CHAPTER IV

CONCLUSIONS, EDUCATIONAL, IMPLICATIONS OF THE RESULTS AND SUGGESTIONS FOR FURTHER RESEARCH
CHAPTER 4

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4.1 Conclusions

In the light of the analysis and interpretation of data, the following conclusions in the context of Thailand may be drawn:

1. All 13 technical colleges and 13 polytechnic colleges under the present investigation are located in urban areas. Out of these educational institutions, 7.7 percent are located in industrial estates. All institutions are co-educational and non-residential in nature.

2. There are various levels of programmes offered in educational institutions under DOVE, namely (i) the Certificate in Vocational Education; (ii) the Diploma in Technical Education; (iii) the Diploma in Vocational Education; (iv) the Higher Diploma in Vocational Education; and (v) Different Short Courses. Five Vocational Programmes have been introduced in colleges throughout the country namely; (i) Trade and Industry; (ii) Commerce and Business Administration; (iii) Home Economics; (iv) Arts and Crafts; and (v) Agriculture.
3. The duration of each vocational course offered varies differently in accordance with its nature and content of the courses from 3 periods (1 period of 50 minutes) up to 3 years. It was found that majority of vocational courses offered meet the needs and demands of local community. However, many vocational courses under the programme of Trade and Industry have not been introduced due to variations in industrial development and the availability of teachers in the particular region.

4. There was no trusting evidence that any prior vocational survey had been conducted before introducing new vocational courses and selecting educational institutions to run the proposed programmes.

5. The enrolment trend in vocational courses under the Trade and Industry Programme indicates that it has increased from 24,095 to 27,932. It was also noted that the percentage of girls taking up vocational courses under the proposed programme is significantly low though it increased from 4.3% in the year 1994 to 4.7% in the year 1995, especially in the field of electronics. The majority of male students were in the age group of 16-18 years. Moreover, most of the students belong to literate middle to low socio-economic strata families.

7. On the basis of the views of directors, teachers and students, infrastructural facilities such as laboratory, workshops, equipment, library facilities and raw materials are inadequate and unsatisfactory.
8. There is evidence that vocational students are provided guidance and counselling facilities before joining vocational courses in educational institutions under DOVE.

9. There is shortage of teachers in the Trade and Industry Programme. The problem of shortage of teachers under the proposed programme has not been solved effectively even though DOVE has offered the Higher Diploma Programme as a solution to the proposed problem.

10. Due to the shortage of teachers, most of teachers who are working under such circumstances have extra-work load, especially extra administrative duties apart from teaching. As a result, they don’t have sufficient time for their professional growth and academic development.

11. The teachers under the Trade and Industry Programme are appointed on full-time basis and are adequately qualified in terms of their academic requirements. However, most of the newly appointed teachers have no industrial experiences. The lecturer method is mostly used for teaching theory courses and laboratory method for imparting instruction in practicals. It was also found that college administrators have adequate teaching and administrative experience. Moreover, majority of these administrators, have proper technical background, especially the directors from polytechnic colleges.
12. DOVE has established Staff Development Institute (SDI) with the assistance of the National Social and Economic Development Council and the Department of Technical and Economic Co-operation (DTEC) and the institute gets financial support from the United Nations Development Programme (UNDP) in order to upgrade the skill, knowledge and ability of DOVE teachers. However, SID is not able to provide DOVE teachers with sufficient advanced technology courses because of the shortage of proper advanced machines, laboratory, equipment and expert instructors.

13. Prescribed text-books are sufficiently available for vocational courses offered in colleges. Besides, instruction in vocational courses is imparted only in Thai language.

14. Special incentives in the form of scholarships and financial assistance to the students offering vocational courses under DOVE are provided by the private and other state enterprises and DOVE itself. Occasionally, teachers also get scholarships and other financial assistance from DOVE management. However, it may stated that DOVE has not established its own financial assistance project to assist its own staff even though it has the project to assist higher diploma students through its own budget for solving the problem of teacher shortage.

15. Semester system of examination is used for evaluating students' academic performance in each college under DOVE. Weekly and monthly tests are also
utilized by teachers in evaluating learning outcomes of students. It may also be noted that internal evaluation is used for evaluating students’ performance in each college. The external experts from outside are hardly invited to evaluate students’ skill performance except for giving suggestions in respect of skills needed for each-course component. Besides, there is no Board of School Education established for the purpose of external examination.

