



**TECHNICAL AND VOCATIONAL EDUCATION  
AND TRAINING AUTHORITY**

**NATIONAL POLYTECHNIC STANDARDS  
AND GUIDELINE**

**May, 2019**

# **FIRST SCHEDULE**

## **INSTITUTIONAL STANDARDS**

### **Citation**

1. These standards may be cited as National Polytechnics Standards for Accreditation and Operations;
2. These standards are to be read in conjunction with standards for TVET Minimum Infrastructure and Equipment, National Polytechnic CBET Programmes and National Polytechnic Libraries;
3. These standards will be abbreviated as NP/INST/STD/00.

### **Interpretation**

In these standards, unless the context otherwise requires:

“Act” means the Technical and Vocational Education and Training Act, 2013;

“accreditation” means the process by which the Board formally recognizes and confirms by certification that an institution has met and continues to meet the standards of academic, training and competence excellence set by the Board in accordance with the provisions of the Act;

“Authority” means the Technical and Vocational Educational and Training Authority established under Section 6 of the Act;

“Board” means the Technical and Vocational Education and Training Board established under Section 8 of the Act;

“Cabinet Secretary” means the Cabinet Secretary for the time being responsible for matters related to technical and vocational education and training;

“Certificate” means the level of qualification below diploma or its equivalent; “Course” means the programme of instruction comprising a range of syllabus content areas for trainees to acquire knowledge, work attitudes, skills and competences for employment in formal or informal sectors.

“Curriculum” means the programme of courses fulfilling the requirements for a certificate or diploma in a particular field of study.

“Diploma” means the level of qualification below degree and above a certificate;

“Industrial attachment” means a supervised practical experience that is the application of previously studied theory under the supervision of a trainer and a supervisor in the industry.

“Institution” means an institution that promotes or offers technical and vocational education and training;

“Manager” means a person engaged with the approval of the Board to manage a TVET institution;

“National Polytechnic” means an institution declared a National Polytechnic in accordance with Section 26 of the Act;

“Private institution” means an institution which is not a public institution;

“Programme” means a sequential grouping of courses which forms a considerable part, or all, of the requirements for an academic credential or an occupational objective.

“Public institution” means an institution established or maintained by use of public funds or by the community;

“Quality assurance” means the procedures, processes and systems used to guarantee and continuously improve the training standards of a TVET institution;

“Standard” refers to an established norm or requirement;

“Trainer” means a person registered under section 25(1)(b) of the Act;

“Training” includes technical and vocational education and training leading to acquisition specialized skills and knowledge that can provide the practitioner with livelihood;

## **Application**

These standards shall apply to:

1. All public National Polytechnics established in Kenya;
2. All private National Polytechnics established in Kenya;
3. All Open, Distance and e-learning (ODEL) centres of National Polytechnics operating in Kenya.

Vision, Mission Statement and Core Values

### **NP/INST/STD/01**

A National Polytechnic shall have Vision & Mission statements and Core Values which clearly and succinctly indicate its strategic direction.

### **Guidelines**

- 1)The Vision statement shall clearly outline what the National Polytechnic desires to be;
- 2)The Mission statement shall incorporate elements of the National Polytechnic’s business purpose and values, succinctly describing why it exists and what it does to achieve its vision;
- 3)Statements of Vision and Mission shall be prominently displayed and appear in key documents of the National Polytechnic; and
- 4)The Core Values of the National Polytechnic shall be clearly stated.

## **Accreditation Status**

### **NP/INST/STD/02**

The registered and licensed National Polytechnic shall have full accreditation status in Kenya. Each shall have a registration certificate and license as legal instruments of accreditation that authorizes the institution to discharge its mandate.

#### **Guidelines**

- 1)The accreditation status may be attained after at least three years of operating as any other lower TVET Categories status recognized by the Authority;
- 2)The number trainees enrolled in Diploma programmes in an accredited National Polytechnic shall not be less than 70% of the total trainee enrolment.

## **Governance and Management**

### **NP/INST/STD/03**

A National Polytechnic Legal order shall clearly articulate its governance and management structures in line with the TVET Act, 2013. It shall ensure that there is clear separation of powers between the governing organs.

#### **Guidelines:**

- 1)A National Polytechnic shall have clear organizational and administrative charts showing the inter- relationships of the various organs and offices;
- 2)Shall have documented policies that include but not limited to human resources policy, research policy, ICT policy, disability policy, gender mainstreaming policy, curriculum development policy, TVET integrity policy and Internal Quality Assurance Policy;
- 3)Shall develop statutes, rules and regulations for its governance and management in line with section 26, 27, 28 and 29 of the Act. These shall include;
  - a) Student conduct and discipline;
  - b) Staff code of conduct;
  - c) Terms and Conditions of service of staff; and
  - d) Student handbook containing, inter alia, admission requirements and fees guideline.

## **Human Resources**

### **NP/INST/STD/04**

A National Polytechnic shall have adequate and competent human resources to carry out its mandate in accordance to its human resource policy.

#### **Guidelines**

- 1) Adequacy of staff shall be dependent on the institution's approved staff establishment;

- 2) The Principal/CEO/Director or equivalent of the National Polytechnic shall be a person appropriately qualified with extensive training, administrative and research experience;
- 3) The training staff of a National Polytechnic shall meet the qualifications outlined in the Standards for TVET CBET Programmes as provided for in Trainers qualification framework;
- 4) The administrative staff of a National Polytechnic shall have requisite qualification in their areas of operation; and
- 5) Every National Polytechnic shall clearly articulate its appointment criteria as stipulated in

Table 1.

Table 1: Minimum Criteria for Appointment of training staff.

	<b>Function</b>	<b>Tasks</b>	<b>Requirements</b>
1.	Technical Instructor	<ol style="list-style-type: none"> <li>1. Supervises Work-Based Learning</li> <li>2. Conducts pre-scribed Competency Assessment</li> <li>3. Maintains Training Facilities</li> <li>4. Utilizes readily prepared professional notes in facilitating training</li> <li>5. Ensures gender sensitivity and equality in workshop participation</li> </ol>	KNQF level 5 in the technical/vocational domain (Craft) + certificate of an approved ToT for Technical Instructors
2.	Trainer	<ol style="list-style-type: none"> <li>1. Is a professional and keeps his professionalism up to date</li> <li>2. organises a good mix of class-room learning and practicals</li> <li>3. administers/ conducts a training programme</li> <li>4. Utilises electronic media in facilitating learning.</li> <li>5. provides advice and support learners in their learning career</li> <li>6. The trainer is actively involved in training on the job/ in the actual practice of the workplace</li> <li>7. Assesses student's competencies.</li> <li>8. Ensures internal quality control</li> <li>9. Can act as an entrepreneur and transfer these skills to his/her students.</li> <li>10. Ensures gender sensitivity and equality in classroom participation</li> </ol>	KNQF level 7 in the technical/vocational domain (Bachelor) +certificate of an approved ToT for Trainers

3.	Principal Trainer/Developer	<ol style="list-style-type: none"> <li>1. Facilitates development of competency standards</li> <li>2. Conducts Training Needs Analysis</li> <li>3. Designs and conducts research in education and training in her/his domain</li> <li>4. Develops/adapts a training curriculum</li> <li>5. Develops/ adapts learning materials</li> </ol> <p>Those of the trainer plus:</p> <ol style="list-style-type: none"> <li>5. Develops/ adapts assessment tools</li> <li>Develops/ adapts Learning Materials for e-learning</li> <li>7. Uses and evaluates assessment instrument</li> <li>8. Analyses difference in tasks, roles and positions of female and male participants in school and their working situation and takes this into consideration when developing the curriculum material and in his/her training</li> </ol>	<p>KNQF level 9 in the technical/ vocational domain and/or experience as trainer (minimum 4 years) + certificate of an approved TVET (curriculum) development training</p>
4.	Principal Trainer/Manager	<p>Those of the trainer plus:</p> <ol style="list-style-type: none"> <li>1. Prepare and manage training budgets</li> <li>2. Leads a team in a TVET centre</li> <li>3. Coordinates research projects in education and training in the domain of the team</li> <li>4. Manages attachments contracts for students</li> <li>5. Provides training for workplace instructors and trainers</li> <li>6. Manages HR of the team</li> <li>7. Promotes, advocates and strengthens industry and TVET linkages</li> <li>8. Designs and Develops maintenance system of training facilities</li> <li>9. Ensures gender sensitivity and equality in the team and stimulates active participation of all team members.</li> </ol>	<p>KNQF level 9 in the technical/ vocational domain and/or experience as trainer (minimum 4 years) + certificate of an approved TVET management training programme</p>

5.	Deputy Directors	<p>Those of the principal Trainer/Manager plus</p> <ol style="list-style-type: none"> <li>1. Leads an Academic Department</li> <li>2. plans, implements and coordinates training programmes;</li> <li>3. coordinates the development and implementation of curricula, training programmes and/or courses;</li> <li>4. develops and maintains academic quality standards and policies;</li> <li>5. coordinates academic programs and support operations;</li> <li>6. coordinates the allocation of instructional and research funds and other resources;</li> <li>7. establishes policy on faculty appointment, evaluation, promotion and tenure; and</li> <li>8. Assures Overall training and development of staff in the Division.</li> <li>9. Coordinates internal quality assurance in the department</li> <li>10. Can act as an entrepreneur and transfer these skills to his/her colleagues in the department</li> <li>11. Ensures gender sensitivity and equality in the department and stimulates active participation of all team members.</li> </ol>	Experience as a Principal Trainer/ Developer or trainer/ manager (minimum 4 years)
6.	Director/	<p>Coordinates the planning and implementation of training programmes for national needs in line with the Constitution, MDGs, Vision 2030 and other relevant provisions;</p> <ol style="list-style-type: none"> <li>2. Initiates, coordinates and implements TVET training policy;</li> <li>3. Coordinates the Institute's overall development projects;</li> <li>4. Ensures effective mobilization and utilization of human, financial and physical resources in the Institute;</li> <li>5. Plans, coordinates and reviews staff development and training programmes;</li> </ol>	Experience as a Principal Trainer/ Manager (minimum 4 years)

		<ol style="list-style-type: none"><li>6. Establishes collaborations and linkages with other Institutions, enterprises and stakeholders;</li><li>7. Oversees overall student welfare</li><li>8. Oversees overall staff welfare in the Institute; and</li><li>9. Ensures effective interpretation and implementation of relevant government policies</li><li>10. Implements and coordinates the institutions quality assurance policy</li><li>11. Acts as an entrepreneur and transfer these skills to his/her staff</li><li>12. Ensures gender sensitivity and equality in the Institution and stimulates active participation of all team members.</li></ol>	
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## **Training Programmes**

### **NP/INST/STD/05**

A National Polytechnic shall offer programmes that are commensurate with its institutional accreditation status and that meet the standards of TVET CBET Programmes.

