CHAPTER IV

WORK EXPERIENCE AND VOCATIONALISATION OF EDUCATION IN INDIAN SCHOOLS

Work Experience

One of the most important recommendations of the Education Commission (1964-66) is the introduction of work-experience as an integral part of all education. The Working Group on Vocationalisation of Education and Work Experience set up by the Planning Commission recommended in 1968 that work-experience in schools should include :

1. The practice of clean and healthy living;
2. The learning of elementary skills needed in everyday life by the use of simple tools leading to productive work; and,
3. Participation in socially useful activities in the school and in the community.

Mr.V. Lakshmi Narayanan has emphasised to keep the following few points in mind while thinking about work-experience :[1]

1. It must not be confused or mixed up with vocational and technical education; nor with social service, work in farms or factories. It will be certainly lead to vocational, technical, agricultural or industrial productivity. Work-experience must be treated as a basic subject of learning, like arithmetic, geography or languages.

2. Work-experience should not be considered as a self-supporting or income-fetching item for the school. Basic education failed because economic motive was built into it. Work-experience should be considered as laboratory of practical work, as in teaching of science. It will be the costliest department in the school, and will require liberal funds. From the long range point of view, work experience will give rich dividends to the individual and the community.

3. Work-experience is not an alternative to subjects which are supposed to require intelligence. Skill and intelligence are closely allied. The biggest fallacy is the belief that students who do not do well in theoretical subjects can be diverted to practical courses in vocational and technical subjects. Work-experience will benefit the gifted and talented students in direct proportion to his intellectual ability.

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[1] V.Lakshmi Narayan, 'Introduction of Work-Experience in Indian Schools' in 'NIE Journal', NCERT, New Delhi, January 1968, pp.5-6.

4. Work-experience must not be a compulsory subject for examination and passing. Any compulsion will destroy the very roots of its philosophy. It should be given encouragement and incentive by giving additional credit as for sports and games. However, work-experience must be considered a curricular activity and not extra-curricular.

5. Work-experience is knowledge and use of tools and labour-saving devices. Man is a tool-using animal.

Educational, Psychological, Social and Economic Aspects of Work-Experience in Schools

The following remarks made by Mr.M.D.Mobley, Executive Secretary of the American Vocational Association in one of his reports on the economy of the underdeveloped countries explain many things in few words.

" From my study of the economy of underdeveloped countries, I am convinced that one of the main reasons why they have low-living standards is the attitude of their educated leaders towards work with hand.' Educated Indians will have to change their attitudes towards manual work.

In the field of education many people in this country are still not quite prepared to believe that purely academic education, without reference to something constructive for a man to do in the economic life of a nation, is futile and frustrating. It is a fact that uncertainty, conflict and indecision have become

the most important characteristic features of the educational policy of this nation. Everybody talks about self-sufficienty and bridging the gap between manual and intellectual work. But hardly concrete steps have been taken. Effective implementation of work-experience programme can help a lot in achieving these goals.

From the educational point of view, greater concreteness and reality can be given to the knowledge acquired by children through work-experience. Knowledge thus gained will be related to life. Most modern educationists today unanimously agree with the idea of educating children through some suitable form of productive work. This activity is considered to be effective for providing integral all-sided education. Psychologically, work-experience is desirable because it relieves the children from the tyranny of a purely academic and theoretical learning. From the social point of view, work-experiences will provide wide opportunities for active participation by all the children. It will help to break down the existing barriers of prejudice between manual and intellectual work. It will positively help to cultivate a true sense of the dignity of labour. Economically considered, work-experience at a later stage will enable the pupils to increase their productive capacity as workers. They will have faith in precision and perfection. Work-experience will also help them to utilise their leisure

advantageously. But here it must be clearly emphasised that the productive aspect should never be allowed to take precedence over the educational aspect.

