Chapter VII

EDUCATIONAL IMPLICATIONS OF THE STUDY, LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH
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This chapter describes the educational implications of the study which probably help develop vocational education in an ideal and purposeful manner. Further the recommendations arrived at would lead to establish a slightly modified system of vocational education free from the problems existing in the field at present. Of course, the other section of the chapter describes limitations of the study and suggestions for further research.

7.1 Educational Implications of the Study

The present system of education can be viewed under two major streams namely general education and vocational education. Majority of the students are associated with general education and only a small percentage of them are provided with the opportunity in vocational education at different levels.

The vocational education programmes are run in two kinds of institutions. A few vocational courses are run in the institutions of general education (high schools and higher secondary schools or junior colleges). The other vocational and technical courses are run in separate vocational/technical institutions (Industrial Training Institutions, Polytechnics, DIETS/TTIs, Nurse Training Institutions, BBM, BCA, etc.).

For over 150 years we have been trying to vocationalise our educational system (Woods Dispatch 1854) since 1937 the educationists of the soil have recommended different schemes with which education can be vocationalised. The father of the Nation Mahatma Gandhi suggested basic education. Madhavari Commission (1952-53) recommended multi-purpose education. Kotari Commission (1964-66) recommended work experience. Iswarbhai Patel...
Committee (1977) recommended socially useful productive work (SUPW). Malcolm Adiseshiah Committee (1978) proposed the scheme of vocationalised intermediate (+2 education). 1986 New Education Policy recommended national wise implementation of vocational education at +2 stage (Centrally Sponsored Scheme). Inspite of all these efforts we have not been achieved significant progress in vocationalising our education.

What could be the reasons for this? Are the parents interested in providing vocational education to their wards? Whether the students who under go vocational education are capable of leading independent life? Are the teachers involved in vocational education are really skillful to prepare the younger generations to specific vocations/trades? Whether the curriculum is appropriate? Are there minimum facilities to run vocational programmes effectively terms of library laboratories workshop field experiences etc.

This study has probed into all the aspects of vocational education referred to above. The most interesting observation made on the basis of subjects obtained is that different types of people associated with vocational education in general are in favour of quality vocational education and they are all unanimous in their opinion that the existing system of vocational education is full of lapses. On most of the issues of the present vocational education system the subjects have expressed their dissatisfaction. Therefore it is suggested that a comprehensive new system of vocational education should be developed with the following characteristics:

1. The vocational education should be provided as a parallel stream of education instead of running it in the institutions of general education.

2. Upto certain specified number of years of schooling (say 10 years of schooling to those children who are in the age group of 5 to 16 years) large number of students (say more than 60%) may be diverted to vocational stream.
3 There is no need to incorporate vocational element in the schools. At the +2 stage all such trades/vocations may be started in Industrial Training Institutes (ITIs) and Polytechnics.

4 After the completion of +2 again more than 50% of the successful students are diverted to technical job oriented professional courses and only a few (less than 50%) are allowed to continue to study basic subjects (either sciences or arts or humanities).

5 Even after the completion of the first degree a large number of students should be diverted to job oriented professional courses such as B. Ed, B. L, M. B. A, M. C. A etc.

6 We have been experimenting with the restructuring of the courses at the first degree level only to incorporate vocational/occupational opportunities in general education. In other words they are called job oriented courses they include subjects like sericulture, aquaculture/fisheries, dairym technology, industrial chemistry, biotechnology etc. Instead of running these courses in the institutions of general education it is better if they are run in separate specific institutions in the areas where there is employment potential.

The Indian system of Education has two major streams as it is existing in Netherlands (Jaap Dronkers 1998) but the expansion of general education at all levels from class 1 to University Education is relatively very large when compare to the alternative stream i.e., the vocational technical and professional education stream. Although the vocationalisation of education is being attempted by establishing vocational and technical institutions exclusively on one side and by incorporating vocational component in general education on the other side the total percentage of student population covered in both the schemes is less than 10% at all levels. Therefore it is
essential to expand the alternative stream i.e. vocational/technical stream to the largest extent progressively in the years to come and the linkage between different stages are to be developed for vertical progress of the students opted for vocational stream as it has been achieved in the Dutch system of vocational education (Laerbrand 1991)

7 In brief the following flow chart describes the proposed system of education with two parallel streams one for general education (a minor system) the other for vocational/technical/employment oriented/professional education stream (the major system)

**General Education**

- Post Education
- First Degree
- Intermediate
- Secondary
  - Upper Primary
  - Primary
  - Pre-Primary

**Vocational / Professional Education**

- Post Graduation and Research
  - BL, B.Ed, MBA, MCA, M.Tech
  - MS, M.D, M.V.Sc, Ag M.Sc etc

