NATIONAL POLICY FOR TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET)



NATIONAL TVET POLICY

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- 1. The HEART Trust/NTA
- 2. Jamaican Universities and Community Colleges
- 3. Government Ministries and Agencies
- 4. School Board Chairmen
- 5. Principals
- 6. Teachers
- 7. Parents
- 8. Students
- 9. Industry representatives
- 10.TVET Consultants
- 11. Members of civil society



FOREWORD BY Honourable Reverend Ronald Thwaites, MP, JP MINISTER OF EDUCATION

The potential of Technical Vocational Education and Training (TVET) to change lives, grow economies and ensure a sustainable future is being increasingly recognised in local and global communities. The recent collapse of financial markets and the ensuing global recession forced a re-thinking of the imperatives required in order to drive national development. The Government of Jamaica, recognising the potential of TVET to create a workforce that inspires foreign and domestic investment which is critical for national development, has begun to strategically and systematically invest in the building of human capacity through TVET.

The HEART Trust/National Training Agency was established in 1982 with a mandate to develop the Jamaican workforce by increasing training. The number of TVET providers, as well as provision modalities, has been rapidly increasing within the public and private sectors.

The commitment of the Ministry of Education, Jamaica to TVET is evidenced by the steps being taken to integrate TVET in the public education system. Programmes leading to industry recognised certification are being offered in over one hundred high schools. Fundamental principles of TVET are being integrated in the national standard curriculum at grades 1-6 in an effort to provide wider exposure to career options and ultimately to better prepare tomorrow's workforce.

The Ministry of Education, Jamaica is privileged to have led the process of drafting this policy that has been developed to provide governance for TVET in Jamaica. It will provide a framework through which public and private entities may be guided towards the achievement of our national goal of a prosperous and sustainable future. We invite the full collaboration and cooperation of all stakeholders in the achievement of the objectives of this policy.

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Honourable Reverend Ronald Thwaites, MP, JP Minister of Education

EXECUTIVE SUMMARY

The twenty-first century has created greater demand for a more adaptable and skilled work-force due to modernisation, advancement in technology, and intense global competition in world markets. An improved climate of diversity in the industrial and service fields has brought about increased awareness of the important role knowledge and skills play in the development of the world economies. Investments in education and training contribute to the building of personal, family, and community resources and reduce the occurrence of crime and violence.

UNESCO's "Education for All" initiative has acknowledged that there is overwhelming evidence to support the important role technical vocational education and training (TVET) plays in promoting economic growth. This relationship between economic development and knowledge-based skills development has become more noticeable as progress is made in industrialisation and the demand for a knowledge-based, adaptable, and skilled workforce increases. To meet this demand for a more knowledgeable and adaptable workforce, it is essential for Jamaica to:

- a) raise the level of general education associated with vocational training
- b) create pathways from vocational training to higher education
- c) utilise competency based education and training (CBET) delivery mechanisms
- d) encourage partnerships between educational organisations and employment enterprises and improve access to additional standards to address emerging and expanding industry demands

The implementation of a TVET policy is one effective means by which entities may be guided to achieve the national goals for social and economic development through Technical Vocational Education and Training (TVET).

INTRODUCTION

Technical vocational education and training (TVET) refers to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic life. This scope of education and training is diverse and may be delivered by various providers, at different educational levels, for various age groups in both formal and non-formal settings. Options and modalities include:

- a) On the job training opportunities
- b) Apprenticeship
- c) Institutional post-secondary training opportunities (training centres, community based projects, training institutes, workforce colleges, community colleges, universities)
- d) Secondary school opportunities (Grades 7 13)

This type of education and training is intended to provide a foundation for the employability of individuals through entrepreneurial activities, the development of a broad set of personal and soft skills to contribute to lifelong learning, community building and social responsibility. It also provides persons with the skills and knowledge to encourage and support investment, build communities, and sustain economic and social development.

It is widely accepted that improvement in access and quality of education and training is the means by which workforce demands will be satisfied, especially at the higher levels. Such improvement is essential in order to foster entrepreneurship and attract well needed foreign investment to Jamaica.

At present, the education system is challenged by limited access to quality secondary education, and the under-performance of students that prevent the successful implementation of many improvement programmes.

According to the 2010 GEM National Expert Survey¹ (NES) conducted in Jamaica, education and training was ranked at number three as one of the factors constraining entrepreneurial activity in Jamaica, the other two being financial support and government policies and programmes. Education and training was also ranked as the number one factor that fosters productivity, and is most likely to improve entrepreneurial activity in Jamaica.

There are a number of challenges that have prevented the unification of efforts to build a sustainable TVET system. One such challenge is the absence of a policy to give national direction and focus to TVET as a major contributing factor in driving economic development. Some of the major reasons offered to support a policy are:

- a) There is a lack of recognition of the importance of TVET to nation building and an absence of support for the related national developmental goals, in particular, support to drive the mainstreaming of TVET in the secondary school system.
- b) Technical vocational education and training continues to be regarded as suitable for students who perform poorly in literacy, mathematics and the core sciences, for example physics, chemistry and biology.
- c) There is need for a national qualification and recognition framework to coordinate articulation and matriculation to higher education and training opportunities and bring programmes of training institutions in line with national development goals, and regional and global imperatives.

