means of 6.04 and 5.58 respectively, were more preferred. The least preferred were professions of Library Science, Dairy Farming and Spinning and Weaving.

6. Bose, et al (1970) investigated into the Interest Patterns of the students in Science, Humanities and Commerce streams at the higher secondary level and concluded that

i. interest patterns for all groups were not identical and the pair-wise comparison indicated
that there was a wide variation between the groups in this respect;

ii. there was much similarity between the interest patterns of the commerce and humanities groups but the science groups were much different from both commerce and humanities groups as far as interests were concerned. These similarities and dissimilarities in the interest patterns for different groups could provide adequate aid in a guidance situation.

7. A cross-cultural study of Status and Vocational Aspirations among Aboriginal Tribes of Baster by Mishra (1975) indicated that the father's vocational status did not influence the vocational aspirations of the subject, except in the case of upper-caste females and lower class females where the father's vocational status on the aspirations of subjects appeared significant. Significant difference in the vocational status as a correlate of vocational aspirations were found between the tribal and non-tribal, upper caste and tribal, lower caste and tribal and male and female groups. The upper caste and the lower caste did not appear to differ in their distributions of vocational aspirations while the upper caste were found to differ from other community groups in their vocational aspirations.
8. In a study conducted by Solanki (1976) on the problems of Tribal Students Going for Higher Education, found that out of the twenty-eight tribes in Gujarat State, children from only fifteen tribes had gone for higher education. Most of the students joined arts, while very few joined medical, engineering and agriculture. Forty-five per cent of the students came from families with educated parents. The majority of them hailed from joint families. For more than half of the drop-outs at the college level, the annual income of their parents was less than Rs.1200. One-fourth of the students were in such a condition that they had to either earn while learning, or get a scholarship, or borrow money from their relatives and friends in order to complete their education. Many of them faced financial problems.

All the students agreed that they could not have gone for higher education if special facilities were not provided to them by the government and suggested that the practice should continue. They had friends from non-tribal as well as Scheduled caste group and did not find any problem of social adjustment.

9. In an investigation by Sunderarajan (1977) into
the process of Change in the Values, Attitudes and Career Commitment of Students of Hotel Management and Catering Technology as a Result of College Experiences at the Institute of Hotel Management, Catering Technology and Applied Nutrition, aimed to find out whether College Experience had any influence on the values, attitudes and career commitment of students. The study conducted on the entire population of students undergoing the three-year diploma courses in Hotel Management and Catering Technology. The tool used for data-collection was a Likert-type attitude scale.

The main findings of the study were: (i) In the Second year of the three-year diploma course, the attitudes of the students to most of the traits listed tended to be less favourable. (ii) In the final year of the three-year study, the attitudes of the students to most of the traits tended to become more favourable. (iii) The attitudes of boys and girls to most of the traits did not reveal any significant differences except for empathy in which the girls showed a higher degree of favourableness in the second year. (iv) The attitudes of the students were found undergoing change during the three-year study period at the college.

10. Pendharkar (1977) in a study on Occupational Aspiration
of the students up to undergraduate level found:

i. that the occupational aspirations, as compared to occupational expectations, were on the higher side;

ii. approximately 54.5 per cent students aspired for occupations like that of doctor, teacher, lawyer, lecturer and engineer. In general, students aspired mostly for professional/technical occupations;

iii. male students and not the female students were associated more with aspirations for high, non-manual occupations;

iv. the level of occupation aspired for was strongly and positively related to the faculty to which the students belonged;

v. the level of occupational aspiration was substantially associated with the level of the extent of knowledge of occupations and the idea of financial rewards.

11. In a study conducted by Chadha (1979) on some psychological and social factors as related to vocational aspirations of rural and urban high school children, found that;

i. the urban boys aspired for engineering (48 per cent), protective (11 per cent) and health (10 per cent), occupations whereas the rural boys aspired for teaching, welfare (43 per cent)
and engineering (36 per cent) vocations. Other fields were represented by less than 10 per cent each for both rural and urban samples;

ii. vocations related to health were less popular as early 6 to 12 per cent boys and their fathers aspired for them.

12. In some of the conclusions made by Chand (1979) in his study on correlates of vocational maturity found that (i) positive and significant correlation existed between intelligence and vocational maturity of adolescents; (ii) there was a consistent increase in the mean performance of students from lower to higher grades on all the measures of vocational maturity; (iii) sex differences and rural/urban background differences were not significantly related to vocational maturity of the students.

13. Uchat (1979) in a study of the self-concept of preuniversity students enrolled in the Arts, Science and Commerce faculties found that; (i) the students from the arts faculty had the highest self-concept, while those from the science faculty possessed the lowest self-concept and those from the faculty of commerce ranked in the middle; (ii) the students from advanced class had higher perception of themselves as student,
opportunities for making friend and their community acceptance than the students belonging to backward class. However, social classes did not differ in their perceptions of teachers, examination system and social activities; (iii) sex was related to self-concept. The female students possessed higher self-concept than the male students; and (iv) college students had the poorest perception of the examination system.