#### **Guidelines**

- 1) A proposed National Polytechnic shall submit no more than four self-developed TVET CBET Programmes to the Authority for consideration for accreditation;
- 2) A proposed National Polytechnic shall not launch any programme until it becomes a legal entity through a legal order;
- 3) A Centre of excellence shall offer programmes deemed to be of national strategic importance.

## **Financial Resources**

### **INST/STD/06**

A National Polytechnic shall have adequate financial resources to meet its obligations.

#### **Guidelines**

- 1) Activities and work plans shall be supported by budget and audited accounts for the last three years to assess financial viability;
- 2) In determining the adequacy of the institution's financial resources, reference will be made to the differentiated unit cost;
- 3) Shall manage its financial resources as stipulated in the Legal Order and other relevant legislations.

## **Planning**

### **INST/STD/07**

A National Polytechnic shall show evidence of long and medium term plans to ensure sustainability and continuous improvement.

#### **Guidelines**

- 1) A National Polytechnic shall have at least a 10-year Master Plan that outlines its physical, training programmes, financial and human development;
- 2) A National Polytechnic shall have a physical Master plan that indicates the location of existing and proposed physical infrastructure; and
- 3) A National Polytechnic shall have at least a 5-year strategic plan that inter alia outlines its overall development including, but not limited to TVET CBET Programmes, physical facilities, trainee enrolment, staff and staff development, ICT Research and Community Service.

## **Trainee Services**

### **INST/STD/08**

A National Polytechnic shall provide trainee services that are commensurate with the trainee population

### **Guidelines**

- 1)The trainee services shall include but not limited to co-curricular facilities, counselling services, dispensary, space for worship and trainee canteen; and
- 2)There shall be clear memoranda of agreement on hired or outsourced trainee services.

### **Quality of Training**

#### **INST/STD/09**

- 1)A National Polytechnic shall promote highest standards of training and learning.
- 2)A National Polytechnic shall institutionalize internal quality assurance mechanisms.

### **Guidelines**

- 1)A variety of delivery modes and methods shall be employed while promoting creativity and critical thinking in learning.
- 2)A National Polytechnic shall facilitate lifelong learning through provision of adult and continuing education.
- 3) TVET staff shall keep abreast with the:
  - a) Current trends in their discipline;
  - b) Latest technologies of training and learning.
- 4) TVET staff shall avail themselves for consultation, guidance and mentoring of trainees;
- 5)Each National Polytechnic shall have quality assurance policy, structures and budgetary provisions.
- 6) Each National Polytechnic shall adapt international/national quality management system to assure internal quality

### **Research, Innovations and Partnerships**

#### **INST/STD/010**

A National Polytechnic shall show evidence of promoting quality research, innovation and partnerships.

### **Guidelines**

- 1)A National Polytechnic shall have thematic research areas in line with its institutional research policy and aligned to the national research policy;

2)A National Polytechnic shall endeavour to have adequate funds for research by allocating a minimum of 2% of its operational budget to research;

3)A National Polytechnic shall facilitate its staff to carry out research;

4)A National Polytechnic shall have a mechanism of providing incentives to members of staff who undertake research, attract research funds, innovate and/or patent;

5)Research activities shall be taken into account when determining TVET staff workload; and

6)A National Polytechnic shall document and disseminate its research outputs.

## **Community Service**

### **INST/STD/11**

A National Polytechnic shall engage in community outreach that promote cultural and socio-economic life of the society.

#### **Guidelines**

1)A National Polytechnic shall engage in community service, which may include but not be limited to, extension, consultancies, public trainings, corporate social responsibility, environmental conservation and promotion of cultural and socio-economic life of the society; and

2) Disseminate outcomes of research to the community.

## **Open, Distance and e-Learning (ODEL) Centres**

### **INST/STD/013**

A National Polytechnic may establish ODEL centre with training facilities for the purpose of bringing education closer to trainees.

#### **Guidelines**

1) A National Polytechnic ODEL centre shall be established in facilities owned or leased by the National Polytechnic that meet the standards of physical facilities;

2) A National Polytechnic may establish ODEL training facilities for the purpose of bringing education closer to trainees, and for providing marketing, recruitment and other trainee services;

3) The National Polytechnic ODEL centre shall be used exclusively for ODeL purposes.

## **TVET Integrity Standards**

### **INST/STD/014**

A National Polytechnic shall carry out its operations in line with and be guided by the national values and principles of governance as set out in Article 10 of the Constitution and as spelt out in the legal Order

### **Guidelines**

1)A National Polytechnic shall develop and implement policies on:

a) Code of ethics:

b) TVET integrity policy; and

c)Public private development partnership in line with the Public Private Partnership Act, No. 15 of 2013.

2)A National Polytechnic shall institutionalize non discriminative practices that includes promotion of:

a) Gender balance and equality of both staff and trainees; and

b) Equalization of persons with disabilities, minorities and other marginalized groups.

3)A National Polytechnic shall respect the relevant ethical standards when training, carrying out research and in engagement in community service; and

4)A National Polytechnic shall at all times prioritize the training interests of trainees and other stakeholders in carrying out its operations.

## SECOND SCHEDULE

### NATIONAL POLYTECHNIC STANDARDS FOR PHYSICAL RESOURCES

#### PART 1 – PRELIMINARY

##### Citation

These standards may be cited as the Standards for Physical Resources.

These standards will be abbreviated as NP/PHY/STD/00.

##### Interpretation

In these standards, unless the context otherwise requires:

“*A recognized water laboratory*” means a laboratory registered with or belonging to the Public Health Department of the Ministry of Health, Ministry of Water Development, or any other public institution, person or organization duly authorized by the Government of Kenya to undertake water analysis;

“*Adequate*” means sufficient in relation to any set guidelines or requirements;

“*Adequate water supply*” means water in such quantities as would permit maintenance of a reasonable level of personal and environmental hygiene;

“*Building Code of the Republic of Kenya*” means the Local Government (Adoptive By-laws) (Building) Order, 1968 and the Local Government (Adoptive By-laws) (Grade II Building) Order, 1968;

“*Lecture room*” means a room accommodating several students for the purpose of instructions;  
“*Departmental areas*” means offices occupied by teaching, administrative and secretarial staff of a teaching department of a National Polytechnic;

“*Full Time Students Equivalent (FTSE)*” means a number of hours of teaching required by one student to fulfill the requirements of the course in an academic year;

“*Masterplan*” means a programme of a National Polytechnic showing the order of development of physical and academic aspects for a given period of time;

“*Physical facilities*” means any structure fixed or movable or of whatever kind and any part thereof used or intended to be used for teaching, lecturing or instructing or as a dwelling house or for recreational and all ancillary facilities thereto including drainage works, services installations and road works;

“*Reader station*” means space occupied by a student in a library;

“*Relevant local authority*” means a city council, county council, municipal council or such local authority under whose jurisdiction a National Polytechnic is situated;

“*Research*” means an investigative study of any physical, biological or social phenomenon through a systematic approach;

“*Research area*” means a facility where research is carried out;

“*Residential National Polytechnic*” means a National Polytechnic in which ten or more students are boarded;

“*Safe water supply*” means a supply of water free from any contamination;

“*Sewage*” means spent water emanating from toilets;

“*Student*” means a person enrolled to pursue a degree, diploma or certificate course;

“*Site works*” means a place where construction activities are carried out;

“*Surface water*” means any ground water, subsoil water, storm water or rain water which discharges on the ground surface;

“*Utility services*” means any service that is connected to any building or living space through pipe or wire network for helping to convey fluids, energy and messages, in and out of any building or living space;

“*Waste water*” means any water after it has been fouled by a variety of uses and which constitutes a combination of liquid and water carried wastes, emanating from residences, toilets, kitchens, laundries, laboratories and workshops.

## **Application**

These standards shall apply to:

All buildings or parts of buildings purposely designed and constructed for National Polytechnic use;

Any alterations and extensions of National Polytechnic buildings or parts of the buildings;

All buildings undergoing material change of use into National Polytechnic buildings;

All related utility services installations, and site works for a National Polytechnic; and

The environment around institutions.

## **Scope**

These Standards are prescribed in respect to:

Public Health-

Application of by-laws, the Building Code of the Republic of Kenya and the Public Health and Safety Act; Cap. 242;

Materials used in the building;

Building lighting, ventilation and sound proofing;

Building hygiene and sanitation; and

Water supply and waste disposal.

Public Safety-

Structural soundness and stability; and

Fire safety-fire resistance, fire protection and safety pre-caution, firefighting and fire escape.

Physical facilities-

Building facilities including theory rooms, staff offices, research areas, seminar rooms, laboratories, workshops, studios, clinics, libraries, students' residences, staff residences, communal and social services areas such as places of worship, kitchen, dining, common rooms, recreational facilities;



Utility and other services including water supply, power, telephone, external drainage and waste water service, access roads, parking and appropriate landscaping;

Land including land size, location, ownership and tenure.

Spatial requirements:

The minimum size and floor areas for various buildings;

The minimum unit numbers of various types of buildings;

The locational relationship of various facilities.

## **PART II - STANDARDS FOR PHYSICAL RESOURCES**

### **Facilities**

#### **NP/PHY/STD/01**

**Every National Polytechnic shall provide appropriate and adequate facilities to cater for the number of programmes on offer and students' enrollment.**

#### ***Guidelines***

As a minimum, a National Polytechnic shall provide the following facilities.

Theory rooms;

Departmental areas, staff offices and seminar rooms;

Central administration offices;

Library;

Auditorium;

Staff common rooms;

Student common rooms with indoor recreation facilities;

Outdoor recreation facilities in form of games or sports facilities;

Drainage system, proper sanitation and water supply;

Health unit;

ICT infrastructure;

Spaces of worship.

In addition to the facilities provided in paragraph 1 a residential National Polytechnic shall provide:

A kitchen and dining facilities;

Student accommodation, including adequate laundry and storage facilities.

At the grant of Legal Order, a National Polytechnic shall have facilities that can accommodate the projected student population at least for the initial programmes on offer.

## **Learning Environment**

**NP/PHY/STD/02**

**National Polytechnic facilities shall be located in an environment that is conducive for learning.**

### *Guidelines*

National Polytechnic facilities shall not be located in environments that could be injurious to the health of students. These include but are not limited to factories, dumping sites, and quarries;

National Polytechnic facilities shall not be located in environments that can be a distraction to learning. These include but are not limited to bars, night clubs, casinos, and brothels; and

National Polytechnic facilities shall not be located in environments whose noise levels are an impediment to learning. These include but are not limited to airports, bus parks and markets.

## **Accessibility**

**NP/PHY/STD/03**

**A National Polytechnic shall be easily accessible.**

### *Guidelines*

Every National Polytechnic shall ensure that it is accessible through motorable access road that shall be all weather; and

A National Polytechnic shall maintain proper and adequate directional signage in all its facilities as to assure ease of movement in all areas.