¹Global Entrepreneurship Monitor, National Experts Survey, Jamaica Report, 2010: http://www.gemconsortium.org/docs/download/2281

- d) It is imperative that there is an integration of general education and technical and vocational education and training. It must be recognized that science and technology is an intrinsic component of TVET and is critical to the development of a culture of research. This integration underpins the philosophy of TVET and supports the development of a creative and innovative citizenry.
- e) The inconsistency in the use of endorsed industry standards among educational institutions offering TVET programmes continues to contribute to the incongruity between the training outcomes and the requirements for higher education and the demands of the workplace both locally and internationally

Vision 2030, Jamaica, Goal 1, National Outcome Number 2², speaks to the design and delivery of a world class Education and Training system that assures individuals access to further education, training and decent work. Additionally, Vision 2030 Goal 3, National Outcome Number 11, addresses the desire for a technology enabled society which emphasises integration of science and technology and the creation of a dynamic and responsive national innovative system. Jamaica's National Training Agency (HEART Trust/NTA) has fully supported this position and have always promoted the importance of TVET to the development of the national economy. The National Training Agency supports the view that Jamaica can attain a competitive edge in the global economy if the human resources of the country have technical vocational education and training. The HEART Trust /NTA plays a significant role in equipping individuals with work related competencies enabling them to contribute to work place productivity leading to social and economic development. This is done by ensuring that skills offered are aligned with current labour market needs.

²Vision 2030- Jamaica National Development Plan – <u>www.vision</u>2030.gov.jm/Chapter 3

Through its status as the National Training Agency, the Agency leads the development of occupational standards, development of instructional resources, quality assurance, certification and accreditation of TVET programmes leading to NVQ awards and collaborates closely with the MOE to mainstream TVET in the formal education system. Its remit as the National Training Agency impacts the TVET system extending beyond the MOE schools to private providers, tertiary institutions and community training interventions. Its vision for the TVET system is captured in its mission which seeks to produce a Jamaican workforce trained and certified to international standards, stimulating employment—creating investments, contributing to the improved productivity, competitiveness and prosperity of individuals, enterprises and nations.

At the UNESCO³, International Meeting of Technical Experts held in Bonn, Germany on October 2004 experts declared that: "Skills development leading to age appropriate TVET should be integral to education at all levels, and [should] no longer be regarded as optional or marginal".

This declaration further concluded that: "It is especially important to integrate skills development in 'Education for All' (EFA) programmes and satisfy TVET demand created by learners completing basic education" 4

Technical vocational education and training has a major role to play in providing knowledge, skills and attitudes to empower individuals and support economic growth. It has been declared as the "vehicle for economic development", especially during this period of globalisation and economic recession. Increasingly, government and non-government organisations, as well as public and private education and training providers, are viewing TVET as essential in improving economic competitiveness and sustainability, which in turn will reduce poverty, crime and violence, and promote social inclusion for the benefit of all citizens.

³International Experts on "Learning for Work, Citizenship and Responsibility, in Bonn, Germany October 2004.

⁴UNESCO – International Experts Meeting – Learning for Work, Citizenship and Sustainability. Bonn, Germany , 2004.

SITUATIONAL ANALYSIS

Countries that have focused on TVET as a vehicle of economic development have realised the need for an appropriate mix of general and technical and vocational education. Singapore, for example, demonstrates a holistic approach to TVET. This country's key thrust in addressing the entire spectrum of educational offerings was to place a greater emphasis on technical education throughout the system. In 1991, Singapore focused on building the manufacturing and service sectors as the 'twin engines of economic growth"⁵ and companies were encouraged to diversify, upgrade and develop into strong export-oriented entities.

This perspective on post-secondary education was reviewed in light of the need to "increase the availability of well trained and qualified manpower in high technology, knowledge intensive and service industry sectors". As a result, 1992 saw the adoption of a new policy of providing a minimum of ten years basic general education in the secondary school system and the establishment of a post-secondary institute—the Institute of Technical Education (ITE)—by Singapore's Ministry of Education. This institution is now described as a principal provider of career and technical education, and a key developer of national occupational skills standards and certification that is dedicated to enhancing workforce competitiveness. These revisions were a clear indication of the country's recognition that TVET must be built on a strong education foundation in order to provide a wider and more skilled pool of labour to sustain economic growth and development and drive the transformation of Singapore's economy.

Jamaica is an independent country within the British Commonwealth. It became independent in 1962, inheriting a largely grammar school education system from the British.

⁵UNESCO-Education for All-Global Monitoring Report 2012 http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/qmr2012-ED-EFA-MRT-PI-07.pdf

The employed labour force statistics as shown in Table 1 below indicate a slight but gradually declined in employment rate over the period 2009 to 2012 from a total of 1,269,800 in 2009 to 1,261,800 in April 2012⁶. The rate of employment stands at 85.70% in April 2012, down from 88.64% in 2009.

EMPLOYMENT STATISTICS

YEAR		EMPLOYED LABOUR FORCE		UNEMPLOYED LABOUR	
	Total Labour Force (male & Female)	Employed	Employment Rate	Unemployed	Unemployment Rate
2009	1,269,800	1,125,500	88.64%	144,300	11.36%
2010	1,249,600	1,094,900	87.61%	154,700	12.38%
2011	1,251,900	1,093,500	87.35%	158,400	12.65%
April 2012	1,261,200	1.081,300	85.70%	179,900	14.30%

Table 1 - 2009 - 2012 Labour Market Statistics – Employment rate

Jamaica is classified among factor-driven economies that rely heavily on natural resources and labour, and dominated by extractive industries and subsistence agriculture. Agriculture, hotel and restaurant services, education and other service areas, such as financial intermediation, wholesale and retail, transport, storage and communication, continue to factor highly as major areas of employment over other areas such as manufacturing, and construction.

