

Tertiary and Vocational Education Policy

1. Introduction

Tertiary and Vocational Education encompasses all post-secondary education, except for academic study which comes under the purview of universities as governed by the Ministry of Higher Education and the University Grants Commission. While it is desirable that all education should be coordinated, currently TVE is governed by the Ministry of Skills Development and Vocational Education and the Tertiary and Vocational Education Commission. TVE is delivered by a range of institutions under the purview of the Ministry, training institutes operating under other ministries and several private institutions, all of which are required to register with the TVEC.

Internationally as well as in Sri Lanka there is increasing awareness of the need for more and better TVE. For many years Sri Lanka worked in terms of the old British dichotomy between academic education and what was seen as practical training for hands on work. When the requirements of occupations not associated with academic training became more sophisticated, they were fulfilled at what were termed polytechnics, with less prestige than universities. But in the eighties Britain gave polytechnics university status, in a process which was seen as upgrading.

In Sri Lanka, while plans are made in terms of three sectors in the economy agriculture, industry and services, Vocational Training is identified with the first two and mainly with the second. There is little formal training for the service industry, though it is clear that many jobs are now available in this area for skilled workers. Given that the Labour Force Participation Rate is reported as reducing, it is imperative to upgrade Skills Training, to make it both more attractive and more productive, and to expand training for the service sector..

In other systems such as that which obtained in Germany, the two streams were considered parallel, with training for practical jobs being seen as on a par with more academic courses.

This led to both types of education having sufficient appeal to make for a well trained and competent workforce in more spheres than where a traditional academic versus manual skills dichotomy prevailed. Sri Lanka has in theory recognized the need for such a system, but

mechanisms to establish this, to ensure seamless transition between the different branches of education, and to increase the appeal of vocational training, have not been developed.

There is need then to establish a collective and coordinated approach to plan and implement training programmes to meet national requirements. The Policy will ensure Training Delivery in a context of TVE institutions having annual targets based on national needs and taking measures to improve the employability of trainees and mitigate dropout rates.

2. Increasing the appeal of the sector

It is imperative to increase the appeal of the TVE sector, and ensure adequate recognition for a well trained workforce for all economic activity, in particular in sectors which are expected to provide more jobs in the future. Courses should be designed to introduce students to the sector, and provide them with skills that will assist them to move on a clear career path with mechanisms for upward and horizontal mobility within their chosen field. Such courses will be in conformity with the National Vocational Qualifications framework, which needs to be mapped against other national and international qualifications, so as to guarantee quality for employment anywhere in the world. This will also be incorporated within the Sri Lanka Qualifications Framework (SLQF) so as to establish equivalences through credit computation.

2.1 Procedures therefore should be put in place with the following objectives,

- 1) To identify training needs based on labour market analysis
- 2) To ensure high level training, for which there needs to be careful selection of teachers with mechanisms for regularly updating their knowledge and skills
- 3) To identify employability outcomes of each programme through tracer and centre based studies
- 4) To identify skills needs of industry and for foreign employment opportunities and set national training targets annually
- 5) To provide employees acceptable to industry and able to contribute actively to development
- 6) To guide training providers to set annual training targets based on national training targets

- 7) To take measures to mitigate dropout rate and to reduce unemployment of VT pass outs
- 8) To have continuous improvement in training delivery processes; institutional training and apprenticeship
- 9) To popularize the National Vocational Qualification framework while providing equivalences for non-NVQ qualifications, so as to promote career progress and further education and training

2.2 Effective Quality Assurance is vital for TVE programmes and to this end,

- 1) No training shall be operated without TVEC registration
- 2) All courses with relevant National Competency Standards and CBT curricula shall obtain TVEC accreditation and award NVQ certificates to trainees
- 3) All training centres shall install the Quality Management System (QMS) introduced by TVEC or ISO Certification.
- 4) Each Institution shall prepare an Annual Training Delivery plan based on the target set through coordination of Ministry agencies. The Institution shall include registration, accreditation and its QMS schedule in its plan

3. Liaison with employers

Training for occupations should be based on the requirements of employers. Skills that are required, and the curricula to generate such skills, should be developed in close association with employers. Employers should also be involved in systems of assessment, and in providing On the Job Training (OJT), which should be an essential component of training for all occupations. Consultation with employers should be systematic and entrenched. Though in the past the sector worked through Trade Councils, these were comparatively informal arrangements. Recently however the Ministry has established Sector Skills Councils with clear mandates, which are intended to work in partnership with the TVEC and with the National Apprenticeship and Training Authority (NAITA). There are four such Councils at present, but it is necessary to identify other sectors and establish professional bodies that would partner TVEC and NAITA to help to fulfill their responsibilities.