14. Phadke and Shukla (1980) in a study of dropouts among the scheduled tribe college students in Vijara, Arts and Commerce college found that the percentage of drop-outs in the case of scheduled tribe students was 53.48 in total, 59.23 for the arts and 42.96 for the commerce faculty. In all, 62.42 per cent tribal male students and 60.46 per cent female students left studies. The drop-out rates among the non-tribal students, both male and female in the arts and the commerce faculties were lower than those among the tribal students. In arts faculty, there were more dropouts in Vijaera college than in any other colleges affiliated to South Gujarat University. In the commerce faculty, the drop-out rates was the highest (44.77 per cent) in Vijaera college as compared to the colleges situated in the tribal belt of South Gujarat.
15. Paul (1981), in a study of certain motivational aspects of goal behaviour of students in vocational and academic spectrums of the higher secondary pattern of schooling found that; the vocational spectrum students had significantly higher mean scores in goal aspiration, goal perception, goal locus of control and in scholastic achievement.

16. Kamalesh (1981) in a comparative study of self-concept, adjustment, interests and motivation among the scheduled caste and non-scheduled caste students, found that non-scheduled caste students from the urban area belonging to higher SES had brighter self-concept than the scheduled caste students belonging to lower SES. The level of adjustment among the urban scheduled caste students belonging to lower SES was below normal. The non-scheduled caste students, both in urban and rural areas did not have adjustment problem. The students showed great interest in science, medicine and technology.

17. In some of the findings of Kamat (1981) with regards to the comparison of the self-perception of backward class and non-backward class students and their SES, Vocational and Educational Aspirations, Educational Achievement and School Environment, found that; higher
social prestige was enjoyed by those occupations that required greater amount of training, skill and talent; vocations involving manual work got low social prestige values. The backward class and the non-backward class students differed in their educational aspirations, that of the former being below the graduate level and of the latter above the graduate level. The non-backward class students aspired for vocation which had higher social prestige values, whereas backward class students aspired for vocations which had comparatively low social prestige. Generally, white-collar jobs were chosen more than manual jobs.

18. In a study on problems faced by certain tribal groups in Trivandrum District in relation to provision and use of school facilities, by Joshi (1981), found that very few tribals taken for the study, were literate (27 per cent), the heads of tribal families felt that the teachers did not show favourable attitude towards the education of the tribal students. Educational concession given to the tribals were inadequate. Teachers perceived the tribal students as irregular in attending school. Only few were found to have adequate readiness for learning. They were found advanced in sports, games and arts even though they were backward in scholastics.
Poverty, lack of learning materials, language difficulty, lack of school facilities, in accessibility of schools, ignorance of parents, task-master's influence, child labour and parent's compulsion were among the factors for dropping out of schools and for their non-entrance. And the facilities for students in their homes were inadequate.

19. Phadke and Shukla (1981) studied on the impact of higher education on the tribal students of Vijara college and revealed that, learning, particularly at the higher level, had linkage with jobs. The study revealed that instead of jobs hunting the tribal youths, the tribal youths were hunting for jobs. Due to interaction with the non-tribal students the thought process had started among the tribal students and developed a sense of responsibility and a sense of consciousness of justice and propriety among the tribal students.

Higher education had affected the self interest of tribal students. The selection of subjects, adding more qualification, and appearing at various competitive examinations were some of the instances not only of realising self interest but also of developing self confidence.
20. Sungoh (1987) conducted a survey of Educational and Vocational aspirations of Doordarshan-viewing Pre-University students in Shillong, found with regards to vocational aspirations that; (i) there was a significant difference in the vocational aspirations of the male and female viewers. The male viewers aspiration was higher than the female viewers; (ii) there was no significant difference in the vocational aspirations between the tribal and non-tribal viewers; (iii) there was a significant difference between Arts, Science and Commerce stream. Science having the highest aspiration, followed by Arts and then Commerce stream.

21. Shivarudrappa (1988) states that, vocationalisation has, as its main objective, the change of the educational system from one which was oriented to knowledge for knowledge sake and clerkdom in the administrative field, to a process which specially prepares children for a wide range of avenues in work life. The goal is to orient pupils to a range of work areas in technical, commercial, agricultural, paramedical and other areas and to determine the range in response to local employment needs. The key concept of the higher secondary stage has become a diversification of pupil's choice.

Further, he suggested that the variables such
as; (i) academic motivation (ii) self-esteem; (iii) self-identity; (iv) self-concept; (v) occupational aspiration; (vi) adjustment; and (vii) attitudes, should be kept in mind while selecting the students for vocational courses.

2.7 VOCATIONALISATION OF EDUCATION IN DIFFERENT STATES OF INDIA

A summary of state reports is presented in this section.