The focus on technical vocational education and training (TVET) (especially in schools) is largely a post-independence thrust by the Government of Jamaica, through the initiatives of the Ministry of Education (MoE), supported by its agency, the HEART Trust/NTA. The country depends largely on foreign investment for its economic development and prioritises value-added investments in production and services.

⁶Source: Ministry of Labour and Social Security's LMIS

Throughout the educational system, curriculum offerings and delivery modalities have focused on academic outcomes and not sufficiently on the attainment of competencies necessary for meeting the needs of the labour market. Despite the introduction of technical vocational education to Jamaica—with the establishment of Kingston Technical High School in 1896, and the subsequent establishment of thirteen similar institutions—no serious consideration was given to the development of a national TVET policy for secondary schools, to drive its importance to general education, and to promote the recognition of TVET as a key component in the development of skills and competencies needed in the workforce.

Over the last twenty years, the National Training Agency, HEART Trust/NTA, has established standards for the delivery of a number of technical and vocational programmes. These TVET programmes are based on endorsed industry standards for competency attainment at different levels with a strong emphasis on entrepreneurial training and information technology and a focus on the Competency Based Education and Training (CBET) delivery modality. However, these programmes have suffered for many years from the stigma that they are only for those students who are unable to meet the educational requirement in terms of literacy and numeracy. As a consequence, the programmes have become the option for students who are unable to advance through the formal school system or to tertiary education.

In effect, TVET has become linked, especially at the secondary level, with academic non-performance and low literacy levels. In several instances, students leaving secondary schools and vocational institutions are unable to matriculate to higher educational institutions, or to access work opportunities, because of their inability to meet the basic requirements for literacy and numeracy demanded for matriculation to higher level institutions and the workplace. In order to advance to a higher education level, many students require bridging programmes⁷ to assist them to meet academic programme requirements for tertiary institutions.

⁷Bridging programmes- regulated programmes formulated to assist individuals in meeting the requirements for entry into higher education

There is no compulsion for private training providers to utilise these endorsed standards for training. Most offerings do not meet the occupational skill requirements of the workplace. In addition, most schools offer too wide a variety of vocational programmes; many of which are impaired by ill-prepared instructors, out-dated or inadequate equipment and facilities and are not in keeping with the skills needs of the workplace.

A 1990 survey carried out by the Caribbean Community (CARICOM) Secretariat observed that TVET covers all programmes and schemes that contribute towards the development of knowledge and skills required for work. As an outcome of this survey, a multi-disciplinary task force was established to develop a Regional Strategy for Technical and Vocational Education and Training. The Regional Strategy was created to provide the basis for a cohesive framework for developing, improving, and coordinating TVET across the Region, and was adopted by the Caribbean Community's Ministers of Education at their 8th Meeting in Trinidad and Tobago in May 1990. A revision and update of the Regional TVET Strategy was undertaken in 2012 by CARICOM, in collaboration with Caribbean Association of National Training Agencies⁸ (CANTA), with the view to repositioning TVET in the region as the key force for workforce development and economic competitiveness.

At its 181st session, UNESCO's Executive Board proposed several strategies for supporting TVET over the period 2010-2015. These strategies are based on the evidence that TVET investments can be instrumental in reducing poverty either by significantly increasing employment opportunities, or by generating income through self-employment.

⁸Revision of Caribbean TVET Strategy: www. C-EFE_Revised_Draft_Report_TVET Strategy.pdf ridging programmes-regulated programmes formulated to assist individuals in meeting the requirements for entry into higher education

Among the six goals of the Education for All Movement supported by UNESCO and over 164 governments, is the goal to "promote learning and life skills for young people and adults by 2015". This goal supports the 2000 Millennium Development goal to fight hunger and poverty by "achieving full, productive and decent work for all". It also supports Goal #1 – Outcome #2 of Jamaica's Vision 2030 National Development Plan which speaks to the attainment of world class education and training.

⁹United Nations Development Programme - *Millennium Goals- htttp://www.undp.org/content/undp/en/home/mdgoverview.html*

MINISTRY OF EDUCATION'S GUIDING PRINCIPLES

There are four fundamental guiding principles which have been consistently emphasised by the Ministry of Education in respect to education and training. These principles relate to access, equity, relevance and quality.

Access

To provide access to a high standard of education for all students. With capacity at 87% at grades 10-11, it is evident that the system is unable to provide all children with adequate secondary education. In addition, many individuals with disabilities are unable to access adequate skills training in their area of choice. Access must be provided so that individuals can become skilled, with a lifelong learning approach to vocation, and become adept at developing new ideas and adopting best practices.

Equity

To provide equity in the distribution of resources among the schools and training institutions, so that they can all offer programmes of similar quality and content, with emphasis on innovation, critical thinking, analytical and problem solving skills, key employability, and entrepreneurial skills.

Relevance

Training programmes need to be relevant to the demands of the Jamaican society and in particular to the community within which the training is provided. Relevance must also be determined by market indicators and, as much as possible, in the context of the national goals to create a globally competitive workforce.

Quality

The provision of technical vocational education and training at all levels is essential to alleviate the negative impact of increased population, low income generating capacity and poverty. Technical and vocational training plays a vital role in developing skilled manpower, entrepreneurship and technological capabilities which contribute significantly to the country's economic development. It is therefore imperative that timely, relevant and appropriate technical vocational education and training is accessible to all individuals and presented as an important component of lifelong learning.

The absence of some or all of the above conditions, has contributed to low productivity, as is evident in the low literacy rate and general unpreparedness of many secondary school leavers for life, for work and to take advantage of higher educational opportunities.