## **Land Requirements**

### **NP/PHY/STD/04**

#### **A National Polytechnic shall own adequate land upon which it shall be situated.**

Every National Polytechnic, offering face to face/residential programmes, shall own land capable of supporting a student population of at least 375 and for purposes of this paragraph the land area required shall be at least 5 acres;

Every National Polytechnic shall show evidence of owning land on freehold or leasehold term of not less than 20 years at the time of grant of Legal Order.

National Polytechnic land shall be free from all encumbrances other than those of a statutory nature;

National Polytechnic land shall be vested in the council of a National Polytechnic or trusteeship of a National Polytechnic with Legal Order which shall own such land as non-profit making bodies and in perpetual succession;

Each National Polytechnic shall be built on land parcels which are either a continuous holding or on individual land parcels that are contiguous to one another or in close proximity to each other

In all cases where land parcels are not contiguous to one another, they shall, in cases where the student population does not exceed 375, be situated at a distance not exceeding two kilometers from one another and be connected by a motorable road;

Every National Polytechnic shall have a Master Plan to guide land use at the institution.

The physical master plan shall be designed in such a way that all building facilities and proposed developments are functionally related and compatible - all academic buildings, theory rooms, libraries, laboratories, assembly halls, auditoriums, audiovisual centres and other facilities are in close proximity to one another;

The master plan shall, in addition to any other details required by law to be included, indicate-

The location of the existing and proposed National Polytechnic buildings;

The layout of all roads and pathways serving all buildings, which shall be such that the health and safety of the occupants and user of the National Polytechnic is not endangered;

The layout of all waste and soil drain pipes, sewers, culverts, septic tanks, storm water drains, and run-off catchment drains so laid that the health and safety of all occupants and users of the National Polytechnic is not endangered;

The location of all areas to be used by all other activities related to the National Polytechnic such as sports fields, farms, forests, arboreta and sewage treatment; and

The layout of all telephone and electricity service lines shall be laid in a safe manner.

A National Polytechnic shall set aside land for other functional areas of the institution:

The minimum total area set aside for open space and car park shall not be less than 1 acre which area shall not incorporate land set aside for sporting facilities; and

A National Polytechnic shall set aside at least 1 acre of land for outdoor sports for the first 375 students.

## **Conformance to Statutory Requirements**

### **NP/PHY/STD/05**

Every building used or intended to be used as part of the National Polytechnic physical facility shall comply with the requirements of the Building Code of the Republic of Kenya and provisions of the Public Health and Safety Act, NEMA and any other statutory requirements.

### ***Guidelines***

National Polytechnic premises shall meet minimum requirements for health and safety of the public as prescribed by the relevant laws and by-laws and the requirements prescribed in the Schedule;

Any building designed and constructed for use as National Polytechnic building or any building altered or extended so as to be used as a National Polytechnic building or any building which has undergone material change of use into National Polytechnic building must be approved by the relevant county authority;

All buildings and other physical facilities used by a National Polytechnic shall have:

Approved architectural and structural drawings of the complete and proposed buildings;

Approval for alterations or extensions, if any;

Approval of proposed change of user if any;

Certificate of occupation for the newly constructed or altered buildings;

Impact Assessment certificate by National Environment Management Authority;

Any other statutory approval as may be required.

## **Structural Safety**

### **NP/PHY/STD/06**

A National Polytechnic shall use qualified and duly registered professionals in the construction of buildings/structures intended to accommodate National Polytechnic activities.

#### ***Guidelines***

National Polytechnic shall use registered professionals:

Registered architect for purposes of architectural designs;

Registered engineers for structural and civil works; and

Contractors registered by the National Construction Authority for the construction of all National Polytechnic buildings.

National Polytechnic building shall have the necessary approval from the relevant county authority:

All drawings in respect of the structural framework of steel buildings and related calculations shall be signed by the registered structural engineer responsible for their design;

All completed buildings shall be certified by the architect or structural engineer as having been constructed according to design and in compliance with the building code and other appropriate codes of practice; and

Approvals by the national and county authorities.

Where a National Polytechnic causes the erection of a building or structure of the type described in this paragraph it shall, in addition, employ on the site throughout the period of the construction resident engineer and clerk of works as per the building code.

## **Safety of Facilities**

### **NP/PHY/STD/07**

Every National Polytechnic shall operate in facilities and structures that are safe for the public as provided for in the Building Code of the Republic of Kenya.

#### ***Guidelines***

All buildings and other physical facilities used by a National Polytechnic to accommodate National Polytechnic activities shall be serviceable and functional;

The buildings shall be kept in a good state of repair and maintenance;

The buildings shall be free from structural failures, excessive deflection, cracking or dilapidation of building material fabric and components.

All buildings shall be secure for users from such hazards as falling, slipping, tripping; and

All buildings shall have in place mechanisms to minimize or avoid security risks associated with users.

## **Public Safety**

### **NP/PHY/STD/08**

**The specifications on public safety shall apply to all types of National Polytechnic buildings.**

#### ***Guideline***

Types of National Polytechnic buildings shall include:

Any building or structure of two storeys or more or in which provision may be made for future development of such number of storeys;



Any building or structure of whose storey height from ground floor to eaves level or ceiling is over 6 meters and with roof span greater than 10 meter;

Any building or structure in which any suspended structural floor panel beam or frame exceeds 6 meter in span; and

Any building or structure in which a balcony is provided for purposes of public assembly.

## **Access by Persons Living with Disability**

**NP/PHY/STD/09**

**All buildings used for National Polytechnic activities shall have adequate provisions to cater for Persons Living with Disability (PLWD).**

### *Guidelines*

A ramp, a lift or other means shall be provided to enable access to the facilities by PLWDs;  
and

Modified toilets shall be provided for PLWDs as specified in the Appendix to the Sixth Schedule of the Building Code.

## **Fire Safety**

**NP/PHY/STD/10**

**All buildings and other physical facilities used by a National Polytechnic to accommodate National Polytechnic activities shall provide for adequate fire safety.**

### *Guidelines*

Every National Polytechnic shall ensure that:

All buildings and other physical facilities shall conform to the requirements of the Building Code of the Republic of Kenya, the Public Health Act and other standard practices with regard to fire resistance, means of fire escape, access for fire escape and fire - fighting equipment

All buildings used for National Polytechnic activities shall be provided with adequate, reasonable and easily accessible means of escape in the event of fire;

All means of fire escape shall be properly maintained and kept free from any obstruction;

Doors for theory rooms and other large rooms used for public purpose shall open outwards;

Large theory rooms/halls shall have at least two separate doors;

The guidelines given for Building Groups (I), (III) and (III and (VI) shall be adhered to;

Adequate and appropriately placed fire-fighting equipment such as hose reels, portable fire extinguishers, fire blankets, dry risers, fire hydrants, sprinkles, and water storage tanks in every building are provided;

A fire station or fire-fighting unit shall be provided where a National Polytechnic is located outside the area covered by Government or local authority fire station; and

The National Polytechnic shall be provided with a water supply system for fire-fighting and the water for emergency fire-fighting purposes shall be drawn through the main water supply distribution system via a series of underground hydrants located at regular intervals throughout the site of the National Polytechnic.

## **Public Health**

### **NP/PHY/STD/11**

**A National Polytechnic shall provide and maintain a clean, adequate and suitable sanitary conveniences, which conform in all respects to the requirements of the Building Code of the Republic of Kenya and Public Health and Safety Act, for students and all persons working in the National Polytechnic.**

### ***Guidelines***

Where students or other persons of both gender are accommodated or are expected to be accommodated the conveniences shall afford proper separate facilities for persons of each gender;

In a day National Polytechnic, the following well lighted and ventilated closets, urinals, wash hand basins and drinking water fountains shall be provided for the initial enrolment of 1000 trainees: -

One W.C / pit latrine for every 20 female students;

One W.C / pit latrine for every 25 male students;

One urinal stall for every 25 male students;

One hand wash basin for every 20 students;

One drinking water fountain for every 20 users; and

A sanitary disposal facility in every water closet for female users.

In a residential National Polytechnic, the following well lit and ventilated closets, urinals, wash hand basins, bathrooms and drinking water fountain shall be provided-

One W.C. per every 15 male students;

One W.C per every 10 female students;

One urinal per every 10 students;

One hand wash basin per every 10 students;

One bath or shower per every 10 male students;

One bath or shower per every 8 female students;

One drinking water fountain for every 20 students; and

A sanitary disposal facility

Any enrolment above 1000 trainees shall require one extra facility in each case for every additional 50 trainees.

### **Theory Rooms and Offices**

#### **NP/PHY/STD/12**

**A National Polytechnic shall provide theory rooms which are adequate in number and size and are well-lit and ventilated.**

#### ***Guidelines***

The minimum theory room floor area per student in square metres shall be 1.5 where the theory room has desks and chairs and 1.0 where the theory room has lecture chairs only.

A National Polytechnic shall provide a minimum of one theory room to each course of study;

Every room used as a theory room shall be of sound construction;

Every room used as a theory room shall:

- Be provided with windows with an effective area of not less than 20 per cent of the floor area of the room and 75 per cent of the window area openable to the external air;
- Not have a height of less than 2.60 meter from floor to ceiling, or where there is no ceiling to the wall plate; and
- Be provided with adequate, well illuminated writing surface at each seat and a place to set books and papers.

### **Staff offices**

#### **NP/PHY/STD/13**

**A National Polytechnic shall provide adequate space to accommodate academic and non-academic staff offices.**

#### ***Guidelines***

The departmental offices shall comprise of the following minimum number of offices/work space;

- One Head of Department office;
- One secretary's office;
- At least one common room for training staff.

Academic and non-academic members' staff offices shall have the following minimum floor areas-

- Head of Department: 18 square meters;
- Common room for staff: 18 square meters for every two trainers;
- Non-academic staff: 7 square meters for one staff;

No room used as an administrative office shall be less than seven (7) square meters in area;

The administrative offices shall be conveniently accessible from the main entrance to the institution so as to serve as the logical reception point for special guests as well as general visitors arriving at the institution; and

The minimum total office space provided for the National Polytechnic's central administrative offices shall be 50 square meters.

### **General Assembly Room**

#### **NP/PHY/STD/14**

**A National Polytechnic shall provide a building facility for general assembly that shall be in the form of an auditorium, a large theory room or an assembly hall.**

#### ***Guidelines***

- 1) The assignable space per seat shall conform to the specifications contained in the Table 3.

#### ***3: Minimum space per seat in auditorium and assembly hall***

<b>No. of Seats</b>	<b>Assignable space per seat in square meters</b>
60-100	0.9
100-150	0.8
150-300	0.7



>300	0.6
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The assembly hall or auditorium shall conform to the requirements for buildings in Groups IV and V in the Sixth Schedule of the Building Code of the Republic of Kenya.

## **Training Laboratories, Workshops and Studios**

### **NP/PHY/STD/15**

**A National Polytechnic conducting courses requiring the use of laboratories or specialized facilities as part of instructional facilities shall, in addition to providing theory rooms, provide adequate laboratory facilities.**

#### ***Guidelines***

- (a) Laboratory facilities should be adequate and in close proximity to theory rooms;
- (b) Laboratories or specialized facilities should have room for instructional workstations and each workstation per student should, where possible adhere to the specifications contained in Table 4.

