

4. THE MANAGEMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING FOR DEVELOPMENT

- 4.1 Development needs require training responses. Training responses require management if they are to be effective. This is true whether it is one instructor preparing his own programme or a country implementing a national training policy.
- 4.2 Despite the relative size of population in Island Developing and Other Specially Disadvantaged States of the Commonwealth there exists a surprisingly wide range of agencies responsible for the management of technical and vocational education and training policies and programmes. Ministries, educational institutions, voluntary groups, the churches, private companies, aid agencies and individuals all have a part to play.
- 4.3 For example, the table below indicates some of the agencies in a sample group of countries with responsibility for training activities for the servicing and maintenance of out-board engines on fishing boats, a crucial skill training programme for sea-bound countries.

The Bahamas	Ministry of Agriculture and Fisheries
Barbados	Ministry of Trade and Industry; private companies
British Virgin Islands	Private companies
Cayman Islands	Marine School; pre-secondary training scheme
Dominica	Ministry of Agriculture (Fisheries Division)
Fiji	Fiji Institute of Technology (Division of Automotive Engineering); Fiji National Training Council; Ministry of Works
Mauritius	Ministry of Fisheries; Ministry of Employment
St Lucia	Schools
St Vincent	Technical College; special Government funding scheme; Ministry of Agriculture and Fisheries; Ministry of Works
Turks and Caicos	Department of Education and Training schemes; fisheries firms.

- 4.4 In the manufacturing sector food preservation and food processing is of special importance if diversification of the national economy and the development of rural areas is to take place. Responsibility for skill training programmes in this area includes the following in five of the countries represented at the meeting in The Bahamas.

Antigua and Barbuda	Ministry of Agriculture; Ministry of Education; Women's Desk (Home Economics Division)
Dominica	Ministry of Education; Ministry of Agriculture; Social Leagues
Fiji	Ministry of Agriculture and Fisheries; Ministry of Commerce and Industry; Fiji Canning Company; Ministry of Education
St Vincent	Ministry of Education; Ministry of Agriculture; Ministry of Home Affairs (Community Development); Organisation for Rural Development; National Women's Council
Turks	Service clubs; fishing companies; Department of Fisheries

4.5 A significant example from the service sector is the training of hotel personnel for the tourist trade. In the following group of countries training is the responsibility of a wide range of public and private bodies.

Anguilla	Ministry of Social Services; Hotels Association
The Bahamas	Hotel Training School; Hotels Training Council; High Schools; Industrial Training Council; University of West Indies; Ministry of Tourism
Barbados	Community College; Hotel Training School; Hotel Association; Tourist Board; Caribbean Tourism Research Centre
British Virgin Islands	Hotels Association; Department of Community Development; Department of Education
Cayman Islands	Department of Tourism; Hotels Association; individual hotels
Jamaica	High Schools; Community Colleges; Hotel Tourist Association, University of the West Indies; Tourist Board
Mauritius	Hotel and Catering School
Montserrat	Overseas training
St Lucia	Hotel Association; Morne Fortune Technical College

4.6 Whilst it is clear in these three and limited examples that ministries predominate, it is also apparent that colleges, schools, private companies and non-government organisations have an important role to play.

Additionally, lists such as these omit the informal expertise which is passed on in farming and fishing communities.

4.7. The efficiency and effectiveness of these managerial bodies varies enormously both within the organisation and in the co-operation and co-ordination that exists between them. The meeting examined both facets of the management equation.

4.8 As the technical college is perhaps the single most important repository of training wisdom and resources in the small countries of the Commonwealth particular attention was paid to ways and means by which governments might improve the ability of training colleges to respond effectively to developmental needs. A number of measures were identified which should enable technical colleges to increase and diversify their development role through improved management. **The meeting recommended Governments should:**

- Develop a consistent and long-term policy for technical and vocational education and training for development in technical colleges and institutions.
- Draw upon the expertise of those working in technical colleges and institutions in the development of educational policies for technical and vocational education and training.
- Ensure that policy makers respond positively to the development of technical and vocational education and training programmes in technical colleges and institutions.
- Ensure that administrative decisions relating to technical and vocational education and training are translated into action at the earliest possible time.
- Undertake a regular review of the management structures of technical colleges and institutions.
- Make legal provision for the establishment of formal advisory boards for technical colleges and institutions.
- Encourage positive relationships between personnel dealing with academic subjects and those dealing with technical and vocational education and training, recognising that this arises in part from the low status often accorded to the latter group.
- Allow some flexibility in the administration of finance for technical and vocational education and training programmes in technical colleges and institutions. Increased financial autonomy should allow a greater local responsiveness to development needs.
- Encourage staff development, and ensure that this is a major concern of the college or institution principal.
- Emphasise evaluation as an important management tool in technical colleges and institutions.