TVET POLICY

Vision Statement

A technically competent, knowledgeable, and innovative workforce, where all citizens are empowered to effectively contribute to the nation's social, economic, and cultural development and global competitiveness.

Goal

To provide a national framework for the development and sustainability of TVET in the Jamaican education and training system.

Policy Aims

- a) Guide the development of a comprehensive, integrated, outcome-based TVET system
- b) Create a coherent framework for TVET systems to encourage research and development, stimulate productivity, guide career advancement and lifelong learning
- c) Create pathways to facilitate the progression of individuals through competency levels and career changes in keeping with current demands
- d) Improve the quality of TVET at all levels, and make it responsive to the needs of the labour market and accessible to all
- e) Strengthen the culture of entrepreneurship and support job creation in the economy, with focus on emerging industries
- f) Guide the establishment of a sustainable financing system for building and maintaining TVET structures

Policy Areas

The areas that this policy will address relate to:

- 1. Access, equity and relevance
- 2. Governance
- 3. Quality in TVET
- 4. Financing
- 5. Curriculum development, certification and recognition
- 6. Research, innovation and creativity capacity building

These areas are considered critical to the advancement of TVET.

Access, Equity and Relevance

Policy Objectives

The Government of Jamaica, through the Ministry of Education, the Ministry of Labour, the Scientific Research Council, and the Bureau of Standards shall:

- a) provide access, equity, and relevance in the delivery of TVET, to enable all to pursue programmes that lead to nationally and globally recognised certification for work and higher education in keeping with national and regional imperatives
- b) establish policies and guidelines to encourage the use of current data, trends and labour market information to guide the preparation of individuals for the workforce
- c) create education, training, and certification pathways to improve the employability of individuals.

Strategies:

- a) Create TVET laboratories that are suitably equipped and maintained to meet national and global standards
- b) Expand opportunities for education and training upgrade through partnerships and collaboration with work-based entities to meet the advancement of technologies and skills required for new and emerging industries
- c) Provide training opportunities to develop entrepreneurial capabilities
- d) Facilitate the expansion of relevant TVET programmes in keeping with national strategic goals and objectives and to meet the demands of the workplace
- e) Make provisions for individuals to pursue technical vocational education and training leading to certification
- f) Develop and implement standards to guide TVET providers in making provisions for persons with disabilities to access the training opportunities offered
- g) Diversify delivery modalities to accommodate a variety of learning needs; including online training and assessment modalities where applicable.

Governance in TVET

Policy Objectives

The Government of Jamaica (GoJ), through the Ministries of Education; Investment and Commerce; Labour and Social Security, and Science, Technology, Energy and Mining shall:

i. Establish a governance structure to allow for the effective implementation of the policy across all sectors

- ii. Streamline the public institutional framework to coordinate systems for the provision of national TVET opportunities for the benefit of all stakeholders
- iii. Establish standard operating procedures to enable and encourage compliance with this policy

Strategies

The Ministries of Education; Labour and Social Security; and Science, Technology, Energy and Mining shall collaborate to:

- Guide the development of a comprehensive, integrated, outcomes-based technical and vocational training system to meet the needs of the labour market
- Create strategic linkages with industry and TVET training partners locally, regionally and globally to contribute to the achievement of the nation's 2030 vision
- 3. Establish a coherent framework for all stakeholders to guide the planning, monitoring and evaluation for TVET towards workforce development and economic competitiveness
- 4. Align administrative structures to encourage and facilitate collaboration for effective and efficient use of human and physical resources
- 5. Establish systems of accountability to manage and maintain quality in technical vocational education and training
- 6. Educate and inform stakeholders on related and emerging issues in TVET as they impact national, regional and global imperatives
- 7. Establish standards for the approval and the registration of entities involved in the education and training of technical and vocational skills (TVET)

Quality in TVET

The measure of quality must be focused, not just on the outcomes or results of examinations or qualifications, but also on what strategies the Government, through the relevant quality assurance affiliates (National Education Inspectorate (NEI), National Training Agency, Jamaica Tertiary Commission (JTEC), University Council of Jamaica (UCJ) and NCTVET) will implement to ensure quality of TVET outcomes. *The focus on quality will also ensure that TVET providers are meeting the required standards in the establishment of TVET Institutions and the development and delivery of programmes.*

Policy objectives: The Ministry of Education and the Quality Assurance Agencies shall collaborate to:

Maintain and evaluate compliance regarding resources, standards and curricula development, training delivery, assessment, certification and recognition, and management to build a strong, effective and sustainable TVET system for all Jamaicans

Strategies:

The Ministry of Education shall:

- a) Provide quality educational offerings at all levels, to respond to the needs of the labour market, the requirements for national development and good citizenry
- b) Build the necessary human capacities to effectively manage and implement TVET to meet the needs of enterprises and the local and global labour force
- c) Strengthen institutions through the creation of Centres of Excellence to provide adequate teaching and learning environments for the development of knowledge, skills and attitudes
- d) Provide continuous opportunities for training providers to strengthen competencies thus enabling improvement in training outcomes

- e) Collaborate with the HEART Trust NTA to ensure that TVET programmes being delivered in the formal school system and informal providers are quality assured
- f) Regulate training providers and facilities to ensure that quality technical and vocational education and training is provided at all levels.

Financing of TVET

It is not desirable that the Government be the sole provider of TVET. Government must establish partnerships with entities such as the Jamaica Employers Federation (JEF), the Small Business Association (SBA), the Jamaica Manufacturers Association (JMA), and the Incorporated Master Builders Association. A sound technical and vocational education system benefits not only the individual but employers, government and society as a whole. Given the high costs associated with developing and delivering quality TVET programmes, all beneficiaries should contribute to the cost.