<b>Workshop/Laboratory</b>	<b>Minimum Space per Student in m<sup>2</sup></b>
Applied Science and Agriculture	2.80
Health and related sciences	2.70
Telecommunication	2.40
Mass Media (TV, Radio)	2.80
Engineering (excluding Mechanical)	3.70
Engineering (Mechanical)	6.50
Architecture	2.80
Hotel/Hospitality Management	2.80
Hair and Beauty	2.40
Clothing	2.40
<u>Computer Science/IT/Secretarial</u>	<u>1.50</u>

- (c) the provision of storage and preparatory room, and a workshop/laboratory office
- (d) The provision of the following service facilities, where applicable:
  - (i) Adequate windows openable to external air,

- (ii) Fume cupboards and fume hoods in the preparation and storage rooms,
  - (iii) Standard table top electrical service outlets for the instructor's table and for each pair of trainees' workstation,
  - (iv) Adequate lighting free of flare from exterior sunlight,
  - (v) Surface treatment of floors, wall and ceiling to reduce noise,
  - (vi) A sink with hot and cold water service installation for the instructor's table and for each pair of trainees' workstation,
  - (vii) Gas for the instructor's table and for each pair of trainees' workstation;
- (e) The provision of built-in furniture and equipment: -
- (i) at least one instructor's table,
  - (ii) at least one workstation for each pair of students, adequate stools or chairs,
  - (iii) chalkboard, white board or tack board, wall mounted;
  - (iv) at least one corrosion resistant sink and eye-wash fountain.

A National Polytechnic offering health related courses shall have the laboratory requirements specified in the specified curriculum, and any specialized provisions specified by the relevant professional bodies.

A National Polytechnic offering Building, Civil, Water Engineering or other related programmes shall have:

- (a) Workshops for carpentry and joinery, masonry and concrete works and building services;
- (b) Laboratory space for materials sciences, concrete technology and soil mechanics;
- (c) Spaces for demonstration units in various building construction techniques.
- (d) Drawing office

A National Polytechnic offering Architecture shall have studios for each class with adequate individual workspace at the rate of 2.8 square metres per work station and the institution shall also have: -

- (a) Architectural design studios for each class with adequate individual workspace of 2.8m<sup>2</sup> per student and a minimum of 2.0m<sup>2</sup> pin-up area;
- (b) An architectural science laboratory with sufficient equipment specifically to study thermodynamics, acoustics and lighting;
- (c) One material display space (materials library);
- (d) One carpentry, masonry and plumbing workshop;

- (e) Spaces within the overall premises of the department for external activities such as those required for workshops fabrication and for erection of buildings components and for testing their exposure of weather activities.

A National Polytechnic offering Mechanical Engineering (Automotive, Plant, Production or other related programmes) shall have the following workshops/laboratories where applicable: -

- (a) Production/Machine Workshop
- (b) Metrology Laboratory
- (c) Mechanical Engineering Plant Workshop
- (d) Fluids Laboratory
- (e) Thermodynamics Laboratory
- (f) Automotive Workshop
- (g) Materials Laboratory
- (h) Welding and Fabrication Workshop
- (i) Drawing Office

A National Polytechnic offering Electrical and Electronics Engineering programmes shall have the following workshops/laboratories where applicable:

- (a) Electrical Power Laboratory
- (b) Electronics/Telecommunications Laboratory
- (c) Instrumentation Laboratory
- (d) Electrical Installation Workshop
- (e) Drawing Office

A National Polytechnic offering Institutional Management programmes shall have a production workshop and service area, provided with adequate installations for instructions in food preparation, cooking and services. Catering and Accommodation practical rooms shall also be equipped with laundry and ironing facilities.

A National Polytechnic offering Food Science programmes shall have a food laboratory.

A National Polytechnic offering Agricultural programmes shall have at least two and a half hectares of land set aside as an institution farm over and above the land requirement that is stipulated for an ordinary institution.

A National Polytechnic offering Computer Science, Information Technology or Computer Applications shall have adequate computer laboratories that incorporate the following: -

- (a) At least one computer for every two students;
- (b) A local area network running on a platform that is current;
- (c) Access to internet.

A National Polytechnic offering broadcast media programmes shall have the following:

- (a) Broadcast media studio for radio/TV production

(b) Computer laboratory installed with sound/video editing software  
A National Polytechnic offering photography programmes shall have a photography studio.

A National Polytechnic shall provide other additional training equipment and/or facilities as shall be recommended by professionals as a result of emerging issues and/or global trends.

## **Studios, Laboratories and Workshops for Fine Arts**

### **NP/PHY/16**

**A National Polytechnic offering Fine Art and related programmes shall have the relevant studios, laboratories and workshops.**

### *Guidelines*

The National Polytechnic shall provide studios for drawing from life, general drawing, basic design painting, ceramic and films; graphic photography and print, life painting, still life painting, textile design and weaving and sculpture;

The National Polytechnic shall provide laboratories for ceramic glazing and testing, glass design and technology, silver smiting and jewelry, musicology, remote sensing, photogrammetric and computing;

The National Polytechnic shall provide workshop space for modeling casting, woodcarving and hydrography; and

Space for sculpture, garden outdoor wood burning kilns and such other facilities as may be specified by the curriculum.

## **Laboratories for Telecommunication Engineering**

### **NP/PHY/17**

**A National Polytechnic offering Telecommunication Engineering and related programmes shall have laboratories with adequate space for digital and analog communication, electromagnetic engineering, control and fiber – optics.**

***Guidelines***

The National Polytechnic shall have for every year of study –

Anechoic chamber, servers and workstations;

State-of-the-art facility for wireless sensor networks, network security, mobile networking, data packet routers, voice over IP gears with software switch, media server, trunk gateway, IP phone;

Equipment, such as, microwave trainer, antenna trainer, network analyzers, signal generators, digital oscilloscopes and tools;

Theory rooms equipped with visual aids.

Adequate space that is required for all the activities is approximately 3.9375 m<sup>2</sup> per student.

**Catering and Accommodation**

**NP/PHY/STD/18**

**A National Polytechnic providing catering facilities for students shall ensure that the facilities are adequate, safe, well-lit and ventilated.**

***Guidelines***

- The catering area shall have provision for the following functional areas-
- Food preparation of not less than 0.50 square meters per student;

- Dish washing and serving areas, of not less than 0.50 square meters per student;
- Kitchen storage of not less than 0.50 square meters per student;
- Kitchen staff and services area of not less than 0.50 square meter per student; and
- A dining hall of not less than 1.25 square meter of floor area per student;
- The National Polytechnic shall provide for adequate facilities for cleaning utensils, and of suitable and sufficient washing and sanitary facilities in form of lavatories, shower rooms, changing and cloakrooms for kitchen staff;
- There shall be sufficient provision for doors to ensure rapid exit in case of fire or other emergency.

### **Recreational facilities**

#### **NP/PHY/STD/19**

**A National Polytechnic shall provide adequate recreational facilities for students and staff.**

#### ***Guidelines***

- Every National Polytechnic shall provide common rooms with adequate indoor sports and recreational facilities for staff and students;
- Every National Polytechnic shall provide for outdoor sports and recreational activities; and
- Where sports and recreational facilities are leased or shared the National Polytechnic shall procure a legally binding memorandum of agreement.

### **Students' accommodation**

#### **NP/PHY/STD/20**

**Students' accommodation in a National Polytechnic shall be provided in facilities that are adequate, safe, well-lit and ventilated.**

***Guidelines***

- Rooms used as student accommodation shall house not more than four students per room;
- Accommodation for male and female students shall be separate.
- The total floor area of rooms used as student accommodation shall not be less than the following area:
  - Single room, 8.00 m<sup>2</sup>;
  - Double student room or cubicle, 14.00 m<sup>2</sup>;
  - Three or four student room 18.00 m<sup>2</sup>;
- Every room shall be provided with maximum benefit of natural light and natural ventilation;
- Sufficient doorways shall be provided in every student hall to ensure rapid exit in case of fire or other emergencies;

**Utility Services**

**NP/PHY/STD/21**

**A National Polytechnic shall have adequate, safe and reliable water supply installed in accordance with the requirements of the Building Code of the Republic of Kenya.**

***Guidelines***

- The water shall be wholesome, free from any contamination that may cause disease or injury to health, has no objectionable taste and odor, is aesthetically acceptable and has been certified as such by a recognized water laboratory;
- The water provided shall conform to the requirements of the Kenya National Drinking Water Standards set out in the latest edition of the Practice in Water Supply Services in Kenya issued by the Ministry, for the time being, in charge of Water Services;
- The National Polytechnic shall make available cold water storage facility in each building for domestic purposes taken from the main supply to the buildings or cold water storage tank in



each building with sufficient capacity to meet not less than twenty-four hours demand from the building's users or a minimum water demand of 150 liters per day per person;

- There shall be a central cold water storage facility from the main water supply to the National Polytechnic or of a storage facility with sufficient capacity to meet not less than three days demand from the National Polytechnic community or a minimum water demand of 150 liters per day per person;
- Every National Polytechnic shall make provisions for water harvesting to supplement the main water supply;
- There shall be additional storage facility in every National Polytechnic where animals are kept;
- The National Polytechnic shall provide and maintain an adequate cold water storage facility for fire-fighting purposes at the rate of 10 liters per second continuous flow for two hours;
- The National Polytechnic shall acquire a borehole drilling permit and borehole logs or water withdrawal permit from a surface source from Water Resources Management Authority (WRMA) where the National Polytechnic has developed its own water supply
- The availability of rain water harvested from every new building in accordance with the latest edition of the Building Code of the Republic of Kenya;
- The availability of reclaimed/recycled grey water for use for purposes other than drinking and cooking as stipulated in the latest edition of Building Code of the Republic of Kenya.

## **Waste Water Disposal**

### **NP/PHY/STD/22**

**A National Polytechnic shall provide an appropriate and adequate waste water collection, treatment and disposal system.**

### ***Guidelines***

In assessing the adequacy of the waste water system, the following shall be taken into account:

- The availability of a satisfactory drainage system for water;
- The availability of an adequate means of sewage and waste water disposal by means either of the relevant local authority main sewer or of septic tanks, conservancy tanks or cesspool constructed to specifications contained in the Building Code of the Republic of Kenya; or other wastewater treatment system approved by the relevant local authority, National Environmental Management Authority (NEMA) and Water Resources Management Authority (WRMA);
- In the absence of adequate means of sewage and waste disposal the extent to which the quality of effluent of natural water bodies conforms to the National Standards for Effluent Discharge to the environment;
- Evidence of approval by the relevant local authority, Water Resources Management Authority and the National Environmental Management Authority for all disposal systems other than those connected to a local authority's sewage system.;
- For National Polytechnics not connected to any sewerage system, availability of at least two hectares of land set aside for the construction of a sewage plant and the land shall be so situated as to ensure public health and safety from effluent and odour originating from the plant.