16. Placement cell at the institutional level under DOVE has been established for providing information to students regarding employment, wages, etc. However, its functioning including the guidance services is not up to the satisfaction of the concerned teachers and students.

17. Although the Ministry of Education (MOE) and DOVE have definite policies to stimulate entrepreneurship on self-employment because it is realized that the Thai economy depends largely on dynamic entrepreneurial activity, yet most students under this programme are not interested in creating new business organization or self-employment. It seems that they mostly prefer wage employment in private sector, state enterprises and public organizations.

18. There is a constructive and productive collaboration between DOVE institutions and other organizations concerning employment, resources, financial assistance and programme implementation. However, DOVE needs to play the role of a facilitator and stimulator in these matters.
19. DOVE has established the Private Sector Co-operation and Co-ordination Section under the Planning Division to co-ordinate among various public organizations, as well as private agencies for the success of the programme implementation. However, this section needs more productive support from DOVE in terms of adequate qualified staff and resources.

20. Regarding further education and vertical mobility of vocational graduates under the Trade and Industry Programme, it was found that they are provided chances for admission in universities on the basis of marks obtained in the university entrance examination, like other secondary students. However, as per reforms of 1981, there are a few public universities providing much opportunities to vocational graduates. It includes King Mongkut's Institute of Technology having 3 independent campuses and two open universities.

21. The supervisory unit under DOVE is responsible for the academic matters concerning vocational and technical education including the development of teaching strategies, research in learning process and the curriculum development.

22. The financial support to each educational institution by DOVE was found to be inadequate for the effective implementation of vocational education under the Trade and Industry Programme.

23. The information about the vocational courses offered in each college is properly advertised to attract public attention. Thus, the local community is
informed about the availabilities of vocational courses and other benefits they are expected to get from the programme.

24. DOVE has taken certain steps to decentralise educational management. But it has not taken proper official shape at all levels, especially at the institutional level.

4-2 Educational Implications of the Results and Suggestions

The results of the study illustrate that there is a gap between the formulation of the policy of vocationalisation of education and its implementation at the departmental and institutional levels. It seems that measures taken for the successful implementation of vocational programme at all levels have not been actively and effectively carried out so far. The results of the study have certain implications and suggestions for DOVE and other concerned parties which are laid down as under:

1. It was found that almost all the technical and polytechnic colleges are located in urban area and only insignificant percentage of such colleges are situated in industrial area. Since, the economy of the country is dependent on the agriculture also, the vocational education needs to be strengthened in the rural areas so that the students belonging to such areas will also develop vocational skills to upgrade their agricultural know-how.
For this, it is suggested that DOVE educational institutions with more emphasis on agricultural technology be established in the rural and backward areas.

2. DOVE has offered various vocational programmes at different levels in its educational institutions and it was found that many need-based vocational courses have not been introduced in some educational regions. Thus, it is suggested each new need-based vocational course should be introduced after careful planning on the basis of trusting data obtained from researches and all concerned parties associated with the implementation of vocational programme. It is also suggested that vocational courses should be started after systematic surveys.

3. It was found that the enrolment trend of males in vocational courses under the Trade and Industry Programmes is higher than females. As provision of equal educational opportunities to women is regarded as an important issue in the educational sector as far as MOE and DOVE are concerned, it is suggested that DOVE should take concreted steps for women by providing them with special incentives in the form of reservation of seats, financial assistance and guarantee of employment.

   In addition, other disadvantage groups, such as handicapped and students from rural and backward areas should also be provided such type of opportunities so that the talent from these groups also get opportunities for joining vocational courses.
4. The marks obtained in entrance examination and personnel interview are main criterion for the admission in vocational courses in DOVE educational institutions.

Since, different vocational courses may need different types of admission criteria, it is suggested that appropriate steps should be taken so that students are properly guided in making their choices on the basis of their aptitudes and interests.