Policy objectives:

The Government of Iamaica shall:

- i. Stipulate guidelines for the financing of TVET
- ii. Establish or adjust mechanisms to allow for the funding of TVET across all levels to be underwritten by the mandatory contributions collected from employers, an appropriate annual budgetary allocation from the MoE, and grants from international donor agencies
- iii. Identify various sources of funding to ensure sustainability of TVET through the setting up of public private partnerships (PPP)

Strategies:

The Government of Jamaica shall:

- a) Enable legislation which will secure funding and implementation of TVET across all levels
- b) Establish a national TVET fund to provide sustainable financing for the development of technical vocational education and training across all levels
- c) Establish a sustainable financing system for building and maintaining the infrastructure for TVET
- d) Facilitate the provision of student loans, grants and bursaries for post-secondary training.

Curriculum Development, Certification and Recognition

The establishment of a qualification framework for recognition and articulation of competencies is essential for the advancement of a qualified and responsive workforce. Certification systems must allow individuals to advance and adapt to the changing needs of the economy and to take advantage of new and emerging technologies. Where appropriate, mechanisms should be adopted to encourage the recognition of prior learning to enable entry to higher levels of education and training.

Policy objectives:

The Ministry of Education shall:

- Establish the relevant certification and recognition mechanisms and frameworks to enable appropriate recognition of qualification, skills and competences at all levels of education and training
- ii. Enable articulation through the various pathways that are available for advancement within the education system

iii. Promote the integration of information and communication technologies in TVET to reflect workplace and societal demands

Strategies

- a) Curriculum development, implementation and certification guided by endorsed industry standards to maintain relevance and currency of training output
- b) Utilise available labour market data for decision-making in development of curricula and resource materials
- c) Establish a national qualification framework which will facilitate articulation across all levels and disciplines
- d) Establish mechanisms for the collaboration of industry stakeholders, the Ministry of Education and tertiary institutions in the development and review of standards and curricula for TVET implementation
- e) Revise curricula to facilitate the integration of TVET at all levels and to reflect new and emerging technologies and skills
- f) Develop and implement strategies to utilise the appropriate approaches/methodologies for the delivery of training and the assessment of competencies. For example: Competency Based Education and Training – (CBET)
- g) Utilise labour market data and relevant sources to ensure timely review and implementation of TVET interventions and offerings
- h) Implement career education at all levels to provide individuals with the needed information to guide employability and promote lifelong learning
- i) Encourage the delivery of relevant TVET offerings for all individuals including vulnerable groups and people with special needs.

Research, Innovation and Creativity

The global economy demands individuals, who are not only skilled and competent, but able to collect and analyse data and utilise information to create and improve output.

Policy objectives:

The Ministries of Education; Science, Technology, Energy and Mining; as well as the Ministry of Labour and their affiliates shall:

- i. Provide the necessary support to build the research capability of TVET professionals through training and exposure appropriate to their technical discipline
- ii. Encourage the delivery of training programmes that are research oriented and which promote, innovation and creativity, independent learning, and critical thinking
- iii. Promote the development of a culture of research in TVET by actively encouraging creativity, innovation and entrepreneurship.

Strategies:

- a) Train and encourage providers to critically analyse local and global labour market data and information to make informed decisions about changes and emerging workforce demands
- b) Strengthen the culture of entrepreneurship and innovation and support job creation in the economy, with particular focus on emerging industries
- c) Review and revise curricula and strategies to encourage research and innovation by including components of research and innovation in all TVET programmes
- d) Establish TVET innovation centres in schools to facilitate the development of ideas
- e) Provide incentives for engagement in research projects leading to new or improved outputs
- f) Provide incentives for education and training in new and emerging knowledge and skills

Capacity Building

Professional development programmes should be offered on a regular basis to up-grade and up-date lecturers/instructors/administrators and other special staff members in their areas of specialisation as well as promote pedagogical competence. Such programmes should take into account the strengths and weaknesses existing in TVET with the view to building skill and leadership competencies.

Policy objective:

The Ministry of Education shall:

- i. Initiate and maintain collaboration with industry through attachment, work study, exchange programmes to build competencies and maintain relevance of TVET trainers
- ii. Create a system to ensure that physical resources and infrastructure are upgraded and maintained so that training meets expected outcomes in relation to global, industrial, environmental and service standards
- iii. Ensure that teaching professionals have the necessary competences, qualification and experience to administer TVET programmes and that they undertake upgrading on a regular basis to keep abreast of new and emerging technologies and teaching strategies

Strategies:

- a) Establish standard qualification requirements for TVET practitioners to ensure they have the requisite competencies, qualification, and experience to deliver education and training at appropriate levels
- b) Provide opportunities for continuous professional development of TVET practitioners as well as regular exposure to industry to maintain relevance and currency

- c) Stipulate guidelines for the continuous upgrade and expansion of facilities to ensure state of the art equipment is available for training
- d) Provide adequate graduate and post-graduate education and training opportunities for TVET professionals to encourage and to engage in research for increased productivity
- e) Involve and mobilise professionals from industry and commerce (including retired professionals) to contribute to capacity building

THE GOVERNANCE AND MANAGEMENT STRUCTURE

Legislative and Policy Framework

The following are key legislations and policies that govern and support the education system in Jamaica. These contain guidelines that are important to the implementation of this policy.