3.1 Councils with clear mandates to contribute to syllabus design and delivery, and to assist with training and the provision of apprenticeships, should be established for the following sectors,

- a. Construction (including Electricity connection)
- b. Manufacturing and Light Industry (including Electrical and Electronics and Plastics, Rubber and non-metal manufacturing)
- c. Hospitality
- d. ICT
- e. Automobile engineering
- f. Textiles and apparel
- g. Fine arts and design
- h. Care, Counselling, Health (including Pharmaceuticals) and Education
- i. Financial and Business Services
- j. Food Industry

3.2 Constant interaction with employers is essential and in particular to ensure that courses lead to employment. Apart from the Sector Councils, there should be close liaison in the regions with the local Chambers of Commerce. With regard to promoting employability, the Skills Development / Career Guidance office in each division should, in coordination with the head of each training institute, monitor employability of the pass outs of each course and recommend appropriate remedial action by for instance,

- a. Finding out employment status when issuing the certificate
- b. Facilitating employment by establishing effective career guidance centres in each District with input to each training centre
- c. Forwarding the names of those unemployed to the Sector Councils and to regional Chambers of Commerce
- d. Tracing students for two years to find out employment status and salary level every six months
- e. Maintaining a Register of pass out employment to record employment status at issuing of certificate and six months after the completion of a course

- f. Comparing employment status with tracer study results at TVEC and discussing any difference
- g. If employment rate is less than 80%, exploring reasons for low employment rate and taking actions to mitigate them
- h. Terminating courses in general if employment rate is lower than 50% for two consecutive years or reserving training for those training institutions with the best employment outcomes for the particular course.

There should also be clear policy guidelines on the sharing of information, so as to maximize stakeholder awareness of training outcomes. The sector should develop a system to share information of details relating to training programmes. The TVEC should for this purpose prepare handbooks for each Sector, that lay out the basic learning outcomes at each level of training and indicate the possible career paths available in each sector. These Handbooks will be in English and may be used for subsidiary soft skills training, which will be mandatory for all occupations. The Handbooks, which will be developed in collaboration with Sector Councils, will contain a glossary of tools and instruments and concepts relevant to each sector.

Stakeholders and interested parties should have information readily available and opportunities to respond to this information, in particular with regard to employment prospects. While TVE institutions have the right not to share sensitive information that could lead to adverse outcomes for students, they should ensure that relevant information is constantly updated and maintained, in accordance with formats provided by the TVEC.

The TVEC shall develop and maintain an appropriate Management Information System (MIS) as the central information source and all TVE institutions are required to provide information on training as per the guidelines of the TVEC. The TVEC and all TVE institutions shall ensure that sensitive information is not in the public domain. TVE institutions are required to provide information related to the recruitment, assessment, certification and employment of trainees with respect to each training programme, along with details of these (e.g. mode of training, duration, medium, commencement of the programme)

4. Ensuring Holistic Training

Discussions with employers have made clear the need for a rounded training that includes communicative competence and awareness of workplace norms. Technical skills should of course include theoretical knowledge, but there is also need of cognitive skills with regard to conceptualization and coordination. Initiative and entrepreneurship skills, the ability to solve problems and make decisions through reasoning should also be inculcated in training. Interpersonal skills are also needed, leadership capacity and the ability to work in teams and in particular to communicate effectively. Ability to use technology is desirable, while for enhancing employability a command of English is essential. Development of a rounded curriculum should be an ongoing process, with the Sector Skills Councils engaging in regular consultation with their membership to make requirements clear.