Work-Experience in Other Countries

In almost all the advanced countries of the world work-experience has become an integral part of education at primary and secondary stages. In the socialist countries the work-education programme is based upon the educational and political ideals of Marx and Lenin. Karl Marx suggested that 'education and physical culture be combined with manual labour and manual labour be combined with education and physical culture.'[1] In Russia, practical education was introduced during the second half of the nineteenth century by Victor Della Vos. In his system, the students were required to make series of models or exercises as means of learning the fundamental operations. Polytechnical education is the backbone of the educational system in the socialists countries. Here polytechnical education is organised around the basic productive forces of industrial society, clerical energy, machine production, chemical production, and agricultural production. Experience is provided in school shops, in school plots, in the farms and in the factories. In Communist China too, education is combined with productive labour. There are 'Half-work, half-study' schools.

[1] Chaudhuri, S.C. 'Work Experiences as an Integral Part of Primary Education,' NCERT, New Delhi, 1970, p.8.

They have also introduced productive work in the full-time schools. In East Germany also polytechnical education is given in a systematically built up course which extends from Class I. In Class I to VI children acquire polytechnical knowledge and skills in the handicraft lessons and through work in the school garden. Handicraft lessons are given in class-room specially equipped for the purpose.[1] Their activities also consist of wood-work, metal work, plastic work etc. From Form VII qualitative changes are introduced. The pupils go to a factory or a farm once a week. The aim here is not vocational training but giving the children a many-sided technical foundation. In Forms VIII and IX, teaching is determined by machines and their elements, their technological application and their efficiency in the various branches of the national economy. In Form X, pupils acquire fundamental knowledge in the field of electrical engineering. Thus in socialist countries, polytechnical education is much more than mere pedagogies. It is directly related to the communist educational theory where the school is a part of actual life and the techniques of learning are not independent of the life a community leads.

In U.S.A., U.K., and West Germany also programmes for providing work-experience to the school children are well-planned and systematic. In U.S.A., work-education programmes

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[1]Saraf, S.N. 'Polytechnical Education or Work-Experience.' (A Report on the Schools in GDR), Ministry of Education and Youth Services, Government of India, 1970, p.11.

are provided through Manual Training, Manual Arts, Industrial Arts etc. Manual training aims at training of the hand and eye. If consists of wood-work, mechanical drawing, metal work and other activities. Manual Arts encourage graphic arts, mechanical arts, textile arts, plastic arts etc. Calvin M.Woodward, the American champion of manual training pointed out, 'The object of the introduction of manual training is not to make mechanics... we expect them all to become good citizens. Our great object is educational.'[1] In America, 'work-experience' is used to mean practical activity in the production of goods or services exercised in a normal way in business, industrial, professional, and institutional fields.[2] Here two different types of programmes for work-experience are provided. One is based on a 'Part-study and Part-work' type of programme. In the other type, work-experience is provided through the school programmes, camps, community service etc. In the Scandinavian countries a system called 'Sloyd Training' was introduced in the primary schools.Through the construction of a series of articles of wood of increasing complexity, it was expected that desirable habits and attitudes of work would be formed.

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[1]Olson Delmar W. 'Industrial Arts and Technology.' Englewood Cliffs, N.J. Prentic Hall, Inc., 1963, p.3.

[2]Seyfert, Warren C. and Rehms, Paul A. (Ed.). 'Work-Experience and Education', Harvard University, 1941, p.6.

In order to implement the programme of work-experience in our schools effectively, the following steps w should be taken :

1. Social climate should be created to accept the dignity of work. Still there are many people in our society, and many pupils in our schools, who are unwilling to do manual work which they consider to be menial.
2. The teachers should be well-trained and pre-prepared to undertake these activities effectively.
3. The heads of the schools, the inspectorate staff and other administrators should be convinced about the usefulness and the importance of work-experience in our schools at various levels.
4. Work-experience should also be provided through programmes of community development and national reconstruction. Social service camps can be organised to provide work-experience.
5. Some experts like Prof. S.K. Bose, Director of Indian Institute of Technology, Powai, Bombay, and others feel that the school leaving certificate at the end of X^{th} standard should be given in two parts - the first dealing with academic attainment and the second in respect of the skill of work attained.
6. Work-experience Cells should be established. Such cells should be created at State level for curriculum development, production of instructional material and training of personnel. The cells can also take up some research and experimentation at a later stage. A special wing should be set up in State Institute of Education for State level

and in National Institute of Education at Central level to implement the programmes of work-experience.