5. It was visualized that the infrasturctural facilities in terms of building, laboratory, workshops, library, equipment, raw materials and teaching staff were inadequate in vocational and technical institutions offering vocational courses. Since, the infrastructural facilities are generally regarded as the main factors for the success of vocational education, it is suggested the special funds may be made available to DOVE by MOE and the government.

6. DOVE has appointed 18,690 teaching staff, 1,050 non-teaching staff and 5,139 permanent workers for smooth functioning of vocational programme in its educational institutions. But it was observed that the number of these posts is inadequate keeping in view the requirements of the vocational courses and prescribed norms of DOVE policy document (Planning Division, 1996).

Thus, to ensure that the implementation of vocational courses can yield successful results, it is suggested that MOE and the Thai government should provide DOVE with sufficient well qualified staff for the success of the
programme implementation.

7. It was found that DOVE teaching staff do not have sufficient opportunities for their professional and academic development due to the shortage of staff. Thus, it is suggested that teaching staff at institutional level should be provided proper opportunities for academic and professional growth and development. Besides, the problem of the shortage of staff in each institutions offering vocational courses should be given due consideration so that the learning outcomes of the students are greatly enhanced.

8. Staff Development Institute (SDI) under DOVE hardly provides DOVE staff specialised orientation in advanced technology courses. Therefore, it is suggested that DOVE should recruit more experts and allocate sufficient budget for the purchase of laboratory equipments and more advanced machines such as computerised numerical control (CNC), Special Machines (SPMs) and other precision machines and instruments.

9. It was found that prescribed text-book are available in Thai language only. But it may be pointed out that it creates problems to students in consulting technical books and literature in English. Hence, it is suggested that students in vocational stream should be provided special coaching in English technical terms so that they don’t not face problems in consulting technical literature. This is more essential in teaching modern advanced technology.
Industrial units depend upon DOVE institutions from which it gets educated trained workforce. Moreover, the students with vocational orientation after graduating from DOVE institutions need proper avenues of employment where they can use their talents. But without the support of well qualified teaching and non-teaching staff, DOVE can not fulfil this objective. It was also found that DOVE has not established its own financial assistance project for the professional and academic development of its own staff. Thus, it is suggested that DOVE should have adequate finances at its disposal so that it can provide assistance to the projects for enhancing the professional competence and morale of its teaching and non-teaching personnel.

It was found that no Board of School Education has been established in DOVE for the purpose of external examination. Moreover, the external experts from outside are not officially involved in the evaluation procedures. Thus, it is suggested that DOVE should establish Board of School Education and experts from industries should also be associated with this board.

It was observed that DOVE syllabi is flexible enough for the present changes, but its content should cater to the needs of growing changes in technology and the needs of future industries and market. Moreover, the experts of the DOVE and teachers should visit the industries in order to get themselves acquainted with the need and problems of industries. The Trade Industrial Authority and its technical experts should also be called to institutions for
teaching or conducting workshops so that DOVE students can get information about the world of work.

13. The functioning of the Placement Cell and Guidance has not been viewed satisfactorily by the teachers and students. It is, therefore, suggested that DOVE should recruit well qualified staff to carry out the tasks of guidance and counselling by discussing and disseminating information about the job opportunities. Besides, sufficient budget should be allocated for the effective functioning of this cell.

14. It was found that one of the major policy of DOVE is to stimulate entrepreneurship on self-employment. But most students under the Trade and Industry Programme prefer wage employment rather than creating new business organization or self-employment. Thus, it is suggested that DOVE should translate its policy into action sincerely by providing financial assistance for this purpose so as to facilitate students’ efforts in establishing their own business under the self-employment scheme.

15. The Private Sector Co-operation and Co-ordination Section under the Planning Division in Thailand has been established for effective co-ordinate between DOVE and other concerned organizations especially the private sectors. However, to ensure a productive lasting co-operation between the said organizations, there should be well qualified trained staff and sufficient budget allocation for this joint co-operating venture. Besides, it is also suggested that
this section should be established independently as an autonomous institution free from routine official complication, red-tape and unnecessary bureaucratization.

16. Regarding further education and vertical mobility of students offering vocational courses under the Trade and Industry Programme, it was found that students are provided with less opportunities to take admission in universities. Thus, it is suggested that DOVE should establish its linkage with other educational institutions, including universities in technical courses in vocational courses under the Trade and Industry Programme. Besides, the Thai government should take a role of a facilitator in this venture.