The sector should also be involved with planning for the General Education system, given that a recent study by the International Labour Organization suggests that *‘Going by recent sector-wide skills assessments, it appears that Sri Lanka’s general education system is failing to develop the cognitive skills of large numbers of its graduates. It has also failed to impart several urgently needed technical skills such as the ability to write and communicate clearly in even the mother tongue, let alone English. Therefore as a first step, the general education system needs to be overhauled in such a way that it shifts out of the business of imparting facts and moves into building the skills necessary to process and analyse facts, make connections and see the big picture, and then communicate the analysis clearly and succinctly through presentations and report writing.’*

While TVE curricula can make up for shortcomings, the education sector as a whole should aim at producing students with a wider range of competencies that obtains at present. Suggestions as to Educational Reforms must take into account national needs and work through effective consultation, as envisaged when the National Education Commission was set up. The actions outlined before are not a substitute for careful restructuring of the entire educational system, with priority to ensuring employability of its products.

Courses must necessarily include English and Soft Skills. All NVQ Courses should include modules for this purpose and assessing these should be an essential component of any NVQ course. In addition, an NVQ Level 1 Foundation course could introduce English competence and general cognitive and soft skills, while NVQ Level 2 should strengthen these while providing introductory material about the different sectors, to facilitate choice of specialization along with understanding of possible career paths, these courses could also be delivered by private service providers. They could also be taught in schools, so as to encourage students to explore the alternatives to academic education available in the TVE sector.

5. Flexible Delivery of Training

There is also a need to develop a range of course types, so that there are opportunities for training for students in the course of work experience as well as in preparation for work. Amongst the difference modes, with flexible learning opportunities, that need to be provided more widely are,

5.1 Full time day courses for school leavers who intend to find employment on completion of courses

This is the main mode of training in training institutions throughout the island. But intake is limited by the fact that only those without employment can follow these courses. Some young people find semi or unskilled employment directly after school for economic reasons, often in the sales and services sectors. But, though skills they have following school or with brief training suffice for such occupations, they do not provide long-term or developing career paths. It is necessary therefore to provide part time courses that will allow students to obtain an income while also developing their competencies. We need therefore to promote also,

- I. Morning or afternoon half day courses to enable youth to do a job in the rest of the day. These courses should be conducted in Colombo and suburbs and major cities and training centers should have officers to assist trainees find employment. When these young persons acquire skills sufficient for higher level employment which training promotes, they may give up the semi-skilled job.

- II. It should also be recognized that those in satisfactory employment need skills and higher qualifications for career progression. Since they cannot follow full time or even half day courses, they should be provided with opportunities to follow evening and week end courses and distance education courses.
- III. It is also desirable to provide training during full time apprenticeships, and this model should be provided in close collaboration with leading employers in particular fields. Arrangements should be made for learning and absorption of theory on a weekly basis, with the provision also of soft skills in evenings or at weekends. Such soft skills may also be offered to already skilled workers under the same employer.

The sector should also facilitate self-study, and for this purpose it should ensure that curricula are readily available and readily understood by all stakeholders, through Sector Guides as noted above. The TVEC should also produce study materials in the form of user friendly Handbooks. These are not a substitute for the hands on training that is desirable and the opportunities to discuss problems in a learning environment, but they will help with providing students with basic understanding that will facilitate further learning.

6. Ensuring Quality Training and understanding of Training requirements

- 6.1 Training Delivery should be systematic and consistent. To ensure this
 - a) No training Institution should deliver training without TVEC registration as per the Tertiary and Vocational Education Act No 20 of 1990.
 - b) No course relevant to NVQ qualifications already developed shall be delivered without TVEC accreditation as specified in the NVQ Operations Manual
 - c) All training centres are expected to install a Quality Management System by year 2018
 - d) Continuous assessment (Formative Assessment) shall be compulsory for all NVQ courses. Each student is required to maintain the Formative Assessment Record book introduced by TVEC or a book prepared as per the format of the book introduced by TVEC.
 - e) If success rate is less than 80%, the Head of the Institution and / or Director (Training) of the Institution is required to take the following actions.