- 1. The Education Act, 1965.
- 2. The Human Employment and Resource Training (HEART) Act, (1982).
- 3. The Career Development Policy (Draft -2004)
- 4. Child Labour Law
- 5. The Apprenticeship Act (in reference to work experience in schools)
- 6. The Lifelong Learning Policy (Draft 2005)
- 7. The Compulsory Education Policy (2009)
- 8. The National Youth Policy (2006)
- 9. The Education Regulations, 1980 (Education Code)
- 10. The National Council on Education Act, 1993
- 11. The Financial Management Regulations, 1996
- 12. The University Council of Jamaica Act 1987
- 13. The Parenting Commission Act
- 14.Council of Community Colleges Act

New Policy Requirements

A policy on Competency Based Education and Training (CBET) must be developed to support the implementation of the TVET policy. The methodologies utilised in the training and assessment of TVET is critical in the preparation of learners. Competency Based Education and Training methodologies must be thoroughly understood by all in order to positively impact the quality of the education and training output. At least one TVET subject must be taught in all public secondary level educational institutions and students should leave these institutions with certification in at least one TVET subject.

Stakeholders Roles and Responsibilities

The education authorities shall have primary responsibility for governance of the educational system. The following groups of relevant stakeholders shall be actively associated with policy formation in the planning process.

Ministry of Education

- a) Establishes a system of education and training designed to provide adequately for the planning and development of an educational product and service related to the changing needs of society
- b) Oversees an education and training system that facilitates individuals to transition from school to work, by providing them with opportunities to access further education and training and employment
- c) Effectively executes the education policy of the government
- d) Identifies and allocates resources
- e) Monitors and evaluates personnel involved in TVET programming whether directly or through respective agencies.

Technical and Vocational Unit

The Technical and Vocational Unit is the section within the MoE responsible for monitoring TVET programmes within institutions to ensure a responsive educational service, quality control, and adherence to relevant guidelines that will ultimately lead to an improved education and training system.

HEART Trust/ National Training Agency

The Human Employment and Resource Training/National Training Agency's (HEART Trust/NTA) role co-ordinates and regulates post-secondary and technical and vocational education and training thereby creating a competent and marketable workforce. The Agency must assume the strategic position as envisioned by the GoJ and the MoE to become the prime driving force of the human development strategy in relation to the national training system, which will include its rationalisation, configuration and governance (administrative and regulatory).

The HEART Trust/NTA provides technical assistance in the following areas:

- 1. The design and supply of occupational standards required by business and industry
- 2. Auditing and quality enhancement of TVET institutions and programmes
- 3. Collection and analysis of data on labour market demand and supply
- 4. Evaluate and certify students based on accepted system of standards and competencies
- 5. Accreditation of TVET institutions
- 6. Partnership in mainstreaming TVET in the formal school system

Jamaica Teaching Council

The Jamaica Teaching Council (JTC) will enhance and maintain professional standards in teaching, and the professional status of teachers. Its principal function is the development of the registration and licensing standards and the accreditation of teacher certification.

National Education Inspectorate

National Education Inspectorate (NEI) is charged with the responsibility of monitoring, inspecting, evaluating and reporting on the standards and quality of education in the school system. The NEI also monitors and reports on the effectiveness of Regional Offices in supporting school and students' performance.

Other Partner Agencies

Other relevant agencies that will impact the implementation of this policy include:

- 1. Jamaica Tertiary Education Commission
- 2. Teachers' Colleges and Universities
- 3. Private training providers and independent (private) schools
- 4. Caribbean Examinations Council
- 5. Council of Community Colleges of Jamaica
- 6. Jamaica Confederation of Trade Union
- 7. National Youth Service
- 8. Students' Loan Bureau
- 9. Social Development Commission

- 10. Jamaican Foundation for Lifelong Learning
- 11. Jamaica Library Service
- 12. Overseas Examination Commission
- 13. University Council of Jamaica
- 14. Other agencies responsible for workforce development

QUALITY ASSURANCE

Standards and Guidelines

Standards and guidelines must be established and compliance maintained to ensure that:

- a) Programmes and courses are endorsed by the National Training Agency which shall be independent of the management of training entities
- b) Institutions are accredited to offer the approved/endorsed programmes/courses
- c) Employed personnel possess the minimum qualification or experience within the area of specialisation as stipulated by the Ministry of Education
- d) TVET practitioners to participate in biennial upgrading/retraining within their skill area through training, on the job exposure (furlough), in service training workshops or other suitable means
- e) Infrastructure and facilities are developed, upgraded and maintained by the MoE to ensure access to relevant and current technologies and functional tools and equipment
- f) Industry personnel are involved in the design and monitoring of TVET courses

Programme Evaluation

Evaluation of programmes and outcomes must be conducted on a regular basis to monitor and maintain quality.

- a) Programmes should be evaluated periodically and benchmarked based on best practices in similar local and international contexts.
- b) The financing of evaluations should be undertaken by the MoE and the results communicated to stakeholders to impact improvements to school plans, curricular development, and resource acquisition.
- c) Student evaluations should focus on teaching and learning
- d) The management and administration of TVET institutions should be strengthened through improved knowledge and skills of managers and teachers

POLICY IMPLEMENTATION AND COORDINATION MECHANISMS

The Ministry of Education shall adopt an integrated approach to the implementation of the policy. This integrated approach should facilitate the mainstreaming of TVET throughout the various levels of the education system, to enable the optimisation of resources for technical and vocational training. The implementation therefore requires collaboration from groups inclusive of:

- i. Government Ministries, Ministries of Labour; Education; and Youth and Culture
- ii. HEART Trust/ National Training Agency
- iii. Industry lead groups
- iv. Assessment and awarding bodies
- v. Professional bodies
- vi. Churches (Community based training programmes)
- vii. Training Organisations tertiary institutions (universities, community colleges, workforce colleges), schools, TVET Institutes and private training providers

The implementation also requires the full resourcing of committees or department/units assigned to coordinate efforts to implement the policy.