- Ensure that all programmes of technical and vocational education and training are based on clear objectives and that such objectives are achieved.
- Ensure that training for the management of technical and vocational education and training institutions includes techniques of information gathering as these relate to the development of appropriate skills and courses.
- Ensure, through appropriate ministries, that technical teachers are upgraded by attending refresher courses and through attachments to industry.
- Ensure that national teaching needs are satisfied by seeking internal and external funding, to provide for appropriate technical teacher training at regional institutions and elsewhere.

4.9 In schools and amongst the community at large there is also a need to enhance the value of technical and vocational education and training. The introduction of technical and vocational education and training into schools is a live issue throughout the Commonwealth in large and small countries alike. **The meeting recommended that Governments should:**

- Recognise the importance of technical and vocational subjects in the school curriculum. This importance should be reflected in appropriate weighting for this subject area in the school curriculum and timetable.
- Introduce appropriate technical and vocational programmes at the primary or first cycle of schooling.
- Encourage the acquisition and development of marketable skills by including the study and experience of work as a component of technical and vocational programmes in schools.
- Ensure that schools place an increased emphasis on all aspects of agricultural education and training, including fishing.
- Make provision for parental and community involvement in school programmes of technical and vocational education and training.

4.10 The co-ordination of the many technical and vocational education and training programmes and projects exists more in the intention than in practice. There are instances of co-ordination and co-operation between institutions and ministries as for example in Jamaica where the Ministry of Education and the Ministry of Youth and Community Development combine on the latter's courses for school technical instructors. However, many countries note wasteful overlaps with different institutions offering similar programmes. This is true, for example in The Bahamas where a secondary school, the Hotel Training School and the Industrial Training Centre could usefully discuss the co-ordination of training resources without loss of opportunities. Similar problems were reported in St Lucia and Cayman Islands.

4.11 A number of countries show a strong desire to establish some form of national advisory council or board for technical and vocational education

and training (see, for example, Antigua and Barbuda p 57, Dominica p 61, Montserrat p 62, St Lucia p 62, and Kiribati p 65). Barbados, Jamaica, and Mauritius in the Indian Ocean are examples of countries which have taken this step. Representation on such a central body usually includes government, unions, training institutions, the private sector and individual members of the community. Responsibilities and power vary but usually include the overall co-ordination of programmes, the setting of standards, certification and in some cases the assessment of manpower needs on a regular basis.

4.12 The meeting recognised that the presence of a national council helps establish and confirm the credibility of training. It acts as a focal point for all forms of training. By establishing occupational and certification standards there is a greater likelihood that regional standards can be determined; an important consideration for small states with mobile populations.

4.13 Recognising the role which a national council could play in the overall development of a policy for technical and vocational education **the meeting recommended that Governments should:**

- Develop a consistent and long-term overall policy for technical and vocational education and training for development.
- Establish, as a matter of urgency, wherever they do not exist, national councils which would bring together all those governmental and non-governmental agencies and institutions responsible for formal and non-formal technical and vocational education and training in order that effective programmes for development may be implemented and, as necessary, rationalised.
- Ensure that national councils foster and increase collaboration between the government, the private sector and non-governmental organisations in order to improve the standards of technical and vocational education and training.
- Establish appropriate machinery within and between government ministries to articulate and co-ordinate government training programmes for technical and vocational education and training.
- Maximise the use of scarce resources by encouraging national councils to give close attention to the need for collaboration between different educational institutions offering similar courses.

COUNTRY PAPER EXTRACTS ON THE MANAGEMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING FOR DEVELOPMENT

Comonwealth Caribbean

ANGUILLA

There is hardly any formal or non-formal technical and vocational education in Anguilla. However, with the Government in the process of developing a Technical and Vocational Centre, there is an urgent need for training educational personnel to manage such training.