- B.Tech, MBBS, BDS, B.V.Sc, Ag B.Sc
  - B.B.M, B.C.A, TTC, Nurse Training etc

- Polytechnic
- Industrial Training Institutes (ITI)
We have the inherent character of vertical linkage for the progress of a student from the lower level to the higher level in general education stream. It is necessary to develop such kind of linkage in the major stream of vocational education. There is no need to restrict the entry to different professional courses only to those who acquire a specified qualification in general education. For example, we allow intermediate students to get admission to MBBS course. Why not a physiotherapist or a nurse or a para medical assistant be eligible for admission to MBBS course? If we specify a minimum level of general education for entry into professional courses why not we specify a minimum level of vocational education for the entry into the related professional education? This kind of inter-linkages at different levels of vocational/technical/professional courses is the need of the day. The society in general does not exhibit any unfavourable attitude towards the vocational programmes even at the lower level.

We allow village level workers (VLW) who are trained for two years after eleven years of schooling (SSLC) to get admission into Ag B Sc condensed course of three years. Similarly, we allow livestock inspectors (animal husbandry department) for admission into a condensed course (3 years) of B V Sc. We also allow persons with ITI qualifications and SSC certificate to do related polytechnic courses (to his trade at ITI) and the polytechnic diploma holders are allowed to do B Tech course. An M Sc mathematics teacher candidate is eligible to get admission into M Tech Computers course.

An elementary school teacher is eligible to do degree and B Ed and become secondary school teacher. Further, he can obtain MA/M Sc and M Ed and become a lecturer either in the college of teacher education or in the university department of education. Any graduate working in any department can acquire a degree in law and become a lawyer. When the
distance mode of education and virtual class room with the electronic media are capable of transmitting any kind of knowledge to the people of all ages. It is very easy to develop proper linkages among the vocational courses at different stages. The entry qualification for various scientific and technological professions may be prescribed in terms of vocational courses.

10 The curriculum for vocational/technical courses at all levels should also cover the basic subjects (science, arts, and humanities) to some extent so that it would be possible to establish parity between general education titles and vocational education titles.

11 Keeping in view the above points and examples it would be possible to develop vertical linkages meaningfully among vocational/technical/professional courses. An electrician who is trained in household wiring should be allowed to become an electrical engineer provided he/she fulfills the minimum required levels of qualifications in terms of vocational education. Then the parents will not hesitate to send their children to vocational courses at the lower level.

12 The course we devise in the field of vocational/technical stream should have social relevance. The structural changes in the economy, the priorities given in our development plans, the local agriculture and industrial needs, and the interest of people should form as the basis for designing a variety of vocational and technical courses.

13 Any innovative work will be successful only when the course material is prepared well and made available in the market in any language. If not, we are sure to get a bitter experience of failure (as in the case of BCA). Without the necessary study material, well-trained teachers, library and laboratory facilities, we have been expanding our education by introducing...
new courses both in general education and vocational/technical education. This is not a good sign. Developing an appropriate curriculum preparing revised study material, producing sufficient number of trained teachers, increasing necessary infrastructural facilities, including academic inputs such as laboratory, library, workshops, and field experiences, etc., are the essential steps involved in making any programme of education qualitatively attractive.

14 The vocational and the lower level technical courses are mostly related to the production of semi-skilled persons with lower abilities both in the general education and the vocational education. They need to be given more practical oriented education which helps them develop the required skills to perform the given task independently. But unfortunately most of the vocational courses we have been conducting aim at providing the theoretical knowledge only about the trade or vocation and not the practical orientation. Because of this reason the students who complete vocational courses are unable to stand on their own and the public in general have lost faith in vocational education.

15 For over decades, many attempts have been made to emphasise that there should be close association between industries and vocational education institutions. The apprenticeship act was more rigorous earlier than today; the field experience was more effective in the past. The curricular activities both under theory and practicals should be specified explicitly to make curriculum effective and purposeful.

The ideology behind Vocationalisation of Education can be translated into a reality only when we modify our approach to expand the system of education with proper planning and a vision keeping in view the recommendations made above.

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7.2 Limitations of the Study and suggestions for further Research

1. This study is limited to students of vocational courses, teachers and administrators involved in vocational education only. Further researchers can take up studies of this nature by collecting opinions from students, teachers, and administrators of general education.

2. A study of public opinion may also be warranted to have better understanding of parental aspiration on the education of their children.

3. This investigation considers only the attitudes of the people towards vocationalisation of education. The other aspects such as vocational interest and aspirations and occupational choices etc. can also be studied.

4. The present investigation has not collected any data relating to physical facilities available in the institutions conducting vocational courses. A study aimed at collecting factual information about the different aspects of conduct of vocational courses may be taken up.

5. Studies on the opinion of the subjects who completed vocational courses and entered into the earning stream may be considered for further development of the vocational stream of education.