7. Attempts must be made to utilise all the resources available for this purpose.

8. The Khadi and Village Industrial Boards, the All India Handloom Boards, the Central Silk Boards, The All India Handicrafts Boards, the Coir Board, the Small Industries Board and other such agencies should be involved in these programmes. Similarly the help of the nearby technical school of I T I (Industrial Training Institute) or Multi-purpose School, Polytechnics, Engineering Colleges, Agricultural Colleges, big Industrialists, big Farm Owners, Local Government officials and others should also be taken.

9. A short-term and a long-term programme for work-experience should be carefully prepared. Efforts must be made to implement the minimum programme of work-experience in all the schools without any further delay. This is a great challenge and it should be accepted.

Contents of Work-Experience

Work-Experience in the Lower Primary Classes (I to IV/V) :

The Education Commission has recommended that work experience in lower primary classes should take the form of simple handiwork. The activities suggested are : paper cutting, cardboard work, clay modelling, spinning, simple needle work, simple planting and kitchen gardening. Teachers should be encouraged and given guidance regarding corelation of these activities with lessons in science and arithmetic. The students should be encouraged to make something which should be useful.

Efforts should be made to develop their powers of observation and creativity, along with respect for manual work.

Work-Experience in the Higher Primary Classes (IV/V - VII/VIII)

At this stage, the Commission has recommended to introduce work experience in the form of learning crafts like cane and bamboo work, leatherwork, pottery, needlwork, gardening, model making, fretwork and work on farms.

Work-Experience in Lower Secondary Classes (VII/VIII-X) :

Work-experience at this stage should be productive. It should always be provided in real life situation. It may also be in the form of workshop training. Even a central workshop may be established to cater to the needs of a group of schools in a compact area.

The range of possible activities which can be adopted to provide productive work-experience is enormous and choice will be determined mainly on the availability of materials and trained instructors. The list given below is purely indicative and the choice of activities would be made in the light of prevailing local conditions. Included in the list are also activities of special interest to girls or to schools in rural areas:[1]

Lower Primary School :

Paper cutting
Cardboard cutting and folding
Modelling in clay or plasticine
Spinning (where natural in the environment)
Simple needle work
Simple planting indoors or on plots
Kitchen-gardening

[1]Based on the Report of the Education Commission.

Higher Primary Schools :

Cane and bamboo work
Leatherwork
Pottery
Needlework
Weaving
Gardening
Model-making
Fretwork
Work on the farm

Lower Secondary School :

Woodwork
Simple metalwork
Basket work
Leatherwork
Ceramics
Soapmaking
Tanning
Preserving
Weaving
Electrical repairs
Cookery
Model making
Making simple scientific equipment
Classroom decoration
Carpet making
Bookbinding
Linocutting
Fabric printing
Tailoring
Toy making
Millinery
Wood carving
Simple farm mechanics
Animal care
Crop care
Care of the soil
Workshop Practice

Higher Secondary School

Many of the activities listed above would be contained but the emphasis would shift to workshop practice or actual work experience in industrial or commercial concerns or on

farms. The activities would be oriented towards productive work. Skills demanded in woodwork, metalwork and agriculture would be of a higher and more exacting nature.

Some illustrative activities of work-experience which can be organised in schools are given below by Shri Lakshmi Narayanan, Director of Birla Institute of Technology and Science, Pilani. The list is suggestive and by no means exhaustive :

Gardening :

Growing: plants, flowers, lawns and vegetable ornamental creepers, shrub and hedges, rock, gardens, fish ponds, garden statuary, fruit gardens and trees.

Farming :

Small plots of food crops: oil seeds and cotton. Use of organic manuare and chemical fertilizer, insecticides and pesticides.

Cattle Farms :

Cows, buffaloes, sheep, goats and pigs, milk and milk products.

Poultry keeping

Pet animals, bird-keeping and Zoo

Sports and Grounds :

Sports tracks: wrestling places Playgrounds: gymnasium, swimming pool

Open-air theatres

Construction work

Roads and pathways

Plastering, white-washing and painting of walls

Small building and sheds
Cement Concrete articles
Sanitation, drainage, and Waste-disposal
Flush latrines and septic tanks
facilities for bathing and washing clothes.