ANTIGUA AND BARBUDA

The management of technical and vocational education in Antigua and Barbuda is admittedly an area that needs some attention. Schools which are owned and operated by Government come directly under the supervisory control of the Ministry of Education in every aspect of their operations. Non-government agencies have to observe, in theory, some regulatory principles embodied in the Education Act, but this requirement is loosely met. There is at the moment no machinery or provision for consultation between the community or other interest groups, and the various agencies involved in technical and vocational education in the determination of curricular content and evaluation standards. However, some training institutions like the State College, by virtue of their informal but close relationship with industrial establishments obtain some feedback on their work, which is taken into account in curriculum development.

The Ministry of Education is actively considering proposals for the formal establishment of machinery to promote the widest possible collaboration in the shaping of programmes, in the setting of evaluation standards and in other aspects of curriculum planning and implementation.

THE BAHAMAS

The management structure of technical and vocational education and training varies from institution to institution. Currently, there is no one machinery existing to co-ordinate all forms of technical and vocational education and training. However, some form of control is envisaged when the National Industrial Training Council is properly constituted.

There is an Advisory Committee on technical education which was re-established in 1975. The terms of reference of this Committee include:

1. The preparation of annual reports, according to guidelines established by the Committee, on technical and vocational training in the College of The Bahamas, the school system and in other establishments.

2. The preparation of a report on demand for manpower in the technical and vocational sectors and, if possible, projections on demand; all in accordance with guidelines to be established by the Committee.

Formal Programmes

The College of the Bahamas is administered by its Council which is composed of nine members as follows:

1. The Principal (ex - officio)
2. One public officer representing and appointed by the Minister
3. Six members appointed by the Minister of Education after consultation with such economic or social bodies and associations from which he considers that such members should be selected
4. A student of the College selected by the Principal and appointed by the Minister of Education.

All major decisions must be approved by the Minister of Education.

The Academic Board is responsible for the academic administration of the College and it is composed of the Principal (as Chairman), the heads of teaching departments, the librarian, a student and three persons selected by the Principal and appointed by the Council. Technical and Vocational Studies, Applied Science, and Business and Administrative Studies are academic divisions.

The Bahamas Hotel Training College is administered by the Bahamas Hotel Council a tripartite body consisting of representatives of Government, industry and labour. The College is financed by Government and the hotel industry. The Industrial Training Centre is administered by the National Industrial Council (interim), an arm of the Ministry of Education and Culture.

In Government schools, technical and vocational studies are supervised by the Division of Supervisory Services of the Ministry of Education. One section, with one Senior Education Officer, is responsible for the Primary and Secondary schools of New Providence. Another section, which has eight District Education Officers, is responsible for all Family Island schools. In addition to on-the-spot visits from these officers, seminars and other in-service activities geared toward curriculum implementation are also handled by them.

The Department of Nursing Education exists within the Ministry of Health under the Chief Nursing Officer. It is administered by the Principal Nursing Officer for Education; this officer plans and controls the budget. Minimum curriculum guidelines are set by the Council of Nursing of The Bahamas. The nursing faculty is responsible for curriculum development based on health sector policy and objectives and on advice from Ministry of Health officials and the Nursing Advisory Committee representing nursing leaders in the education service.

Non-Formal Programmes

The management of these programmes varies from one extreme to the other. In situations with training and education provided in privately owned and operated institutions, there is no community input other than that provided by employers, if such a feedback mechanism exists. Within the Ministry of Youth, Sports and Community Affairs, there are various levels of community participation for Youth Division activities. The Youth Division works closely with 40 to 50 registered youth groups. There is an advisory council or youth board. There is on-the-job training for six weeks where the activities of the participants are monitored and evaluated. Junior Achievement uses advisers from industry, and facilities, information and leadership performed by the community. The training performed by the Public Service Training Centre can be classified with other in-house training and education arrangements such as those of construction, banking and finance, and industry; in these situations, the management of the programmes is a "family matter".

BARBADOS

There is no single management structure for technical and vocational education and training since the responsibility does not rest with one Ministry or Department.