### **Surface Run-Off/Storm Water Collection and Disposal**

**NP/PHY/STD/23**

**A National Polytechnic shall provide an adequate surface run-off/storm water collection and disposal system.**

#### ***Guidelines***

- The drainage system shall be able to drain and dispose of surface water in such a manner as to cause the least inconveniences or nuisance to the public;
- There shall be no surface run-off or storm water from National Polytechnic buildings and related infrastructure such as roads, parking areas, and playing fields.

**THIRD SCHEDULE**

**STANDARDS AND GUIDELINES FOR NATIONAL POLYTECHNICS**

**CBET PROGRAMMES**

**INTRODUCTION**

These standards and guidelines have been developed by the TVET Authority and are intended for use by National Polytechnics in Kenya in the development, implementation, quality assurance and review of TVET CBET Programmes. Focus has also been given to the provision of TVET resources for the support of the programmes.

## **DEFINITION OF TERMS**

The following terms shall apply in the context provided:

“Act” means the Technical and Vocational Education and Training Act, 2013;

“Accreditation” means the process by which the Board formally recognizes and confirms by certification that an institution has met and continues to meet the standards of academic, training and competence excellence set by the Board in accordance with the provisions of the Act;

“Authority” means the Technical and Vocational Educational and Training Authority established under Section 6 of the Act;

“Board” means the Technical and Vocational Education and Training Board established under Section 8 of the Act;

“Cabinet Secretary” means the Cabinet Secretary for the time being responsible for matters related to technical and vocational education and training;

“Certificate” means the level of qualification below diploma or its equivalent;

“Course” means the programme of instruction comprising a range of syllabus content areas for trainees to acquire knowledge, work attitudes, skills and competences for employment in formal or informal sectors.

“Curriculum” means the programme of courses fulfilling the requirements for a certificate or diploma in a particular field of study.

“Diploma” means the level of qualification below degree and above a certificate;

“Industrial attachment” means a supervised practical experience that is the application of previously studied theory under the supervision of a trainer and a supervisor in the industry.

“Institution” means an institution that promotes or offers technical and vocational education and training;

“Manager” means a person engaged with the approval of the Board to manage a TVET institution;

“National Polytechnic” means an institution declared a National Polytechnic in accordance with Section 26 of the Act;

“Private institution” means an institution which is not a public institution;

“Programme” means a sequential grouping of courses which forms a considerable part, or all, of the requirements for an academic credential or an occupational objective

“Public institution” means an institution established or maintained by use of public funds or by the community;

“Quality assurance” means the procedures, processes and systems used to guarantee and continuously improve the training standards of a TVET institution;

“Standard” refers to an established norm or requirement;

“Trainer” means a person registered under section 25(1)(b) of the Act;

“Training” includes technical and vocational education and training leading to acquisition of specialized skills and knowledge that can provide the practitioner with livelihood;

## **1. LAUNCHING OF TVET CBET Programme**

### **PROG/STD/01**

*No National Polytechnic shall launch a TVET CBET Programme without prior consent from the Authority.*

#### **Guideline**

- a. The TVET CBET Programmes of the National Polytechnic shall be accredited by the Authority. The Authority shall evaluate the programmes, ensuring that the said programme has met the various CBET&A requirements and national needs prior to the programmes being launched;
- b. The resources for the support of a proposed TVET CBET Programme shall be verified and considered appropriate and adequate for at least half of the programme duration of study before consent to launch of the programme can be considered  
*Accredited National Polytechnics*
  - c. The TVET CBET Programmes of Accredited National Polytechnic shall only be launched once the initial requirements by the Authority have been met. These requirements shall include:
    - i. The Principal/CEO/Director of the institution has officially submitted a request to design and develop a curriculum, in line with the Authority’s guidelines for preparing a new and/ review existing TVET CBET Programme.
    - ii. Submission of previous Authority approval to develop the proposed programme;

- iii. Detailed deliberations of meeting of the National Polytechnic Academic Board at which the proposed programme was approved and comprehensive reports on:
- TVET facilities and infrastructure available for the support of the programme, including infrastructure;
  - Equipment and learning materials available for the support the programme;
  - List of core-texts and journals for the support of the programme;
  - TVET trainers and support staff, indicating TVET qualifications and areas of expertise, where obtained from, experience in TVET training and whether full-time or part-time staff. Curriculum vitae of the listed TVET staff and support staff should also be appended;
- In case of a professional programme, an attachment of a letter of consent from the relevant professional body.**
- iv. The Principal/CEO/Director of the institution has signed the Authority's commitment form indicating that he/she:
- Is responsible for ensuring that the laid down process of curriculum design and development has been adhered to; and
  - Will ensure that the report on TVET resources to support the TVET CBET Programme is updated and available at all times.
- v. The institution has a functional and approved Internal Quality Assurance (IQA) structure; and A Regular Monitoring and evaluation of TVET CBET Programmes has been institutionalized and a 5-year peer review plan submitted to the Authority.

## **2. QUALITY ASSURANCE SYSTEMS FOR TVET CBET PROGRAMMES**

### **PROG/STD/02**

*Each National Polytechnic shall have its own quality assurance systems and mechanisms in line with the Authority's prescribed guidelines.*

#### **Guideline**

The Authority is the external quality assurance agency of the TVET Institutions in Kenya. National Polytechnic's are therefore responsible for the internal quality assurance of their TVET CBET Programmes.

- a. Each National Polytechnic shall institute its own internal quality assurance policies, systems and mechanisms in line with the Authority's prescribed guidelines; and
- b. Each National Polytechnic shall review its TVET CBET Programmes at least once in every cycle of the programme in accordance with its quality assurance policies.

### **3. COLLABORATION ON TVET CBET PROGRAMMES**

#### **PROG/STD/03**

*Any institution seeking collaboration with another to offer TVET CBET Programmes shall ensure that the mother institution is accredited in its country of origin and that the programme has been accredited/validated by the relevant accrediting body or the state.*

#### **Guidelines**

- a. Accredited National Polytechnics, by virtue of their training license, are authorized to collaborate/affiliate with other institutions on given TVET CBET Programmes provided that the said institution has institutional and programme accreditation. This collaboration shall be communicated to the Authority for purposes of updating its database;
- b. Any other institution seeking collaboration on TVET programmes with another institution within or outside the country shall meet the following requirements.
  - i. The TVET CBET Programme should be in existence in the institution being sought for collaboration;
  - ii. The institution offering the TVET CBET Programme should be accredited in its country/region of origin;
  - iii. The TVET CBET Programme should be recognized/validated by regulator body (where applicable). TVET CBET Programmes that are not regulated shall be subjected to the Authority's validation/accreditation processes before consideration can be given to collaborative status;
  - iv. There should be evidence of an existing detailed written Memorandum of Agreement and Understanding (where applicable) between the institution seeking collaboration and the institution being sought for collaboration. The collaboration details shall include:
    - The nature of the collaboration;

- A statement on the TVET awarding institution. More specifically, the institution offering the TVET CBET Programme shall be the Diploma/Certificate awarding institution; and
- Signatures from the management of the two (2) or more institutions seeking the collaboration.

#### **4. NEW TVET CBET PROGRAMMES**

##### **PROG/STD/04**

##### *Development of TVET CBET Programmes*

- a. A TVET CBET Programme shall facilitate a balanced learning process, ensuring that the trainees are able to acquire such cognitive, affective and psychomotor skills as are consistent with educational goals and aspirations of Kenyans;*
- b. The design of a TVET CBET Programme shall take into account:*
  - i. Contextualization and relevance;*
  - ii. Contribution to the overall national human resource development and requirements;*
  - iii. Broad-base, diversification and integration aspects;*
  - iv. Practical-orientation; and*
  - v. The Authority's CBETA standards & guidelines and processes in TVET curriculum development.*
- c. Each level of TVET CBET Programme shall be differentiated by specific KNQF attributes. Higher levels of TVET CBET Programmes shall require higher and more complex attributes;*
- d. An institution shall be expected to have successfully graduated several cohorts of the lower level TVET CBET Programme before proposing a higher level TVET CBET Programme.*

##### **Guidelines**



- a. Each National Polytechnic shall have a Programme Development Team that guides the institution on programme and curriculum development and ensures that the institution's proposed curricula have met the standards of curriculum development prior to being presented to the Academic Board and Council of the institution, and their after, to the Authority for evaluation and consideration for accreditation;
- b. The lowest TVET foundational programme is Skills Certificate II (SC II)/Trade Test II (TT II)/Vocational Training Certificate II (VTC II)/ Semi-Skilled Operator Level 3**

The programme shall have Minimum 30 Credits.

Purpose	The level qualifies individuals who apply integrated technical and theoretical concepts in a broad range of contexts to undertake advanced skilled or paraprofessional work and as a pathway for further learning
Knowledge	Graduates at this level will have technical and theoretical knowledge and concepts, with depth in some areas within a field of work and learning
Skills	<p>Graduates at this level will have:</p> <ul style="list-style-type: none"> <li>• Cognitive and communication skills to identify, analyse, synthesize and act on information from a range of sources</li> <li>• Cognitive, technical and communication skills to analyse, plan, design and evaluate approaches to unpredictable problems and/or management requirements</li> <li>• Specialist technical and creative skills to express ideas and perspectives</li> <li>• Communication skills to transfer knowledge and specialized skills to others and demonstrate understanding of knowledge Competence</li> </ul>

Work attitude	<p>Graduates at this level will demonstrate the application of knowledge and skills:</p> <ul style="list-style-type: none"> <li>• To transfer and apply theoretical concepts and/or technical and/or creative skills in a range of situations</li> <li>• With personal responsibility and autonomy in performing complex technical operations with responsibility for own outputs in relation to broad parameters for quantity and quality</li> <li>• With initiative and judgment to organize the work of self and others and plan, coordinate and evaluate the work of teams within broad but generally well-defined parameters</li> </ul>
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- c. Artisan Certificate/Vocational Training Certificate III (VTC III)/ Skills Certificate I (SC I)/Trade Test I (TT I)/Skilled Operator
- d. Craft certificate /Vocational Training Certificate IV (VTC IV)/Master Craft Person III/Advanced Operator
- e. Diploma Certificate/Technicians/Skilled Supervisors/Master Craft Person II
- f. Bachelor's degree / Management Professional/ Master Crafts person 1

## **5. Evaluation of TVET CBET Programmes**

### **PROG/STD/05**

- a. New TVET CBET Programmes from the Public or Private National Polytechnic shall be submitted to the Authority for accreditation at a stipulated fee; and*
- b. A revised TVET CBET Programme shall be considered as new and thus warranting re-submission to the Authority if it is extensively different from its original version*

### **Guidelines**

- a.** New TVET CBET Programmes from the National Polytechnics shall be submitted to the Authority for evaluation once in every quarter and at a stipulated time period, notably, within the last week of March, June, September and December;
- b.** A pre-determined fee shall be charged on every new TVET CBET Programme submitted to the Authority
- c.** A revised TVET CBET Programme shall be considered new, thus warranting re-submission to the Authority for re-accreditation if its content is more than 30% different from that in the original programme;
- d.** The evaluation process of a proposed TVET CBET Programme shall encompass:

The peer reviewers who are mainly monitors and evaluators shall have the appropriate TVET qualifications and experience in the field in focus and must have been registered as monitors and evaluators.