- I. Find out the reasons for low success rate
 - II. Take actions to mitigate them
 - III. Inform the Ministry and TVEC about reasons for lower success rate and actions taken to mitigate them
- f) Conduct assessments and repeat assessments as per the NVQ Operation Manual. Assessors, in addition to submission of assessment results to the training centre and TVEC, should submit a report analyzing assessment results with proposals to improve the teaching – learning process
- 6.1 TVEC shall send representatives to each training institute at least once a year and prepare a feedback report for each institution and a general report that will
- a. Analyze results with targets set at ATDD meeting
 - b. Assess shortcomings and propose improvements for the sector
 - c. Present this report to the Ministry and Heads of Institutions to use as a basis for discussion at the annual planning meeting

Proper selection and training of trainers is vital to ensure effective delivery. All trainers should have exposure to industry before or as they begin work and there should be provision for regular placements to ensure knowledge updating and understanding of employer requirements. Teachers need constant exposure to industry while updating of teaching methodology should also take place regularly. Quality Circles in all sectors should be established on a regional basis, with mechanisms to update skills every year through short courses. All training institutions should appoint academic coordinators in all training centers, who will monitor delivery.

Courses to develop trainers are also needed, including for English and Education. Diploma level courses will help to provide up to date trainers for lower level courses in different sectors.

Students should be able to understand the requirements of the occupations open to them and what they will learn and how this will be assessed. Competency requirements and the syllabus to fulfil these should be systematically prepared, by agencies which will need continuous training in such preparation, with mechanisms to ensure consultation of prospective employers. Following recent consultations about the NVQ Operations manual, it

was decided that TVEC, which is responsible for curricula, should work in general with NAITA and Sector Councils to prepare Competency Standards and this should go hand in hand with development of curricula, which will primarily be entrusted to the Department of Technical Education and Training (DTET), along with UNIVOTEC, with involvement also of industry. The importance of involving Sector Councils or equivalent bodies in all procedures must be recognized. The TVEC is responsible for all qualifications up-to Level 6 and will work together with UNIVOTEC to prepare Degree Level qualifications at Level 7 that will include a range of study systems, including the provision of credit for job experience that is presented analytically through portfolios.

In rationalizing the system of developing syllabuses, there is need to establish mechanisms to publish Sector Guides for each sector to provide clear and easy to understand information to potential students. Assessment systems should be explained in such Guides, which should also include basic introductory information about the sector, with details of possible job opportunities.

The current practice of conflating syllabuses for different levels should be changed, with clear identification of the requirements at each Level. In general, Level 3 should lead to a Certificate that testifies to basic skills facilitating productive employment in a particular sector. Level 3 courses could be even of just 3 months duration, though that should be followed by On the Job Training (which may not be essential for 6 month Level 3 courses. But the practice should be encouraged of students moving into jobs after initial training, and then returning on the basis of their performance, for Level 4 training that will move them to supervisory or more specialized or management skills in the sector. Level 4 training will require On the Job training, with certification based on performance as a whole in the workplace, in addition to Competencies and Cognitive Learning. All NVQ courses should encourage creativity and ensure awareness of environmental concerns, for which teaching staff in the sector may need retraining, so as to ensure that they are aware of the full extent of skills and attitudes to be inculcated in students.

7. Career Guidance mechanisms and increasing awareness of the sector

Knowledge about the sector is limited and the current education system stresses academic achievement with few opportunities for students to appreciate the immense possibilities open to them in this sector. It is vital therefore that better career guidance systems be established and information made readily available to students. In order to maximize opportunities, there is need of liaison with prospective regional employers as well as regional officers concerned with rural development. The sector should also ensure that all institutes are in possession of information required to better target potential students and for this purpose an effective coordinated Management Information System should be in place.

The Ministry will set up in each District Secretariat a TVE Advisory Committee. It should be chaired by the District Secretary, but day to day responsibility should be given to the District Skills Development Officer and the Director of the District Career Guidance Centre. District Career Guidance sectors should be the responsibility of the three major service delivery institutions, with each taking responsibility for setting up a centre at a teaching centre in the District. Services should also be delivered at Divisional Secretariat Level, with monitoring through Divisional Skills Development Officers and others concerned with economic activity requirements, with plans being presented as to satisfying them. This does not do away with the requirement for Career Guidance Officers in all Training Centers, in addition to individuals responsible for academic affairs and for administration (though in small centers all these can be the responsibility of the head of the institution). All Centre Career Guidance officers should collaborate in the dissemination of information and the organization of regular job fairs and school visits. These committees should report regularly to the parent institutes and to the TVEC, to fulfil its responsibilities with regard to planning.