Wood work

Furniture for schools and homes
Polishing and varnishing and painting wood work
Toys and fret work
Wood carving

Metal Work

Wire and sheet-metal work
Tin and coppersmith's work
Brass work

Foundry

Non-ferrous metal casting

Machine Shop

Simple lathes : drilling machines, hacksaws

Mechanical Repairs

Repairing and overhauling of bicycles, sewing machines and typewriters
Motor cycle and motor car repairs and maintenance
Tractor repairs

Watch Repairs

Clock, watches and simple instruments

Scientific Apparatus

Making of laboratory apparatus
Demonstration equipment
Botanical and physiological models
Herbaruim and zoological museum

Plastics

Moulding small objects and toys

Ceramics

Pottery and tiles and Art pieces

Weaving

Simple textiles

Carpet weaving

Knitting and knit-wear

Book-binding

Binding books and note-books

Printing

Simple printing presses, Compositing, Wood-block making

Photography

Developing, printing and enlarging

Electrical

Simple electrical wiring and illumination

Electrical appliances

Electronics

Assembling simple radio sets

Transistors

Audio-Visual

Cine-projectors and slide-projectors

Public address systems

Tape-recorders

Fine Arts

Drawing, painting

Poster painting

Signboard writing, display boards, Sculpture and clay-modelling

Leather-work

Making simple leather articles

Shoe-repair

Music

Musical Instruments

Tailoring

Sewing, cutting and tailoring

Hair-dressing

Hair-cutting and hair-dressing

Food-Preparation

Bakery - Bread and Pastry

Preserved food: jams and pickkles

Fruit Juices

Laundering

Washing clothes; ironing, Dry-cleaning.

Every school should make a selected choice of manual, agricultural and industrial arts listed above depending upon its resources and local needs.

Students should be encouraged to use the shop facilities in the school for making articles for their own use. They should buy the material required and take with them the articles they manufacture.

Work-experience in schools will revolutionize the system of education, and increase the productivity in the farms, and factories. An immediate beginning in selected schools in each area should be made. The money spent in providing the facilities required will repay ample dividends for generations to come.

Behavioural Changes among Pupils through Work-Experience Programmes

Any educational programme worth the name should produce some concrete results. The following behavioural changes are expected out of the programme of Work-Experience:[1]

A : Knowledge to be gained :

The pupils should know -

1. The problems and the needs of their own family, community, country and also of other nations related to production.
2. The role of production in the development of a nation.
3. The role of science and technology in improving production.
4. History of technology with special reference to Industrial Revolution.
5. Impact of technological development on the life of people.
6. The present and the future role of pupils in the development of the nation.
7. Production activities of their own community, their own country as well as of other countries.
8. The services involved in the production and distribution of manufactured goods.
9. The life of the people engaged in industry.
10. The raw material used in production activities, their sources, specifications, etc.

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[1] (Adopted from 'The Concept of Work-Experience', NCERT, New Delhi, 1970, pp.38-41.)

11. The tools, their parts, proper method of using, maintaining etc.
12. Safety precautions.
13. Factors contributing to productive efficiency.
14. Selection and proper use of consumer goods.

B : Abilities to be developed :

The pupils will develop the following abilities through work-experience programme. They should :

1. Locate problems regarding production and consumption related to basic needs, namely health, food, shelter, clothing and cultural and recreational activities.
2. Formulate hypotheses regarding the solution of the located problems.
3. Design experiments or production for the testing of the hypotheses.
4. Select the apparatus or tools for testing the hypotheses.
5. Actually test the hypotheses.
6. Evaluate the process of problem solving and products.
7. Feedback the results.
8. Undertake hand and consistent manual work.
9. Maintain inter-personal relations.

C : Attitudes to be cultivated :

The pupils will be able to cultivate the following types of attitudes. They should -

1. Realise that every citizen has a vital role in raising the productive capacity of the nation.
2. Consider every type of work promoting the welfare of the community as a dignified activity.
3. Have the same respect for the manual workers as one has for the intellectual workers.
4. Be keen on improving the tools and techniques of production and work.
5. Insist on perfection, including precision.
6. Do every work methodically.
7. Avoid any kind of wastage.
8. Co-operate with others.