These shall be drawn from one (1) of the following two (2) categories:

#### *TVET Institutions*

The monitors and evaluators are mainly drawn from public accredited TVET Institutions. They should have been Principal trainers, Senior trainer/Developer for a minimum of five (5) years with a related degree in the relevant field of programme. For programmes where

there is scarcity of degree level TVET staff, senior trainers who are holders of relevant diploma shall also be considered.

### ***Industry***

The monitors and evaluators drawn from industry should be holders of a degree level in a relevant field with more than five (5) years working experience in the field. Where applicable, they should also have membership in a professional body and a practicing/professional license.

- ii. Verification of TVET resources for the support of the programme by peer reviewers; and
- iii. Approval of the programme by the Authority.

## **6. PROFESSIONAL PROGRAMMES**

### **PROG/STD/06**

- a. *Professional programmes shall only be considered for approval only if the basic programmes on which they are dependent are on offer in the said institution; and*
- b. *Professional programmes shall be granted approval by the respective professional body prior to being recognized as approved programmes by the Authority.*

### **Guidelines**

- a. Any institution seeking approval on a TVET professional programme shall first have on offer the supportive basic programmes; and
- b. A professional programme shall be considered for approval only after the relevant professional body has approved it. The respective institution shall provide the Authority with evidence of approval by the relevant professional body while seeking recognition of the programme by the Authority.

## **7. THE TVET CBET PROGRAMME STRUCTURE**

### **PROG/STD/07**

*A TVET CBET Programme structure shall be aligned to a standard frame as provided by the Authority and shall include background information of the institution, information on the various programme facets and details on the TVET resources for the support of the programme.*

#### **Guidelines**

- a. Each TVET CBET Programme structure shall consist of:
  - i. The institution's background information, which includes the vision, mission and core values of the institution; the institution's minimum admission requirements; the TVET resources in the institution including facilities (*theory rooms, library, Information and Communication Technology, laboratories, workshops, studios and tuition farms/fields*) and equipment (*computers, printers, projectors, computer software, laboratory, audio-visual equipment*), TVET staff (*both Training and technical*) and reference materials (*books and journals, print and online reference materials*); the programmes offered by the institution including duration of each programme, CBET organization of the programmes and definitions of terms including course units, credit hours, theory and practical hours and industrial attachment hours;
  - ii. Information on the various facets of the programme including its title, descriptor; rationale including market survey implications; Goal; Expected Learning Outcomes of both the programme and the specialization areas (if any); Mode of Delivery and assessment; KNQA Regulations comprising of admission requirements, regulations on credit transfer, programme requirements, trainee assessment policy/criteria, grading system, assessment regulations including verification of trainees assessment results, certification rating and requirements, Portfolio/Reports/projects (where

applicable); Programme Evaluation; Management and Administration; List of Courses/units; Duration and Structure; Course Distribution Table and Course Outlines including course title, purpose, expected learning outcomes, content, mode of delivery, instructional materials and/or equipment, assessment, (*reference materials including textbooks, journals and e-materials*); and

- iii. Appendices of the TVET resources for the support of the programme comprising of the facilities; equipment and training materials; core-textbooks and journals; TVET staff; and the National Polytechnic Policy on Curriculum Development.
- b. There shall be a linkage between the various facets of a TVET CBET Programme:
- i. The institutional information shall be cascaded down to the programme while the programme's general information shall be cascaded down to the various courses of the programme; and
  - ii. The course title shall be reflected in the occupation of trained person and the course's expected learning outcomes. The expected learning outcomes shall be reflected in the course content, which shall be linked to the mode of delivery, instructional materials and/or equipment, assessment and reference materials.
- c. *TVET CBET Programme title*

A TVET CBET Programme title shall be reflective of its content.

- i. It shall adopt universal nomenclature for similar programmes;
- ii. It shall be short, concise and descriptive of its overall content;
- iii. The appropriateness of a TVET CBET Programme title shall be determined by:
  - At least 70% of the content being relevant and core to the TVET CBET Programme. This includes both core and specialization courses; and
  - For TVET CBET Programmes titles that include two (2) fields of study, the allocations of core courses to the two (2) fields being equally shared.
- iv. Two (2) or more similar TVET CBET Programmes shall be considered distinct, thus warranting unique programme titles, if more than 30% of the content is different.

*d. TVET CBET Programme content*

- i. The content of a given programme shall reflect the vision and mission of the institution and shall be aligned to the Vision 2030 and Millennium Development Goals;
- ii. The content of a given TVET CBET Programme shall be presented in a systematic manner as follows:
  - Basic Foundational courses;*
  - Common Courses focusing on concepts and principles;*
  - Core Application and Skills Development courses; and*
  - Field attachment Practical and Project-based courses.*

*f. Course codes*

Distinct course codes shall be provided for the various courses on offer as provided by the Authority.

- i. An outline of the various types of course codes applicable to the courses of the programme shall be provided;
- ii. The course codes shall comprise of International Standards for Education (ISCED ) digits and a version control letter; and
- iii. The digits of the course code shall represent the sectors/Sub-sector and training subject area from which the specific course is drawn and serial of the unit.

*g. TVET Programme organization and structure*

Each institution shall clearly articulate the organization and structure of its programmes and shall include its training calendar mode; duration of each segment of the training calendar; definition of course/unit/credit hours/training hours in relation to the training calendar; total number of courses; and course distribution table.

- i. The training calendar for any given institution shall be divided into one of the following modes:

- Semesters, which comprise two (2) equal divisions/terms of between 15-17 weeks in a TVET year;*
  - Trimesters, which comprises three (3) equal divisions/terms of between 13-15 weeks in a TVET year; or*
  - Quarters, which comprises four (4) equal divisions/terms of between 9-12 weeks in a TVET year.*
- ii. The institution shall define the terms' credit hours/ hours/contact hours in its own context, relating the terms to each other, where appropriate, and the semester/trimester/quarter mode;
- iii. One credit hour shall be equated to:
- One (1) contact hour in a knowledge-designed session;*
  - Two (2) contact hours in a group discussion-designed or open-learning-designed session;*
  - Three (3) contact hours in a laboratory-designed or practicum session; and*
  - Five (5) contact hours in a farm or similar practice.*
- iv. The institution shall provide the total number of knowledge contact hours allocated to any given programme, in line with KNQF prescribed standards and professional bodies (where applicable);

## **8. ADMISSION QUALIFICATIONS**

### **PROG/STD/08**

***Minimum admission requirements shall be provided for every TVET CBET Programme in line with prescribed KNQF admission requirements.***

### **Guidelines**

Institutions shall set up the TVET admission requirements for programmes on offer in line with KNQF standards and professional bodies where applicable, minimum standards set for each programme *and* professional bodies (where applicable).



## 9. National Polytechnic Training Staff

### PROG/STD/09

- a. *Each TVET CBET Programme shall be supported by at least one (1) appropriate TVET leader and some appropriate specialization area co-ordinators (where applicable);*
- b. *Each TVET CBET Programme shall be supported by an adequate number of full-time training staff; and*
- c. *The training staff shall hold an appropriate TVET qualification for the support of the programme.*

### Guidelines

- a. Each TVET CBET Programme shall be headed by an appropriate and qualified senior training staff with at least five (5) years' experience in TVET Institution Training, preferably a Senior trainer, with a degree in a relevant field of study.
- b. The programme's TVET leader shall be on full-time employment;
- c. Each TVET CBET Programme specialization area shall be headed by a qualified and appropriate TVET staff with at least five (5) years' experience in TVET Institution Training and a degree in a relevant field of study. He or she shall be on full-time employment;
- d. Each TVET CBET Programme shall be supported by at least two (2) other appropriate full-time training staff members;
- e. The ratio of full-time to part-time TVET staff members shall be 2:1;
- f. Each institution shall determine its trainer: trainee ratio based on their available TVET resources However, the maximum Trainer: trainee ratio for each course
  - i. Discussion - based Courses - 1:30
  - ii. Practical - based courses - 1:20
- h. A trainer shall be assigned trainees to supervise on project work based on a combination of his/her Training load, administrative duties, and supervision
  - i. The maximum trainer workload shall be 40 hours per week and shall include Training; preparation of examination papers; marking of examination scripts; tutorials; preparation

of Training; supervision of TVET work; administrative work; laboratory and laboratory preparation; and research/research assignments.

## **10. REFERENCE MATERIALS**

### **PROG/STD/10**

*Each programme shall be supported by relevant reference materials.*

#### **Guidelines**

- a. Each course of a given programme shall be supported by relevant core texts/manuals and references recommended for further reading, which shall comprise of both print books, illustration manuals and electronic sound/video resources;
- b. A maximum of two (2) current core texts shall be assigned to every given course;
- c. Each institution shall adopt a referencing style and apply it consistently throughout the curriculum;
- d. Each programme shall be supported by both print and electronic reference materials; and
- e. The library shall be stocked with adequate number of appropriate reference materials for each programme in offer.

## **11. FACILITIES AND EQUIPMENT**

### **PROG/STD/11**

*Each programme shall be supported by appropriate and adequate number of facilities and equipment.*

## **Guidelines**

- a. Modern, relevant and adequate number of facilities and equipment shall be availed for the support of a given programme;
- b. Each programme shall be supported by a minimum of two (2) lecture rooms for a four year programme; departmental offices; lecture theatres/conference rooms; and laboratory facilities.
- c. The type of facilities and equipment required for any given programme shall be dictated by the nature of the programme;
- d. A rotation plan shall be availed for facilities and equipment that are shared among several programmes; and
- e. Memoranda of Agreements shall be availed for facilities and equipment sourced from other institutions for the support of the programme.

## **REFERENCES**

*KNQF framework*

*Credit Accumulation and Transfer System Minimum Standard documents*

*TVET Authority's CBET&A Established Standards and Guidelines for TVET Institution*

*TVET Trainers Qualification Framework*

*TVET Authority manual on Processes for Internal Quality Management System in TVET in Kenya*

*TVET Authority manual on Processes for External Quality Assurance System in TVET in Kenya*

## **DISCLAIMER**

**The TVET Authority reserves the right to amend the content of these guidelines without notice. Institutions should obtain the latest edition from the Authority.**

**8<sup>th</sup> December 2018**

# **FOURTH SCHEDULE**

## **STANDARDS FOR OPEN, DISTANCE AND E-LEARNING**

### **PART 1 – PRELIMINARY**

#### **Scope**

The scope of these standards includes open, distance and e-learning offered by National Polytechnics through the following modes;

1. Traditional distance education;
2. E-learning provision and interactive CD ROMs;
3. Blended learning;
4. Virtual education and training.