The Committee should include local Education officials who should provide information about Technical Education in schools, examination results and dropouts, teacher requirements for preparation for working in the sector etc. It should also liaise with GN Division Economic Development and Divineguma officials to obtain information about prospective employers at GN Division level, as well as opportunities for the development of Small and Medium Enterprises in particular areas.

The Committee should develop District and where needed Divisional plans on the basis of the information obtained and draw attention to training needs as well as possibilities of value addition through encouragement of business development by students at each Centre. The different agencies working in each District should also coordinate so as to avoid duplication of courses where there is a limited response and to promote better delivery when pooling of resources is possible. Syllabuses should include project work, with groups putting forward business plans and prizes of start up funds should be made available on a District basis, with priority given to relatively underprivileged Districts.

All institutions and in particular Career Guidance centers should give priority to increasing the involvement of women, whilst also ensuring participation of the disabled with suitable accessibility and deprived groups. All reports and plans should register the importance of equity in this regard and ensure that these factors are monitored and participation increased, with special attention also to job placements.

7.1 The Committee should, in consultation with the Head of each training centre, develop a system to reduce the Drop Out rate by, for instance,

- a. Inviting dropouts for a counselling programme within one month of dropping out. Telephone contact may be needed if otherwise there is no contact. If the drop out does not respond to calls, contact his/her parents
- b. Find out the reasons or problems for drop out and propose a scheme to help students to overcome those problems
- c. Direct the dropout to different training programmes if he/she has left due to mismatch of occupation
- d. Direct the dropout to apprenticeship if he/she has left the course due to financial reasons
- e. Maintain a Dropout Register to record name of dropouts, reasons for drop out and actions taken
- f. Inform the number and rate of drop out of each course within one month after completion of a course, with reason for drop outs and mitigatory action taken to the governing institution. The Ministry. Career guidance officers should send Divisional reports on this to the Ministry

It will be mandatory for teachers on every course to meet parents at least once every two months (and at least twice for three month courses). They should ensure that parents follow the progress of their children and themselves fulfill any requirements such as signing progress records etc. Parents should be informed if students are not regular in their attendance and requested to explain reasons for this and take remedial actions.

8. Involvement of the secondary education sector and ensuring better preparation

It is also desirable to draw attention to the potential of the sector by giving it a higher profile in the education system. Currently there is little attention to technical education at junior secondary level. The so-called basket of technical subjects is disorganized and suggests specialization which is inappropriate at that level. There are also few opportunities for students who are interested in a career in this area to develop further at a young age. The TVE sector will therefore explore the opportunity for joint programs between schools and training institutions, where schools provide core and employability skills and training centres provide the technical skills development.

The school system must provide avenues for Technical Education at an early age so that a choice can be made before Ordinary and Advanced Levels. Technical Education should be provided more systematically at school, through syllabuses that introduce students to the sector as a whole. Basic understanding of tools and their use (with attention to safety requirements) should be inculcated and students trained in practical work for households such as wiring and laying of pipe lines. Awareness of the work done in each sector should be introduced, with understanding of environmental concerns, and systems of dealing with waste and solid waste. The importance of renewable energy should be taught and students made aware of the increasing role of Information Technology in all professions.

Systems of using school plant for encouraging involvement in this sector should be developed. Principals should be requested to provide facilities for TVE after school hours or at weekends. NVQ Level 1 and Level 2 courses may be taught during this time, for nominal charges or with free tuition for students in underprivileged areas. Mechanisms should also be

put in place to encourage girls to attend such classes, since it is desirable that the sector should be free of gender bias or concentration.

Increasing the appeal of TVE

The system of applying for courses should be publicized very clearly, with maximum information provided to encourage entry into the system. TVE should be brought to the attention of the public and principals and students through regular publicity including through Social Media. Advertisements should be placed twice a year, at least a month before courses begin, generally in January and in July (with provision for courses targeting those who have completed the Advanced Level examination to begin in September).