D : Interests to be created :

The pupils will be able to create some of the following interests. They should be interested in :

1. Raising the productive capacity of the nation.
2. Accepting even blue-collared jobs.
3. Taking full advantage of science and technology in improving vocation and daily life.
4. Living in co-operation with others.

Vocationalisation of Education in Indian Schools

The Education Commission has recommended 'Vocationalisation' with a view to introduce the children to the world of work. It should help them to respect manual work and to think in terms of making an honest living other than 'white-collar' jobs.

Col.S.G.Pendse, Director of Training, Directorate General of Employment and Training in a 'Note on Vocationalisation of Education and Work-Experience' points out that the intention is not to give vocational training to all the schools children to the extent that they would become skilled workers in any trade or skill. According to him, this is neither practicable nor desirable since such skill training is already the responsibility of other organisations.

According to Mr. J.P. Naik,[1] secondary education has a duel role :

1. It prepares a student for further education at the university; and,
2. It is also terminal in character and prepares a student for entering the world of work as a semi-skilled worker and, after undergoing appropriate vocational education, as a skilled worker.

Unfortunately, our system of secondary education was designed as exclusively preparatory to higher education, and this aim still continues to dominate. The huge task before the Indian secondary education is to diversify and vocationalize and enable the majority of the students to enter different walks of life as semi-skilled and skilled workers after completing the secondary school.

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[1] Naik, J.P. 'Vocationalisation of Secondary Education.' (A Discussion Paper, 'A Note and a Historical Survey'), Ministry of Education and Social Welfare, Government of India, New Delhi, p. Ib.

It is advisable to provide vocational education to Indian pupils in specialised courses at two stages :

1. Vocational courses in different fields such as agriculture, industry, medicine and public health, village arts and crafts, etc. should be organised to meet the requirements of the children who have completed the primary education and who do not wish to proceed further for secondary education.
2. Vocational courses of a higher level should be organised in a variety of fields such as agriculture, industry, commerce, medicine and public health, etc. for those pupils who complete the secondary education and who do not wish to proceed for higher studies.

At Lower Secondary Stage, there are courses in the Industrial Training Institutes (I T Is) which are open to those who have completed the primary school. There are also Technical High Schools and Junior Technical Schools which prepare students for jobs in industry. It is also necessary to organise different part-time courses for a number of students who drop out after class VII or Class VIII, and who will enter employment in family business or so. Again, some provision should also be made to improve professional efficiency and general education of a large proportion of rural boys who would like to join the family farm. Also a large number of girls will leave schools and will get married. Provision should be made to give further education in Home

Science combined with general education.

As for the Higher Secondary Stage, this is an important stage to divert students to vocational courses. The I T Is, the engineering and agricultural polytechnics, etc. do train middle-level workers in their respective fields. Part-time courses should also be arranged on either day-release or sandwich system. Even correspondence courses may be profitable. It is also desirable to develop a wide range of other courses in health, commerce, administration, small-scale industries and such other services in duration varying from six months to three years.

Reasons for Failure of Vocationalisation of Education so far

This programme of vocationalisation can be considerably strengthened if (i) Work-Experience becomes an integral part of all general education, both at primary and secondary stages; and (ii) the secondary course is divided into two stages instead of forming a single integrated stage. To make work-experience an integral part of all education, it will be necessary to proceed with caution. In this country still there is an apathy for manual work. Even with 30 years of Basic Education, it cannot be said that any appreciable change has been brought about in the attitude towards manual work or manual workers. In theory it is all well but in practice the things are quite different.