1. Andhra Pradesh: Vocationalisation was implemented in the state during the year 1979-80 in 23 junior colleges with 16 courses and 516 students. During 1983-84 the number rose to 107 junior colleges, 21 courses and 3310 students.

2. Assam: Vocationalisation of education has been started in the State during 1983-84 in 5 schools and 10 students in each school, though it was planned to introduce vocational courses in 19 schools initially. Due to rigidity of social structure vocationalisation is not easily acceptable in the society. Industrial development in the state is also very poor. While introducing vocational courses rural population and employment opportunities are taken into consideration.
3. **Chandigarh:** The 10+2+3 patterns of education has been introduced in the Union Territory of Chandigarh during 1983-84 from Class IX. The UT introduced mostly agro-based courses such as diary, poultry, piggery and auto-repairing.

4. **Dadara, Nagar Haveli:** The UT has plans to start 3 vocational courses - one each under agriculture, commerce, and technology. These courses were started in 1984-85.

5. **Delhi:** The vocational courses were started in the UT of Delhi during 1977-78 in 17 schools with engineering, commerce and home science based courses prescribed by the CBSE. In 1979 food preservation course under home science was discontinued. In collaboration with the All India Institute of Medical Sciences a course of Ophthalmic Technician was started during 1980-81. During 1982-83 engineering based courses were discontinued due to closure of technical schools. During 1983-84 136 passed out students from the vocational courses were registered as apprentice under the apprenticeship scheme of Ministry of education, Government of India. In Delhi the program is not getting popularity because of non-availability of vertical mobility and rigid social structure or non-acceptance by the society. At present
the scheme is being run in 15 schools with about 700 students. The main drawback is that the employers are not accepting the product of vocational courses.

6. Gujarat: Vocationalisation of education in the spirit of Kothari Commission was introduced in the state during the year 1982-83 in the area of technology, agriculture, commerce and home science. For providing vertical mobility to technical courses students admission in the 2nd year of polytechnic course is being permitted and commerce students are being admitted in B.Com.

7. Karnataka: Vocationalisation started in 1978 in selected junior colleges. Courses are selected on the basis of district vocational surveys. Courses like Sericulture and some in paramedical area have greater demand. The main difficulty is non-availability of instructional materials and text-books. Teachers appointed under the vocational scheme are on temporary basis, most of them are on a part-time basis. The full-time teachers are posing problems. Twenty meet the demand of trained teachers. It is necessary to organise short term teachers training programmes. The NCERT should take initiative in this direction.
8. Kerala: Vocationalisation of education has been introduced in the state during 1983-84 on a limited scale but not on an experimental basis parallel to the pre-degree education. The medium of instruction is English and the courses are not terminal in nature. Hence no bridge course need to be designed for vertical mobility. All the courses are of two years duration.

9. Maharashtra: Vocationalisation of education started in 1980. The scheme of vocationalisation is said to be bifurcated in nature. The courses have been introduced with the scope for vertical mobility. The course content has one language, 3 academic subjects and in lieu of second language and one optional subject the students are allowed to offer vocational subjects which have two papers each of 100 marks. The main constraints of the scheme are lack of qualified teachers and instructional materials.

10. Pondicherry: Vocational education was introduced in 4 schools with 6 courses during 1978-79. In 1981 five more courses in technology were introduced along with a course in home science exclusively for girls. Theoretical instructions are being conducted in the school. The skill development/practical classes are being organised in collaboration with the nearby industry
such as textile Mills, Workshops, Bakery etc. For each course there is a permission for recruiting two teachers - one regular and the other on part-time basis.

11. Tamil Nadu: Tamil Nadu switched to the 10+2 pattern of education from the academic year 1978-79 in one thousand schools and simultaneously introduced vocational courses in 720 schools, 52 courses in 6 subject areas; agriculture, commerce, home science, technology, paramedical and miscellaneous.

2.8 VOCATIONALISATION OF EDUCATION ABROAD

Vocationalisation of Education in developed countries like, U.S.a., U.K., Japan, Denmark, Phillipines, New Zealand, Australia, Soviet Socialist Republic, Singapore, France, Germany, play an important role in the growth and development. But a reference to these countries have not been made, due to the fact that they cannot be compared with developing countries.

2.9 CONCLUSION

A number of Commissions and Committees, international and national in outlook, have emphasized the need for Vocational Education and Vocationalisation of Education; particularly at the secondary stage. A brief review
of the recommendations of the various reports was given in the first part of the chapter.


Bose, et al (1970), Solanki (1976), Uchat (1979), Phadke and Shukla (1980), conducted studies on the interest,

A brief description of state reports on Vocationalisation of Education is eleven states of India was presented. A brief mention was made regarding developed countries who have implemented vocationalisation of Education.
Our grand business is not to see what lies dimly at a distance, but to do what lies clearly at hand.

- Carlyle