- A. Advertisements calling for applications should be in both Sinhala and Tamil and where relevant in English
- B. Advertisements should be easy to read and specify principal details, without overload. Directions to District Career Guidance Centers should be provided for further information to be obtained, with provision also for consultation of Divisional Skills Development Officers who should be available for consultation throughout the month preceding admission. Private suppliers may place their own advertisements but may contract with Skills Development Officers (and District Career Guidance Centers) to provide information about their courses too

9. Selection process

- a. Each Training Centre shall have a clearly formulated and publicized selection process as approved by the governing institution. Private providers should inform TVEC in writing their criteria for admission when applying for registration of accreditation of courses.
- b. Special consideration shall be given to improve equity, accessibility and gender balance on the following lines,
 - Minimum of 20% of the enrollment shall be allocated to candidates of families receiving social support
 - Minimum of 10% of the enrollment shall be allocated to differently abled (disabled) candidates
 - Minimum of 30% of the enrollment shall be allocated to female candidate

9.1 Mechanisms should be developed to encourage students in the above categories, through systematically targeted assistance as appropriate.

In all these cases, this requirement is subject to there being candidates of these categories who qualify for entry and have performed satisfactorily at any selection test or interview. A training centre with low numbers of women and other groups requiring support will need to justify low numbers and show evidence of course marketing materials that target these groups, and that there are women involved in the selection process.

- a. Each student shall be issued with a letter of acceptance which will specify the duration of the course, learning requirements, provisions with regard to On the Job Training, the course fee if any, the assessment process and the certificate to be awarded.
- b. An official receipt shall be issued for any payment made by students
- c. Each training centre shall maintain a database with backups and / or a Registry of enrolment with Registration Number, Name, address, NIC number, course selected of each student, with a note on progress entered every month
- d. Each student will be issued an Identity card from the training center

9.2 Given the importance of this sector and the need to increase understanding of the manner in which training is delivered, it is desirable to clarify the costs of all vocational training programmes. Providers, including those in the state sector, should establish appropriate charges for these. Private agencies registering with the TVEC should make clear the principles on which fees are prescribed.

Within the State sector, the principle prevalent in Sri Lanka, that no student should be deprived of education because of difficulties about meeting costs, should be observed. This is especially important in this sector, given that such education is vital in a context of changing social and educational requirements.

There should therefore be a system, which is easy to understand and to access, to provide free or subsidized courses as appropriate. Though fees may be levied where courses are arranged for the convenience of those in employment or otherwise occupied, regular courses should be freely available to those being trained to enter the labour market. This is particularly important with regard to courses which provided

access to employment essential for social and economic developments. A system of loans, to be repaid only upon appropriate employment, may also be developed so as to facilitate expansion of training opportunities.

As noted elsewhere in this policy paper, encouragement of women, the disabled and those requiring social support, is desirable, through payment of fees in addition to other financial support for fee-levying courses.

10. Rationalization of sector responsibilities

While there are several training organizations, including a few state institutions that provide training for the sector in particular subjects, there are three primary organs of state for training. These are NAITA, DTET and the Vocational Training Authority. While each of them has distinct roles, they must work together and specialize in different service areas.

There should be no unnecessary overlap, or duplication or competition. In general their roles and responsibilities are as follows,

10.1 NAITA is in essence responsible for Apprenticeships and should also undertake provision of On the Job training for DTET and VTA (though those institutions too should develop close contacts with industry so as to be able to provide such placements themselves). NAITA should not duplicate the Centre based training of those two institutions, but should develop further its model of Apprenticeship based training, whereby students are in employment with cognitive learning being delivered at their place of employment once or twice a week. This model should also be made available for DTET and VTA students as possible. NAITA, in view of its close connections with employers, is also the main instrument of developing National Competency Standards.

In particular NAITA should,

- i. With regard to trades/occupations where the demand for training is higher than the current supply of training in institutions, take action to expand apprenticeship in those trades and TVEC shall encourage, including through grants, opportunities for such training through training centers
- ii. Endeavour to ensure that in time On the Job training is available for all courses, though at present this may not be available for Level 3 courses. But opportunities for

center visits with close observation of work in progress should be arranged for that Level too.