As for the diversification of secondary education some efforts had been made but without any appreciable results. The following are some of the reasons for failure of diversified vocational courses in India so far :

1. Vocational schools are more expensive than other academic schools. So a vast majority of traditional schools are found everywhere inspite of being fully aware of the need of vocational schools, whenever there is a need to start a new school, it is always the traditional school that comes up. Only the co-operative efforts of the Government, the community and the industries can afford to set up a vocational school.
2. The lure of the university still exists on the parents and student community. It is doubtful whether there is still a genuine demand for vocational schools from the parents or the students. There is always a rush for admission at a good general school but the vocational schools or institutions are hardly overcrowded. Sometimes they have to strive hard to fill up some of the seats.
3. It should be confessed that this reform of diversified courses has mainly remained a 'Paper Reform'. In practice the situation in 1947 was not very different from that of 1887 and again in 1967 the situation was not very different from 1947.
4. The Multipurpose Schools also failed to achieve their goals because the specialisation started at a very early stage of the age of 13 or 14. Once the student entered into a particular stream, it was difficult to come out of it even if it did not suit him well. Again most of

the multipurpose schools started only one or two streams - mainly humanities and sciences - which hardly made any difference from the other traditional secondary schools. In fact, technical, commercial and agricultural streams were provided by very few schools. Again for most of the schools that started diversified courses, the real purpose was not to serve the society but to get the financial grants from the Central Government, or to gain prestige.

5. Most of the pupils who came out of the Multipurpose schools, had only one purpose in view. It was to pursue their studies further at a university. Commercial and Technical Schools were merely used for easy entry to Commercial and Technical classes of the Universities.

6. The teachers in these schools were not fully trained for their jobs. The pupils hardly achieved a level to qualify themselves as semi-skilled or skilled workers. There was hardly any question of setting up any trade or business of their own.

7. It should be noted here that so far efforts are being made to combine general education and vocational education. But this programme has not considerably succeeded. Now learning from past experience, it will be advisable to provide vocational education in proper specialised institutions set up for the purpose. Three distinct types of institutions should be set up to provide vocational education for pupils (i) who complete primary education (ii) who complete secondary education, and (iii) for those drop-outs in between. This should be treated as a national programme of utmost priority.

Some Essential Conditions for Success of Vocationalisation of Education in India

1. Estimates of Man-power Requirements :

One of the greatest defects of our present educational system is that it fails to provide employment opportunities for all the educated persons. For any reasonable satisfactory system of education, it is necessary to link the development of educational institutions with employment opportunities. This is more important in the case of Vocational Education because the amount spent per student in vocational education is fairly higher than the amount spent in general education. Again a skilled or semi-skilled worker will be more frustrated if found without suitable job.

The main difficulty at present in India is that not enough expertise has been developed to make reasonable forecasts of manpower needs for middle-level personnel who are trained or who will be trained in vocational courses at the end of primary or secondary stage. The fact remains that reliable estimates for educational planning are not available either at the national, state or district levels. This is one of the areas in which detailed work is urgently needed. For the present almost nothing has been done by the Central Ministry of Education or by State Education Department. Even the NCERT cannot claim to do any substantial work in this field. Though this task

is difficult, it is not impossible.

2. Academic Tasks :

A good deal of academic preparation will be necessary if these vocational programmes are to be implemented effectively. This will include the preparation of methodical courses, both for full-time and part-time vocational schools. For effectively teaching these courses, arrangements will have to be made to establish departments within the school system as well as in the appropriate industry. Again, the training of vocational teachers will be an urgent task. Preparation for adequate teaching and training material and equipment will have to be undertaken first.

3. Financial Implications :

As previously pointed out, the costs of vocational programmes are much larger than those of general education. It is roughly estimated that the vocational programmes would cost about three to five times more than the general education programmes. A Centrally Sponsored Scheme for assisting Vocational education programme at the end of (i) Primary stage, (ii) secondary stage, and (iii) for drop-outs should be instituted. There shoubd be reasonable partnership with State Educational Department also.

A note of caution is necessary here. The Multipurpose Schools failed mainly because some of the schools which took up this programme were only interested in receiving grants and nothing else. Care should be taken to see that this should not be repeated so far as new vocational programmes are concerned.

Again Vocational Programmes should be considered as 'National Programmes' and must be implemented simultaneously in all the States. This cannot be done without the active co-operation between the Centre and the States.

4. The Rate of Growth of Economy should be Accelerated :

The expansion of vocational education and the growth of economy should go hand-in-hand. New industries are fast coming up in this country. These industries should be provided with middle-level skilled workers. At the same time, the national economy can continue to grow only with rapid ihdustrialisation and also rationalisation in industries.