17. Apart from giving job security to vocational teachers, DOVE has to find other incentives to motivate its teachers to carry on their working such as providing house-construction loan and other extra-incomes based experiences.

18. Proper management system at the departmental, regional and institutional levels should be strengthened to run the vocational courses in the institutions more effectively. Besides, it should be ensured that technically qualified personnel having rich experiences are appointed at the departmental, regional and institutional levels to administer, supervise and monitor the implementation of vocational programme.

19. It was found that adequate financial support is not provided to DOVE institution well in time. This tendency should be discouraged and it should
be ensured that budget allocation to all institutions offering vocational courses should be made without delay.

20. It was found that publicity of vocational courses yields successful results. However, for more dissemination, it is suggested that publicity through television, other media and seminars should be initiated to create awareness in the community especially among the target groups of students and their parents.

21. Vocational education through non-formal channel or distant education should be encouraged so that there are proper opportunities for providing vocational education to different needy groups such as school drop-outs, older persons working in factories and farms, unemployed persons and women, uneducated and illiterates adults, minorities, and persons with disabilities. Besides, coordination of DOVE with other concerned organisations such as Department of Non-formal Education and Open Universities should be encouraged for effective functioning of the said programme.

22. It is visualized that one of the main causes of environmental pollution is the rapid growth of industrialisation and use of fertilizers in agriculture. DOVE is the biggest organization which supplies the skilled manpower needed by industries and factories. It was observed that DOVE institutions hardly play any active role in imparting environmental education to their students. In view of this, it is suggested that DOVE institutions should make them aware
of environmental problems and issues. Besides, DOVE institutions should also invite environment experts for having a constant dialogue with representatives from industries and other organizations from time to time.

23. The results of the study indicated that DOVE has not established any working group for identifying and evaluating new and emerging technologies and their potential for adaptation in vocational programmes in the national context. Hence, it is suggested that such working groups should be established so that new technologies and their potential for adaptation in vocational programmes and future organisational structure of jobs and skill requirements in the work market of Thailand are properly identified.

4.3 Suggestion for Further Research

The present study entitled "Vocationalization of Education in Thailand: An Evaluative Study" is limited to the Department of Vocational Education (DOVE), Ministry of Education, Thailand only. Hence, following studies may be undertaken for further research.

- The survey studies may be undertaken on vocationalization of education under DOVE, taking into consideration the supply and demand side of the manpower requirements for selection of appropriate institutions and need-based vocational courses according to the socio-economic needs of different groups of each educational region.
- Some studies pertaining to the identification of factors responsible for drop-outs among students pursuing vocational courses in colleges under DOVE may be undertaken so as to suggest some measures for retaining the students in vocational courses.

- Since the programme of vocationalization of education under the administration of DOVE aims to provide students with knowledge and skills required for entry into gainful employment as well as self-employment, its success entirely depends on how the Thai society perceives the programmes of vocationalization. Some studies may also be undertaken on attitudes of different groups such as parents, students, teachers, principals, administrators, employers etc. towards this programme.

- Certain studies may be undertaken on the perceptions of the employers about vocational passouts in terms of their skills and abilities so that some modification in the curriculum and training programmes may be suggested keeping in view the requirements and needs of the industrial units and business organization.

- Experimental studies may be conducted to evaluate the effectiveness of instructional strategies which are used in teaching of vocational courses in colleges under DOVE.

- Some studies may also be undertaken to design different vocational programmes for different target groups such as women, handicapped, ruralites
and slum dwellers according to their socio-economic needs.

- Certain studies may be conducted to analyse the cost benefit analysis of the programme of vocationalization of education under the administration of DOVE.

- Some follow-up studies may be conducted on vocational pass outs in order to know how far they have been successful in their respective fields and what sort of measures are to be taken for the improvement.

- Certain studies in other educational institutions under the Ministry of Education where the Vocational Programme are offered may be undertaken to evaluate the status of the programmes in comparative perspective.

- Some studies in the international perspectives may be conducted in the countries which vocational education has been successful so as to know the factors which have led to success of the vocational education in those countries.