In the Ministry of Education there is an education officer whose responsibility it is to advise the Chief Education Officer on matters related to technical education and training. This officer also supervises the teaching of industrial arts programmes in schools, where the headteachers and the heads of the vocational studies departments are responsible for the functioning of the programmes.

The Samuel Jackman Prescod Polytechnic and the Barbados Community College are both departments of the Ministry of Education. The principals, assisted by deputy principals and the heads of various divisions are responsible for the type and functioning of programmes offered.

The manager of the Handicrafts Division of the Industrial Development Corporation assisted by a handicrafts officer is responsible for the development and functioning of training.

The Director of the National Training Board and the Director of Skills Training Programmes function under the Ministry of Labour and Social Security with various responsibilities for vocational training.

Co-ordination of Technical and Vocational Education and Training

The National Training Board was established under the Occupational Training Act 1979-82 to provide for the training of persons for or in gainful employment in occupations, in all branches of economic activity in Barbados. In carrying out its functions the Board through its Director works closely with all other institutions dealing with technical and vocational education and training.

Represented on the Board are the Ministries of Education and Labour, employers, employees and trade unions. The Board has the power to

appoint committees which assist with decision making, implementation and evaluation of specific training. The committees have the same type of representation as the Board, although some of the members are chosen because of their close association with and knowledge of specific trades.

Because of the small size of the island, communities are not greatly separated either by distance or by different interests in the training programmes. Technical committees of the Board are therefore representative of the whole island which is regarded as one community.

BERMUDA

An Apprenticeship and Training Council is in charge of all training through the Apprenticeship and Training Act. It is composed of 10 members: a chairman, three members representing employees, three representative employers, and three public officers.

It has advisory committees representing all the major branches of industry, for example construction, electronics, accounting, administration and secretarial. These committees are themselves composed of representatives from the particular fields. These committees use a Dacum method for indicating the terminal objectives they consider essential for competency in their particular areas of industry. From this a course outline and eventually a procedure is developed which allows the Training Council to keep its finger on the pulse of industry and give advice to Bermuda College on which courses are needed to fulfil the needs of industry. This close co-operation between industry and College ensures that training is carried out by the best possible means, whether it be formal in the classroom, work in the College workshops or on the job in industry.

BRITISH VIRGIN ISLANDS

Formal technical and vocational education in the British Virgin Islands is administered by the Department of Education. The 1977 Education Ordinance makes provision for an Education Advisory Committee (EAC) which advises the Minister of Education on educational matters. The membership of this committee represents industry and commerce, parents, the church, teachers, government and other community groups. Thus through this committee the local communities make their contributions to decision making. Sometimes ad hoc committees representing members of the EAC and other citizens may investigate a particular issue and report to the EAC and hence to the Minister.

Non-formal technical and vocational education may also be monitored by the EAC but there are other Government departments and committees which assist in this operation. The Community Development and Labour Departments do considerable work in evaluating non-formal technical and vocational education. These findings are fed into the unit of the Ministry responsible for development and planning. This unit then ensures that each project has training built into it to meet the needs of target groups.

CAYMAN ISLANDS

The government has assumed responsibility for vocational and technical training under the portfolio of Tourism, Aviation and Trade. The three

vocational schools are situated on two different sites, eight miles apart, and are directed/supervised/controlled by a Director/Supervisor of Technical Training. The head of each school is appointed by the Director/Supervisor.

DOMINICA

Formal Education

This has been carried out almost exclusively by the Ministry of Education through its number one institution the Clifton Dupigny Technical College.

In the formative years of the Technical College an Advisory Board was appointed but it never functioned. A period of ten years of inadequate co-ordination has thus ensued.

Recently a new Technical Advisory Board for the College was appointed to advise the Hon. Minister of Education on matters of technical and vocational education and training. The Board is to assist in promoting liaison between the Technical College and industry and, to assist the government and the staff of the College in raising funds for the running of courses, for tools, equipment and machinery.

Non-formal

This is carried out by several agencies some of which are Departments or Units of the Division of Education and Health, the Ministry of Labour and that of Agriculture.

Private, local non-governmental organisations like the Social League, Rotary, Dominica Association of Industry and Commerce (DAIC), the Planned Parenthood Association and some trade unions all do some form of education and training, directed towards the greater efficiency of their membership in particular, and interested individuals among the public.