#### **Citation**

These standards shall be referred to as the standards for Open, Distance and E-Learning (ODEL). The standards will be abbreviated as NP/ODEL/STD/00.

#### **Interpretation**

In these standards, unless the context otherwise requires, the following definitions of key terms shall apply:

“Curriculum” means any documented programme of study;

“Distance education” means delivery of learning or training to those who are separated mostly by time and space from those who are training. The training is done with a variety of mediating processes used to transmit content, to provide tuition and to conduct assessment or measure outcomes. The delivery modes may include traditional distance education by correspondence courses, on-line provision and interactive CD ROMs, e-learning and blended

Learning to open learning centres and face-to-face provision where a significant element of flexibility, self-study, and learning support, in an integral part.

“Flexible learning” means provision of learning opportunities that can be accessed at any place and time. It relates more to scheduling of activities than to any particular delivery mode.

“e-learning” means the application of information and communication technologies (ICTs) to enhance distance education, implement open learning policies, make learning activities more flexible and enable those learning activities to be distributed among many learning venues.

“Open learning” means policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender, or time constraints and with recognition or prior learning.

“Programme of study” means the prescribed syllabus that trainees must be taught at each key stage.

“Institution” means an organization founded for purposes of National Polytechnic education, training and research;

“Virtual education” means distance education and training which is largely web-centered, but does not necessarily limit itself to learners outside a conventional classroom. It uses multimedia and, besides delivering content, also enables a high level of interaction among learners, content, trainers, peers and administration both synchronously and asynchronously.

### Basic Assumptions

The following basic assumptions are made:

1. The principles that lend themselves to quality face-to-face learning environments are often similar to those found in open, distance and e-learning environments.
2. With all forms of media converging to a digital platform, advanced educational technology may include a variety of learning environments and information appliances.
3. While rapidly emerging technologies offer unlimited potential for virtual learning environments for both face-to-face as well as distance learners, practical application of existing technologies may often prove highly effective for various audiences and objectives.

### Principles

There are nine (9) key principles that govern open, distance and e-learning (ODEL):

1. ODEL is appropriate to the National Polytechnic’s mission and purpose;
2. The National Polytechnic’s policies and plans for developing, sustaining, and, if appropriate, expanding ODEL offerings, are integrated into its regular planning and evaluation processes;
3. ODEL is incorporated into the National Polytechnic’s systems of governance and training oversight;
4. Curricula for the National Polytechnic’s ODEL offerings are coherent, cohesive, and comparable in training rigour to programmes offered in traditional instructional face-to-face;
5. The National Polytechnic evaluates the effectiveness of its ODEL offerings, including the extent to which the ODEL goals are achieved, and uses the results of its evaluation to enhance the attainment of the goals;
6. Staff responsible for delivering ODEL curricula and evaluating the trainees’ success in achieving the ODEL learning goals are appropriately qualified and effectively supported;
7. The National Polytechnic provides effective trainee and training support services;
8. The National Polytechnic provides sufficient resources to support and, if appropriate, expand its ODEL offerings; and
9. The National Polytechnic assures the integrity of its ODEL offerings. Maintain parity standards between ODEL and other offerings.

### 10. Scenarios of Learning

The four scenarios of learning are:

Scenario 1: Same time, same place: Classroom training, face-to-face tutorials, seminars, workshops, and residential schools

Scenario 2: Same time, different place: Audio conferences and video conferences, television, one-way or two-way videos etc.

Scenario 3: Different time, same place: Learning resource centers which learners visit at their leisure.

Scenario 4: Different time, different place: Home study, computer conferencing, tutorial support by e-mail and fax communication

## **PART II – STANDARDS AND GUIDELINES FOR ODEL**

### **PROVIDER’S COMMITMENT**

- **Needs Assessment**

#### **NP/ODEL/STD/01**

A National Polytechnic shall show evidence that an appropriate needs assessment or feasibility assessment has been undertaken giving the rationale or justification for setting up the institution or starting the programme as reflected in the beliefs and core values of the institution.

#### **Guidelines**

The feasibility study shall cover the following broad areas:

- Target groups that are to be served by the institution focusing on their:
  - a) Demographical factors;
  - b) Education background/factors;
  - c) Motivational factors;
  - d) Experiences, including work situation;
  - e) Accessibility and familiarity to media and information;
  - f) Information and Communication technology; and
  - g) Economic background.
- The infrastructural situation in the catchments regions, especially telecommunication network, electricity and transport;
- Educational resources such as facilities in the learning institutions, library services as well as human resource; and
- Market demand.

### **Vision and Mission Statements**

#### **NP/ODEL/STD/02**

A National Polytechnic of ODEL shall have clearly stated vision and mission consistent with its beliefs and core values and make it known to its constituents.

#### **Guidelines**

- The mission should include business, purpose and value statements. The key aspects of the vision and mission should be reflected clearly to constitute the provider's commitment to social responsibility at policy level, and these should include:
  - a) Accessible high quality interactive learning programmes and materials;
  - b) Affordable and learner centred flexible programmes;
  - c) Use of appropriate technology;
  - d) Collaboration with other providers; and
  - e) Commitment to excellence.
- The institution's mission and objectives shall:
  - i. Be cascaded to the delivered programme; and
  - ii. Ensure that it fulfils its mandate to trainees in programme.

### **Accreditation of the Institution and Programme**

#### **ODEL/STD/03**

A National Polytechnic shall ensure that the quality of the TVET CBET Programmes offered through ODEL and those offered through face-to-face are comparable.

#### **Guidelines**

- The institution offering ODEL programmes shall be accredited;
- The programme to be delivered by ODEL must have been accredited; and
- The centre of instruction shall be approved by the Authority.

### **Institutional Budget and Policy**

#### **NP/ODEL/STD/04**

A National Polytechnic shall have budgetary provisions for the programme to ensure its sustainability and this shall be reflected in the financial policy statements.

#### **Guidelines**

- There shall be a policy and plan for sustainability of the programme and a teach-out plan
- Institutional budgetary allocation to the programme shall be reflected in the overall institutional budgetary structure to ensure viability and maintenance of facilities; and
- There shall be viable ICT facilities used for the delivery of online programmes.

### **Objectives and Strategies of the Provider**



## **NP/ODEL/STD/05**

A National Polytechnic shall have clearly stated objectives and strategies for achieving its mission.

### **Guidelines**

- 1) The objectives should relate to:
  - a) Learners needs;
  - b) National goals; and
  - c) Employer's expectations or needs (learning outcomes).
- 2) The strategies should include the mode and media of delivery for the TVET CBET Programmes offered.

## **Governance and Administration**

### **NP/ODEL/STD/06**

A National Polytechnic shall ensure that there are clear governance and administrative structures that involve stakeholders, where appropriate.

### **Guidelines**

- 1)The organs of governance shall be responsible for:
  - a) Major policy decisions;
  - b) Administrative issues;
  - c) Finance issues; and
  - d) Supervision and monitoring of TVET affairs.
- 2)The administrative structures shall include those responsible for:
  - a) Management of development of TVET CBET Programmes and study materials;
  - b) Management of production and distribution of study materials;
  - c)Management of trainee support services;
  - d)Management of information and records systems;
  - e) Management of trainee assessment and assessments.
  - f) Planning and financial management;

- g) Management of monitoring, evaluation and research; and
- h) General management and administration.

## **Regional Learning Centres**

### **NP/ODEL/STD/07**

A National Polytechnic offering ODEL programmes may establish regional learning centres to bring services closer to the trainees. These regional centres shall require accreditation by the Authority.

#### **Guidelines**

The regional centres shall be in environments compatible with National Polytechnic education and training; and shall have relevant qualified staff and appropriate facilities. These may include:

- 1) Administrative, training and technical staff;
- 2) Facilities and equipment should include but not limited to:
  - a) Administrative, training and technical staff offices;
  - b) Reading rooms/seminar rooms;
  - c) Library (with books, journals, cassettes and CD);
  - d) Audio-video rooms for playback and viewing;
  - e) Computer rooms with internet and e-mail connectivity;
  - f) Trainees records;
  - g) Appropriate training/learning equipment;
  - h) Tele/video conferencing facilities and equipment;
  - i) Reprographic facilities; and
  - j) Information leaflets on programmes, policies, study opportunities and career opportunities.

## **Learning Centres**

### **NP/ODEL/STD/08**

A National Polytechnic may make available learning centres to bring basic services and facilities closer to the trainees. The learning centres shall be accredited by the Authority.

#### **Guidelines**

1) A learning centre shall have the following services and facilities:

- a) Services to include, academic, guidance and counselling services (trainers should be available in respective subject courses);
- b) Study support services; and
- c) Administrative support services.

2) The facilities at a learning centre shall serve specific purposes depending on the programmes, media mix in use and trainees. The facilities may include:

- a) Basic office equipment and office supplies;
- b) Classroom/reading rooms;
- c) Multimedia room with internet connectivity;
- d) Appropriate equipment and supplies for TVET CBET Programmes; and
- e) Bookstore including course texts and reference books;

3) The number of learning centres within a region will depend on the trainee population and distribution.

### **Collaborative Arrangements**

#### **NP/ODEL/STD/09**

A National Polytechnic may enter into collaborative arrangements for delivery of open, distance and e- learning. Such collaborative arrangements shall be approved by the Authority.

#### **Guidelines**

1) Whenever ODEL is delivered by two or more providers the following should be taken into account:

- a) A written agreement specifying respective rights and responsibilities between the collaborating providers;
- b) Declaration of ownership and legal responsibility of the programme;
- c) Declaration of the accreditation status of both institution and programme; and
- d) TVET resources available to support the collaboration.

2) E-learning Consortium agreements, shall address the following:

- a) Defined agreements on collaborations in terms of-
  - i. Web instructional framework;
  - ii. Vendor for electronically delivered courses;

- iii. Library consortia;
  - iv. Technical agreements;
  - v. Publisher agreements;
  - vi. Administrative services; and
  - vii. Programmes being offered.
- b) Quality assurance in terms of-
- i. Defined performance expectations in contracts and agreements;
  - ii. Adequate quality control and curriculum supervision;
  - iii. Guaranteed redundancy and / or back-up services;
  - iv. Defined and adequate training and staffing provisions; and
  - v. Specific and beneficial fiscal arrangements.
- 3) E-learning interactions between different parties shall address:
- a) Trainee to trainee interactions;
  - b) Trainee and trainer interaction; and
  - c) Evaluation of interaction.

## **Mode of Delivery**

### **NP/ODEL/STD/10**

A National Polytechnic shall specify the media that is to be used for basic delivery of the programme and support to the trainees.

### **Guidelines**

- 1) The provider shall indicate the media available for delivery and which should be combined for multi-media approach to meet the diverse nature of trainees;
- 2) The chosen media mix should be based on the following ACTIONS:
  - A: How Accessible the media is to the trainees;
  - C: Cost of using it, both by the institution at installation and maintenance as well as learner cost;
  - T: Its Training strengths in relation to specific content;
  - I: Its capacity in creating Inter-activity;
  - O: Organizational requirements for development.