10.2 DTET is the flagship training institution for center based training (CBT), and works through Colleges of Technology and Technical Colleges. It should also develop an Academic Wing that is primarily responsible for syllabus design and this may also work in the field of teacher development. In any case DTET should provide for academic mentoring and ensure that all trainers attend refresher courses on a regional basis.

10.3 VTA is the main training institution for the country and, except with regard to a few sectors and only at its District Centers, should concentrate on training from Levels 1 to Level 4. While it needs to streamline its activities, so that there are fewer centers offering just one or two courses, it should rationalize activities on a District basis and provide training in the different sectors identified in its various centers in each District. It must work together closely with the Academic wing of DTET with regard to academic supervision and mentoring.

All three of these institutions shall prepare an institutional Annual Implementation Plan to meet the annual training target set out at the annual meeting at the Ministry held for this purpose.

This plan should also set out training needs for trainers, along with mechanisms to update their industrial experience.

- I. Each institution shall specify the course accreditation schedule in their annual plan
- II. The institutions should promulgate training calendars for each year, coordinating these if possible, with reference also as appropriate to the University Colleges and the University of Vocational Technology

TVEC is responsible for coordination of the sector and should, in consultation with the agencies, establish clear procedures for selection of teachers, providing them with pre-service training and also regular updating. Agencies should coordinate activity to establish regional training centers where refresher programmes are conducted regularly, with the Directors of Training in each institution ensuring that all instructors have opportunities to share experiences and consult senior trainers.

They should also ensure regular contact with industry, with regular placements that enable updating of knowledge of both technicalities and changing employment requirements. In addition to technical expertise, trainers must understand pedagogy and ensure delivery that achieves required learning outcomes, with the full participation of all students. It cannot be stressed enough that the TVE sector needs qualified and experience instructors to train a much wider range of students as they are more diverse than secondary school students and this diversity will increase as the TVE sector expands. Possibly, TVE instructors may play a bigger role than secondary school teachers in supporting youth to obtain qualifications which will help them to start their career path. TVE instructors should play a key role in keeping youth engaged in training and are required to provide pathways to students in order to pursue them to higher level studies in the TVE sector. Traditional jobs are changing and new jobs are emerging that require higher levels of literacy and numeracy, but also skills for sustainability, skills in using technology and knowledge and skills for further learning in the same field. Therefore TVE instructors will need higher level qualifications to meet these challenges. It is desirable too, that TVE should work towards producing multi-skilled craftsmen, and ensure flexibility and adaptability so as to fulfill workforce requirements readily.

A Unit to train all TVE instructors and award professional qualifications is essential, based either at NAITA or at DTET, with regional branches to provide regular refresher courses. Except for the initial pre-service training, which will also include training with regard to the holistic needs of the sector, part time training is preferred so that all instructors can participate and TVE programmes could be conducted without interruption. All TVE institutions will need to consider the following with regard to recruitment and development of high quality professional instructors,

- i. Different qualifications are needed for different target groups, with stress on teaching skills and the ability to promote group learning for early school leavers in particular TVE courses
- ii. Industry experience as a precondition
- iii. Sound communication and soft skills
- iv. Technology know-how

All permanent instructors are required to obtain training certification within two (02) years from the date of appointment. Instructors on contract or visiting basis shall also obtain relevant qualifications and this may help them to find permanent employment in the TVE sector.

Planning and coordination

TVEC is also responsible for overall coordination with regard to catering to national needs and should ensure that the following information is obtained and systematically collated each year, in particular Input from Training and Labour Market analyses. TVEC should assess Training Capacity each year in terms of national needs