A new entrant to the field of training is Management Consultant Limited, a local firm, concentrating on educating and training operators of small and medium sized businesses in middle management.

Technical and vocational education and training is still very much in its infancy, hence it lacks coherence, management and co-ordination of its elements as obtain in more developed countries.

JAMAICA

Management of the formal system is largely the responsibility of the Ministry of Education with other Ministries providing a few programmes. The non-formal system on the other hand is administered primarily by the Ministries dealing with youth, community and labour matters, as well as by private institutions.

There is also a National Training Board which has responsibility for co-ordinating all forms of vocational training. A major area of responsibility of this Board is the Apprenticeship Scheme.

Community involvement comes through participation of members of a number of organisations in committees and task forces appointed by the Minister of Education to examine matters critical to the advancement of education. These community organisations include business and professional groups, Service Clubs etc.

MONTserrat

The Ministry of Education, Health and Community Services is responsible for overseeing management of formal technical and vocational education and training. This it does by close collaboration with institutions under its control.

Non-formal technical and vocational education and training is not yet properly organised, and responsibility for this area is still fluid. However, the Ministry of Education, Health and Community Services has been taking an increasing interest in this area.

To date no properly organised mechanism exists to co-ordinate all forms of technical and vocational education and training. However, plans are underway to create an Advisory Body which will advise on action to be taken in this area.

ST CHRISTOPHER-NEVIS

At the formal level all the technical and vocational education institutions are under the direct control of the Education Department. The non-formal programmes fall under the portfolio of an Education Officer, based within the same Department, who liaises with all the other Ministries - Agriculture, Communications and Works, Finance - as the needs arise.

A vehicle exists for community participation. The State of St Christopher-Nevis is zoned for Youth and Community Councils set up with officers having direct responsibility for each locality. Through these channels matters of socio-cultural importance, as well as technical and vocational education can be expressed.

The Apprenticeship and Tradesmen's Qualification Act of 1971 provided for the setting up of an apprentice training scheme to satisfy the skilled manpower needs of the country.

It was envisaged that the scheme would be administered through the Office of the Director of Apprentices who would also be responsible for the payment of wages, holiday pay etc. The scheme would be financed by the employers with every employer being obliged to contribute in direct proportion to the size of the work force, with perhaps a subsidy from Government. In this way no employer could be said to be subsidising the training costs of another's work force.

ST LUCIA

Although consideration is being given to the establishment of a National Advisory Council on Technical and Vocational Education and Training, there is as yet no specific national body charged with the responsibility of

overseeing and co-ordinating the provision of technical and vocational education and training. At present, a close look is being taken by the Ministry of Education and Culture at the education system in order to promote stronger articulation among the various levels of technical and vocational education and training provided in the different educational institutions.

The management of formal training institutions is generally the task of the principal of the institution, who is responsible for initiating programmes, normally in consultation with relevant personnel from the private or public sector.

There has not been a strong emphasis on evaluation of programmes in the formal sector. However, current indications are that the educational institutions will gradually move towards the position of regarding the carrying out of evaluation activities as a necessary part of their function. In contrast, there is a tradition of involvement of local communities in the planning, decision-making and implementation of non-formal training programmes; and evaluation almost always forms a part of any non-formal project expecting to attract funding from regional or international agencies.

ST VINCENT AND THE GRENADINES

Government, through Cabinet, has given approval for the formation of an Advisory Committee to advise Government on the training needs of St Vincent and the Grenadines. The Committee comprises members from Government and the private, commercial, business and industrial sectors of the community.

TURKS AND CAICOS

An emphasis on technical education resulted from the appraisal of the education system in the nineteen sixties. It is not surprising that the input has been from the top - Minister, Chief Education Officer, Headmaster. The subject is still considered as being subject to the discretion of the Ministry which provides equipment, teachers and funds for maintenance.

The subject forms a separate department in the High School, and its head is answerable to the Principal who accounts to the Minister through the Chief Education Officer. Suggestions for change or improvement may be channelled from the community through the Parent Teachers Association.

Commonwealth Pacific/Indian Ocean

FIJI

The management of primary and secondary education is the responsibility of the Ministry of Education which provides teachers, prescriptions,

conducts examinations, etc. It is also the responsibility of the Ministry of Education to administer technical education at secondary and tertiary levels.