Policy Review

The policy shall be reviewed every five (5) years. This review should take into consideration the adjustments to acts and policies related and relevant to this policy. The Ministry of Education shall appoint a committee to continuously monitor and evaluate the implementation of the policy.

Monitoring & Evaluation of TVET

The delivery of TVET programmes at all training entities shall be monitored and evaluated by officers of the MoE and the NCTVET. The delivery of the Resource and Technology and Career Education programme will be monitored by the Technical and Vocational Unit in the MoE.

FACTORS SUPPORTING THE IMPLEMENTATION OF TVET POLICY

The success of the policy implementation is dependent on a number of factors. These include the establishment of partnerships, marketing and promotion, utilisation of labour market research, human resource development, allocation of resources, compliance with regulatory frameworks, career guidance, and work based programmes.

Partnerships

Although governments carry the primary responsibility for technical and vocational education, in a modern market economy technical and vocational education policy design and delivery should be achieved through new and effective partnership arrangements among government, employers, professional associations, industry, employees and their representatives, the local community, non-governmental organisations (NGOs), as well as international partners. Through partnership arrangements, the following should be achieved to enhance the success of the policy implementation:

- i. Funding made available through the provision of grants, and incentives to encourage innovations and problem-solving
- ii. Provision of scholarships for individuals to encourage the pursuit of studies TVET programmes or in new and emerging occupations
- iii. Review and or amendment of the Apprenticeship Act of 1957 to facilitate new initiatives (including the expansion of industry areas) to enable these initiatives to have legal and regulatory status

Partnerships should be supported by a coherent legislative framework to allow for the launching of a national strategy for change. Within this strategy, the government in addition to providing the leadership and vision for technical and vocational education, must also facilitate, coordinate, and establish quality assurance mechanisms to ensure the provision of quality technical and vocational education for all.

Marketing and Promotion of the Value of TVET

The marketing of TVET should be done on a continuous basis to remove the negative stigma that is attached to it nationally. Such public education will increase the nation's awareness of TVET, its role in national development and also remove stereotypes associated with pursuing TVET programmes. All the departments and institutions that are involved in the delivery of TVET shall contribute to this national public education and awareness campaign. Additionally, the Ministry of Education, Trade Unions, private training providers, employers and civil society should contribute to promoting the value and necessity for TVET to drive the economic development.

Utilisation of Labour Market Research

To be most effective TVET should be based on accurate information about the needs of the labour market. The Planning Institute of Jamaica (PIOJ), Jamaica Promotions Corporation (JAMPRO) and the Statistical Institute of Jamaica (STATIN) provide labour market data and information to the TVET system. National labour market analysis will be needed to support Vision 2030 strategies and plans. Specific surveys (on request), annual labour market reviews, local skills needs analysis and permanent sector based observation, in close cooperation with the professional associations, should be strategies used to promote changes.

Therefore, the need exist for a central clearing house of labour market information that is readily available and up to date in order to provide the support for national development. The ultimate goal of TVET is increased employment. TVET programmes must therefore be linked to the job market. In this way, the socio-economic relevance of TVET can be clearly seen.

Provision of Adequate Resources

The goal of human resource development for TVET is to recruit, retain and develop a highly competent, motivated, and innovative workforce. Critical to the success of National TVET Policy development and implementation, is the need to have TVET professionals who are capable of adjusting to changing technological environments and providing the level of support and direction that is required to ensure success. The areas to be covered for training should include the management of the TVET System, training methodologies, and human resource development for TVET instructors.

For successful implementation all training institutions shall conduct routine periodic review of programme offerings. This ensures currency and relevance to labour market needs and the existing TVET curricula to prepare professionals to deliver at the various levels of the education system. Additional changes to improve resources include:

i. The expansion of the faculties and departments that are geared towards the preparation of TVET professionals. This includes the expansion of TVET programmes in post-secondary and tertiary institutions to include associate and applied degrees to facilitate and promote articulation

- ii. The inclusion of programmes of continuous professional development to ensure that individuals are kept abreast of the current and relevant technologies, processes and procedures. This may include TVET management courses as well as in-service training and mandatory time-bound industry furlough for instructors
- iii. Increased support for and encouragement of research education facilitated through universities and other research oriented institutes. This will provide research information to support the review, development and implementation of policy, curricula, instructional and assessment strategies and assist and encourage creativity and innovation

Regulatory Frameworks

National Qualification Framework

An established National Qualifications Framework shall regulate the recognition of qualifications within the education system and establish standards for programme development. This will allow for articulation to high level programmes and create pathways for career advancement and lifelong learning.

Legal and Regulatory Framework

A legal and regulatory framework should be developed to promote and guide the implementation of training in the workplace especially as it relates to the requirements of the apprenticeship and other work based/work experience programmes. This framework shall include reference to the relevant legislation to support the TVET policy.

These include Compulsory Education Act, the National Youth policy, the Apprenticeship Act, HEART/NTA Technical Operating Model, relevant International Labour Organisation (ILO) and Caribbean Community (CARICOM) documents supporting TVET and the UNESCO's work agenda.

Career Education Programme

Career Guidance in the formal schooling context should promote technical and vocational education as a viable and attractive choice for young people. It should cover a broad range of occupations and include supplementary visits to workplaces. This educational thrust should make individuals aware of the eventual necessity of choosing an occupation and the importance of ensuring that this choice is made as rationally as possible. In addition, it will assist students and their parents or guardians in making a positive choice concerning educational streams, and encourage persons to keep open a wide range of options to increase learning and occupational flexibility.