5. The Middle-Level Jobs should be made reasonably attractive as they are in other advanced countries. An attempt should be made to reduce the great difference in remuneration between the middle-level skilled worker trained in vocational schools and the higher skilled personnel trained in the universities.

6. Vocational education programmes will meet with reasonable success only if launched upon with courage and determination on a National Level. There will be many persons who will give lip sympathy to the programme but will refuse to change anything in the educational structure. Vocationalisation should be a venture of faith and still there are many bureaucrates in this country who will strive to sabotage the programme as it has been practically done in the case of Basic Education.

Inadequate Implementation of the Recommendations made by Education Commission

As already mentioned previously, the Education Commission has urged that over the next two decades enrolments in vocational schools at the lower secondary stage (Classes VIII to X) be increased from the 1965-66 level of 2.2 percent to 20 percent, and at the higher secondary stage (Classes XI to XII) to 50 percent against the 1965-66 estimate of 20 percent. To date however, no firm policy or detailed plan of action has emerged in the country. Much has been talked about the subject yet the fate of vocational education still seems in a state of flux.

However, some efforts at the Central and the State levels are being made to implement some of the recommendations but

they are far from being adequate. The following are a few noteworthy efforts :

1. The Education Division of the Planning Commission had sponsored several Working Groups. The Report of the Working Groups of Vocationalisation of Education and Work-Experience (January 1968), and The Report of the Working Groups of Vocational Agricultural Education(1968) are valuable guides to plan vocational education in India. National Council of Educational Research and Training (NCERT) and Regional Training Colleges have also come out with few useful publications on Work-Experience and Vocationalisation of Education.

2. In Maharashtra, the Ministry of Education had appointed a Planning Committee in November, 1968 to prepare the 'Maharashtra Action Research Project in Occupational Education and Training.' The districts of Osmanabad and Haveli Tehsil were selected for survey and two valuable reports have come out to provide guidelines for the scheme of vocationalisation of education in the State.

3. The 'Intensive Educational Development Project' in Bellary District of Mysore State launched in June 1970 is another attempt to try out some concrete programmes for linking up the educational structure of the district with its overall economic and social development, with special reference to employment, productivity and social justice. The results of this experimental project are anxiously awaited.

4. Following the acceptance of the recommendations made by the Report of the Study Group on 'Pilot Project in the Field of Vocationalisation at School Stage ' (July 1970), The Central Ministry of Education informed the State Governments to select one district from each State to undertake a Pilot Project. In the beginning, the following 12 districts were selected for the Pilot Project. Fortunately Baroda district is selected by the State Government of Gujarat. Now 16 States have taken up these Pilot Projects.

State	:	District
1. Haryana		Karnal
2. Uttar Pradesh		Sultanpur
3. Assam		Nowgong
4. Orissa		Puri
5. Andhra Pradesh		Guntur
6. Himachal Pradesh		Mahasu
7. Tamil Nadu		Saidapet
8. Kerala		Tricher
9. Gujarat		Baroda
10. Rajasthan		Jaipur
11. Madhya Pradesh		Sehore
12. West Bengal		Burdwan

Objectives of These Pilot Projects

These Pilot Projects are introduced with a view :

1. To identify and try out some concrete programmes for linking up the educational structure in the district with its overall economic and social development.

2. To experiment some programmes to vocationalize some selected primary and secondary schools.
3. To try to reduce the problems of wastage and stagnation in schools.
4. To encourage more girls to continue their education, and to give impetus to scheduled castes and tribes' children to enter schools in larger numbers.
5. To study the problems of drop-outs and schemes for part-time and continuing education.
6. To try to make maximum use of the existing facilities with minimum of additional financial burdens.
7. To try to make needed changes in life and schools for rapid economic and social betterment in the district.

To implement these programme of Pilot Projects, each State has appointed a 'Pilot Officer, Generally a Class I post for the purpose. Some surveys are carried on. Some training camps for the house-hold survey were organised. Efforts are made to collect important data about the districts. Most of the States have started this project only from June, 1971 and hence we shall have to wait for some more time to judge its implementation and results. However, it is greatly feared that this scheme may not achieve its goals if it continues to work at its present space under the bureaucracy with little faith in the programme.