Apart from the Ministry of Education there is another statutory body - the Fiji National Training Council (FNTC) responsible for providing technical and vocational training. The Council was formed to cater for the needs of industry. The Council is funded by a one per cent compulsory payroll levy on employers. The FNTC, under the statutory regulation is a completely autonomous body providing its own staff who are responsible for developing courses and providing training to people in various sectors of industry. The Council awards its own certificates. While the Fiji Institute of Technology (FIT) provides training in central places the FNTC takes the training programme to the people. Besides FIT and FNTC, the two major training bodies, there are other organisations such as the Fiji Electricity Authority (FEA), and Telecommunications which have their own schools for the specialised training of their staff. Also, the Ministry of Youth and Sports is responsible for providing basically non-formal practical training to youths who have found academic education unappealing.

One of the major issues currently facing the development of technical and vocational education and training is the absence of a central authority for total co-ordination and administration. The absence of a central authority to administer and control technical education is not only taxing the country's economy but is adversely affecting training programmes and the output of qualified personnel. The establishment of a central authority or council would provide unity of control of technical education and training by the integration of the various training bodies, give improved utilisation of the present facilities, reduce or eliminate overlap in training and allow more economical and effective use of scarce financial resources. The development of a central authority would allow the introduction and development of courses designed to meet local conditions and requirements.

Members of the community are involved in the design and evaluation of courses. Before writing a curriculum for a particular course the need to develop a course is first established. The information on need is obtained from various sources such as the Fiji National Training Council, industries, individuals or the staff of technical institutes. Once the need is established, the school responsible for mounting the programme (School Board) with the assistance of the Industrial Advisory Board draws up the structure for the course. The structure is then approved in principle by FIT's Academic Board. The approved structure is then presented to the school specialist staff to write the syllabus which is scrutinised by the School Board and Industrial Advisory Board. The final draft is then presented to the FIT's Academic Board for approval.

The Industrial Advisory Committee meets at regular intervals to discuss the curriculum and recommends changes as necessary. A typical Advisory Committee consists of:

- Head of School
- Director of Training (Employer)
- Training Development Officer (FNTC)
- Specialist staff from the Institute
- Suitably qualified representatives from interested organisations.

KIRIBATI

A real need exists for more interaction between government ministries, church organisations and other non-government agencies concerned with all aspects of technical and vocational education and training. Fragmentation is leading to duplication of effort and a gross waste of both financial and manpower resources, which if unified would have a significant impact on many of the problems being encountered. It has been proposed and is currently under consideration that better management and co-ordination of all training activities will result from the establishment of a National Training Council, composed of representatives from both government and non-government sectors.

Whilst the Ministry of Education Training and Culture is primarily responsible for co-ordinating all training activities, the scattered nature of the islands makes effective co-ordination difficult, hence we have witnessed many independent training programmes implemented both by government and outside aid agencies which in certain cases have been irrelevant to the felt needs of the communities themselves. In respect of outside aid agencies implementing projects on outer islands, government has now recognised the need to co-ordinate their activities to ensure that such projects undertaken are in keeping with objectives of the National Development Plan.

The Technical Institute through its appropriate technology programme and mobile training teams has over the past four years established an informal network in co-ordinating training activities at community level. Close co-operation with Island Councils, Womens Interest Groups and church organisations has provided a valuable information source, which in turn has highlighted specific areas that require an input of training.

A vital factor in co-ordinating not only training, but many other activities, at village level is the role of the church. The church is a large, if not the largest factor in the village socio-political process. It is an integral part of the community and it plays an extremely influential role in the daily lives of people. The religion of a particular island's people has implications for the achievement of development objectives. Religion has influenced the social structure of the various islands and makes each island distinguishable depending on the religion of its people. It is therefore imperative that such a force is adequately represented on any management or co-ordinating committee concerned with the training function.

MAURITIUS

The Industrial Trade Training Centres are headed by a manager, the Handicrafts Training Branch by a supervisor and the Lycee Polytechnique by a principal. The heads of these institutions are responsible to the Chief Education Officer based at the Ministry of Education and Cultural Affairs.

Changes in management are possible when the Central Training Office becomes fully operational. The Central Training Office will eventually have the overall responsibility for technical and vocational education and training.