Guidance for the infusion of career education in training programmes shall include alignment of workforce education programmes and skill requirements of the new economy and allow for the development of the curriculum framework for career and technical education.

Work Study/Work Experience and Apprenticeship

The goal of the Apprenticeship programme is to provide a continuity of education and work experience for apprentices while providing the sponsoring firm with a talented individual who has demonstrated a desire and willingness to plan for his/her future. The programme should provide the apprentice with a solid foundation of practical experience in combination with an educational component that leads to nationally recognized credentials upon completion. The focus of such programmes should be to create a learning platform for transitioning into a career, with infusion of practical experiences accompanied by a structured educational component. The goal is to create a pool of competent individuals to satisfy the needs of modern industry, through a process of structured on-the-job training and certification.

Industry and commerce representatives shall be invited to participate in the various TVET Programmes by providing work experience opportunities for the students/trainees. This activity will be done on a formal basis throughout the country. The objective is to give students the opportunity to work along with skilled, experienced persons in business and industry in their area of specialisation.

Key Success Factors

In order to successfully implement the activities of the TVET policy the following guidelines are proposed:

- i. Responsibility for the implementation of this Policy in collaboration with all sectors concerned shall rest with the Ministry of Education
- ii. Key activities involving several Ministries shall be clearly defined with a description of the roles and responsibilities of each partner

- iii. The National Training Agency shall be responsible for the national list of professional standards and qualification
 - iv. A spirit of collaboration should exist between all providers of TVET. Funds shall be accessible to all providers
 - v. The Ministry of Education's Technical and Vocational Unit, the HEART Trust/
 NTA and the NCTVET shall be responsible for providing the expertise on
 competency and curriculum standards, development, training of staff and
 assessors, research on TVET, and the maintenance of the National Qualification
 Register of Jamaica.
 - vi. A strong marketing and promotion plan shall be implemented to promote TVET

APPENDICES

APPENDIX I

Glossary of Terms

Words/Terms	Description/Definitions
Accreditation	Process through which a legally responsible agency or association grants public recognition to a school, institute, college, university, or programme of study that meets minimum established educational standards.
Assessment	The process of gathering evidence to determine whether a student has met the required standards. Assessment is also used as part of the learning process to assist the learner in making progress.
CBET	Competency Based Education and Training (CBET) is a teaching and assessment methodology that focuses on outcomes that are linked to the needs of the workforce as defined by employers and professionals within disciplines. Outcomes are stated in operational terms which may be used to train and assess competencies in general education as well as technical vocational education and training.
Certification	Process of formally validating knowledge, know-how and/or skills and competences acquired by an individual, following a standard assessment procedure, leading to the award of qualification by an accredited institution or awarding body.
Competence	Proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and/or personal development.
Curriculum	Set of actions followed when developing a learning programme, including defining training goals, content, methods (including assessment) and materials.
Learning outcomes	Statements of what a learner knows, understands and is able to do on completion of a learning process, defined in terms of performance criteria based on knowledge, skills, attitudes and competence
Learning programme	Programme of studies or training defined by a curriculum that may consist of one or more modules, units, subjects or courses or any combination of those elements.
Level	Position where a qualification is located on a qualifications framework based on level descriptors
Module	A component of a larger qualification which is certified or recognised independently. (Sometimes, it means a component of learning and teaching within a programme, not independently certifiable).

Words/Terms	Description/Definitions
Provider of education and training	7
Qualification	Formal outcome of an assessment and validation process which is obtained when a recognised awarding body determines that an individual has achieved learning outcomes.
Qualifications frame- work	Instrument for the classification of qualifications according to an established set of criteria for specified levels of learning achieved, thereby improving the transparency, access, progression, comparability and quality of qualifications.
Quality Assurance	Generic term for all activities that provide assurance that the educational and training services of an organisation are continually being delivered effectively, to the required standard, and in line with published criteria/goals and objectives.
Skills	Ability to apply knowledge to complete tasks and solve problems. Skills are described as both cognitive (employing logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

APPENDIX II

Acronyms and their Meanings

Acronyms	Meanings
CANTA	Caribbean Association of National Training Agencies
CAP	Career Advancement Programme
CARICOM	Caribbean Common Market
CBET	Competency Based Education and Training
CCCI	Council of Community Colleges of Jamaica
CEP	Compulsory Education Policy
CSEC	Caribbean Secondary Examination Certificate
CSME	CARICOM Single Market and Economy
CVQ	Caribbean Vocational Qualifications
CXC	Caribbean Examinations Council
GEM	Global Entrepreneurship Monitor
HEART Trust	Human Employment and Resource Training Trust
ICT	Information and Communication Technology
ILO	International Labour Organisation
JAMPRO	Jamaica Trade and Invest
JEF	Jamaica Employers Federation
JFLL	Jamaica Foundation for Lifelong Learning
JTC	Jamaica Teaching Council
МоЕ	Ministry of Education
NCTVET	National Council on Technical Vocational Education and Training
NEI	National Education Inspectorate
NGO	Non-Governmental Organisation
NQR	National Qualification Register
NTA	National Training Agency
NVQ-J	National Vocational Qualifications of Jamaica
NYS	National Youth Service
ROSE	Reform of Secondary Education
STATIN	Statistical Institute of Jamaica
TVET	Technical Vocational Education and Training
TVETRSS	Technical Vocational Education and Training Rationalisation of
	Secondary Schools
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VTDI	Vocational Training Development Institute