- a. All Public, Private and NGO sector training institutions are required to inform their training capacity for the next year in respect of each trade by August 31 of each year to the Planning Division of the Ministry and to the IS division of the TVEC in a format given by TVEC
- b. NAITA is required to estimate capacities of training places available for both apprenticeship and on the job training in the following year in respect of each trade and inform those details to the Planning Division of the Ministry and to the IS division of the TVEC by August 31 of each year
- c. TVEC is required to sum up total training capacities in respect of each trade under Institutional training/Apprenticeship in Public, Private and NGO sector training institutions by September 30 of each year
- d. TVEC should also monitor the employment and employability of those who have been trained through ensuring Centre based monitoring of those who qualify at each Centre.
- e. TVEC shall conduct tracer studies of each trade taking representative sample of those passing out each year, within six months of certification. The results of traces studies should be available, with analysis by June 31 of each year
- f. For this purpose, all training institutions shall provide relevant information timely as requested by TVEC
- g. All public and private training centers shall maintain a register of drop outs and inform the dropout rate of each course to the planning division of the Ministry and to IS division of TVEC within one month after completion of a course. All institutions

should have informed the dropout rate of each course at each centre in the previous year to the IS division of TVEC by August 31 of each year

11. Annual Training demand

TVEC shall estimate the annual training demand of each trade by Sept 31 of each year considering the following factors,

- a) Labour market analyses of total employed in each trade
- b) Rate of departure for foreign employment
- c) Rate of retirement
- d) Growth rate of relevant industry sector
- e) Rate of higher studies and voluntary unemployment in each trade found out through tracer studies

TVEC shall analyze all VET Plans and Labour Market Information and identify new training courses and centers to be established with locations and capacities. If necessary, TVEC may have further discussion with training institutions, NVQ steering committee and relevant Industry Sector Councils. TVEC shall prepare a concept paper / preliminary proposals on development of new training courses and new training centers.

TVEC shall get validated the annual training needs from relevant Industry Sector Council (ISC) by October 20 of each year and publish those training needs on the TVEC website before October 31 of each year. In case, relevant ISC is not yet established, training needs shall be validated by the Sector Committee established by the TVEC

12 Annual Training development and delivery (ATDD) meeting

- A. The Ministry shall organize a meeting of all leading public sector TVET institutions in November each year to finalize the annual training development and delivery plan as given below
- B. The meeting shall deliberate the TVEC's proposals on development of training centers and courses, approve them and assign institutions to implement them
- C. Based on annual training needs validated by the ISCs and Sector Committees as relevant, the meeting will set annual training targets for each institution including apprenticeship by November 30 of each year considering demand, capacity, employability rate and dropout rate

13 The role of UNIVOTEC and the possibility of higher qualifications in the sector

TVEC should also work closely with the University of Vocational and Technical Education, which has recently set up University Colleges. These institutions function at Degree and also Diploma level. UNIVOTEC also provides courses in pedagogy, but it is desirable that these be delivered regionally too. DTET should deliver these, for certification on a modular basis by UNIVOTEC, in terms of the provision in its act for validation of services provided by other institutions. UNIVOTEC is also responsible for Level 7, i.e. Degree Level, certification, and should give substantial credit to previous learning and performance,

UNIVOTEC should develop a modular approach to certification that provides a ladder for career advancement, based on a judicious mix of cognitive learning and practical achievement. It must entrench recognition of certificates and diplomas awarded by TVEC and give greater credit to self-learning and productivity in the workplace. The certification, at Diploma Level, of University College students should be accompanied by pathways to a degree based on work performance.

UNIVOTEC, together with DTET, should also develop degree level courses for potential trainers, targeting in particular those who have qualified in the Technology stream at the Advanced Level examination. Such courses should give considerable weightage to practical application of learning, and in particular teaching practice at the basic level courses the state and other institutions should provide.

The TVE sector is subject to constant developments in technology, working systems, job opportunities etc. Therefore, in addition to constant updating of courses, there is need of regular updating of teaching staff. It is imperative therefore that a dedicated trainer and teacher training body be established, with a mandate to develop master trainers as well as teachers. While UNIVOTEC may be responsible for degree level courses, an active teacher development body should have responsibility for updating teaching staff as well as monitoring their delivery. Active involvement in updating, with the preparation of teacher portfolios recording best practice and attention to work experience of students, should be given credit towards certification and career development of training staff.

UNIVOTEC should explore modular qualifications systems based on practical application as well as cognitive skills and should develop a system of assessment and assessor training. DTET / NAITA should develop teacher updating institutions in the regions and institute mandatory refresher courses with the involvement of prospective employers.

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