N:How Novel it is.

S:Speed within which it can be set up.

## **Learning Management System**

### **NP/ODEL/STD/11**

A National Polytechnic shall provide an interactive learning management system that effectively supports e-learning.

#### **Guidelines**

The Learning Management System shall provide for:

- 1)Trainee to trainee interactions;
- 2)Trainee and trainer interactions; and
- 3)Evaluation of interaction.

## **Institutional, Technical and ICT Support Infrastructure**

### **NP/ODEL/STD/12**

A National Polytechnic shall ensure availability and adequacy of technical, and ICT infrastructure and appropriate technical support staff for the infrastructure.

#### **Guidelines**

1)Institutional infrastructure shall be sufficient to address technical support in terms of as per KS 2416-3:2014 Standards

- a)Server space;
- b)Redundancy or load balancing;
- c)Technical help desk; and
- d)Internet access, among others.

2)Technical services shall be reliable in terms of:

- a)Back-up; and
- b)Remote services

3)The institution shall have an ICT plan for purposes of:

- a)Maintenance of technologies,

- b)Upgrading of technologies, and.
- c)Ensuring reliability, privacy, safety and security.
- 4)The staffing structure shall be appropriate for the support of the available infrastructure

## **Institutional Organizational Structure**

### **NP/ODEL/STD/13**

A National Polytechnic shall put in place internal organizational structures to facilitate the development, coordination, support, and management of electronically offered programmes.

#### **Guidelines**

Institutional structures shall have the capability to:

- 1)Facilitate the associated instructional and technical support relationships;
- 2)Provide the required information technologies and related support services;
- 3)Develop and implement a marketing plan that takes into account the target trainee population, the technologies available and the factors required to meet institutional goals;
- 4)Provide training and support to participating instructors and trainees;
- 5)Assure compliance with copyright law;
- 6)Provide contract for products and outsourced services;
- 7)Assess and assign priorities to potential future projects;
- 8)Assure that electronically offered programmes and courses meet institution-wide standards, both to provide consistent quality and to provide a coherent framework for trainees who may enroll in both electronically offered programmes and traditional on-campus courses;
- 9)Maintain appropriate training oversight;
- 10)Maintain consistency with institution’s training, planning and oversight functions, to assure congruence with institution’s mission and allocation of required resources; and
- 11)Assure integrity of trainees work and training staff instruction.

## **Institutional Procedures**

### **NP/ODEL/STD/14**

The National Polytechnic’s procedures for ODEL offered programmes shall ensure quality in the delivery of the programme.

## **Guidelines**

- 1)The process of conception (rationale and justification), development (internal consultations and integration with internal existing planning efforts) and approval of programme shall be clearly articulated;
- 2)The strategies for programme assessment and evaluation and for incorporating results into programme revisions shall be clearly spelt out;
- 3)Technologies appropriate to content delivery and trainee learning shall be clearly spelt out;
- 4)Institutional support and process for staff development and instructional design; education shall be documented;
- 5)There shall be a unit that coordinates trainee support services for delivery of programmes;
- 6)There shall be a documented process for assuring copyright compliance; and
- 7) The institutional copyright policy shall be availed to stakeholders.

## **Technical Framework**

### **NP/ODEL/STD/15**

A National Polytechnic shall assure consistency and coherence of the technical framework for trainees and training staff, and ensure that any change in technology is introduced in a way that minimizes any negative impact on trainees and training staff.

## **Guidelines**

- 1)The institution shall have:
  - a)A clear structure of communicating changes in software programme, hardware or technical system/procedure when a trainee or staff proceeds from one course to another;
  - b)A training programme/process for both staff and trainees when a new software or system is adopted;
  - c)Access to training by trainees; and
  - d)Learning policy on new software when a trainee or tutor proceeds from one course to another.
- 2)The institution should have hardware, software and technical support to facilitate effectively support the learners:
  - a)A help desk that is functioning 24 hours and 7 days a week;
  - b)A system for monitoring and supporting a range of hardware/software;
  - c)Clearly stated technical expectations; and

d)A system for frequently asked questions (FAQs) which should be assessed and feedback given to trainees and staff.

## **Preparation of Course Materials**

### **NP/ODEL/STD/16**

For each media in use, the National Polytechnic shall have in place a clear process of preparation of course materials and orientation to ensure quality material is “fit for purpose”.

#### **Guidelines**

For each media in use, the course materials preparation should involve:

- 1)Identification of the course team to include:
  - a)Course writer;
  - b)Media producers;
  - c)Editors/instructional designers; and
  - d)Reviewers.
- 2)Training of the course team on writing for ODEL trainees by expert in structural designers;
- 3)Writing and illustrating the course materials;
- 4)Reviewing the course materials by peer and other experts;
- 5)Editing the course materials;
- 6)Pre-testing of the materials on a trial basis; and
- 7)Production of the course materials ready for use.

## **CURRICULUM AND INSTRUCTION**

### **Curriculum Development**

#### **NP/ODEL/STD/17**

A National Polytechnic shall ensure quality in the development and implementation of the programme.

#### **Guidelines**

- 1)Clearly defined approval process shall be documented for all levels, including;
  - a) department level;



- b) School/faculty level; and
  - c) Institutional level.
- 2) Licensed trainers/developers/managers shall be involved in the:
- a) Development of the programme;
  - b) Implementation of the programme;
  - c) Review of the programme; and
  - d) Approval process.
- 3) There shall be appropriate communication of programme requirements in terms of:
- a) ODEL centres
  - b) Access to technology; and
  - c) Time-frame (duration).
- 4) There shall be up-front advice to trainees on programme, technical, financial and time commitments.
- 5) There shall be clear and honest communication to trainees on career opportunities.

### **NP/ODEL/STD/18**

A National Polytechnic shall ensure that each programme of study results in institutional level learning outcomes appropriate to the rigour and breadth of the programme level to be awarded, and that the programme meets the general education and training requirements.

#### **Guidelines**

The provider shall ensure that the curriculum contains:

- 1) Clear statements of the objectives, indicating learning outcomes;
- 2) Core/basic/common content areas;
- 3) Content related to the needs and experiences of the learners/learner centered;
- 4) Media and media mix to be used in presenting different content areas; and
- 5) Resources to be used for instruction.

#### **Institutional Policies on Staff**

### **NP/ODEL/STD/19**

A National Polytechnic shall have appropriate policies that ensure recruitment of adequate number of professionally qualified staff to administer and manage the programme.

## **Guidelines**

- 1)The institutional policies on e- delivery of TVET CBET Programmes shall be clearly defined;
- 2)The provider shall ensure that it employs appropriate and competent staff as follows:
  - a)Training staff with appropriate knowledge in the discipline and basic instructional systems design theories and techniques;
  - b)Professionals/technologists with appropriate communication and information technology and management skills;
  - c)Administrative and financial staff with skills in personnel management, budget making and costing and cost analysis.

## **Self-Learning Materials (SLMs)**

### **NP/ODEL/STD/20**

A National Polytechnic shall ensure availability of self-learning materials to suit trainees' needs.

## **Guidelines**

The features of effective self-learning materials shall include the following:

- 1)Clear layout and format used consistently in all Trainings;
- 2)Clear and appropriate learning objectives and learning outcomes;
- 3)Overview of content included in the introduction of both module and individual Trainings;
- 4)Use of conversation or dialogue to provide for two way communication;
- 5)Content divided and presented into module, units and Trainings;
- 6)Clear explanation of technical terms;
- 7)Illustrations which are set next to the text they illustrate with appropriate captions;
- 8)Clear guide to the trainees in the use of module provided including the time a learner of average ability might spend on each unit;
- 9)Keeping the trainees actively involved through the use of text and self-assessment questions and other activities involving application of the new knowledge and skills;
- 10)Situations and feedback to self-assessment questions to show the trainees his/her performance and progress;
- 11)Summaries for both the trainings and the unit / modules;
- 12)Well directed and specific references at the end of each unit or Training; and

The provider shall take all reasonable steps to ensure that course materials are effective and do not contain significant errors of fact, misleading or outdated information, concepts or approaches.

### **Pre-testing or Piloting Learning Materials**

#### **NP/ODEL/STD/21**

A National Polytechnic shall have in place mechanisms for pre-testing or piloting the learning materials to establish that they are at the learner's level and that the learners will use them without difficulties, and finally be able to achieve the objectives or intended learning outcomes.

### **Guidelines**

The broad requirement in pre-testing shall be made available by providing reaction sheet addressing key aspects or areas of the study materials, for example:

- 1) Trainees understanding of the objectives;
- 2) The language of presentation;
- 3) Explanation of concepts, ideas and theories;
- 4) Use of examples for illustration;
- 5) Use of illustrations and graphics;
- 6) The activities and practice exercise given and feedback provided;
- 7) Use of symbols or icons; and
- 8) Equipment and infrastructure for online materials.

### **Review of Curriculum and Learning Materials**

#### **NP/ODEL/STD/22**

A National Polytechnic shall put in place a mechanism for regular review of both the curriculum and learning materials by peers and experts.

### **Guideline**

The review shall focus on relevance and appropriateness of content in relation to the syllabuses and their objectives, discipline conformity and learner expectations.

## **STAFF SUPPORT**

Orientation and Training on Development of Learning Materials

### **NP/ODEL/STD/23**

A National Polytechnic shall ensure appropriate orientation and training on requirements, skills and strategies of developing materials for open and distance learning by use of facilitators and training manuals.

#### **Guidelines**

The training manuals shall cover the following:

- 1) Overview of ODEL;
- 2) Learner characteristics and their implications to content development;
- 3) Unpacking the syllabus to develop course outlines;
- 4) Writing objectives and learning outcomes and their role in open, distance and e-learning instructional materials;
- 5) Presentation of materials for better understanding by the trainees;
- 6) Creating interactivity in open, distance and e-learning materials; and
- 7) Use of visualization in open, distance e-learning materials.

## **Orientation of Trainers**

### **NPODEL/STD/24**

A National Polytechnic shall ensure appropriate orientation of trainers by expert trainers on ODEL system, who give face-face or non-contiguous intervention or interaction with the trainees.

#### **Guidelines**

The focus of the orientation should be on understanding their roles and strategies of operation for greater effective or maximum benefits to the trainees. The orientation training should include:

- 1) Overview of open and distance learning;
- 2) Understanding the trainees;
- 3) Understanding the training/learning process – mode of delivery;
- 4) Strategies of operation of the provider;

5) Understanding the role of the trainers

### **Orientation of Non - Training Staff**

#### **NP/ODEL/STD/25**

A National Polytechnic shall ensure appropriate orientation of non - training staff.

#### **Guidelines**

The orientation should focus on their roles and to their contribution to the programme. The areas to be covered should include:

- 1) Vision, mission of the provider;
- 2) Strategies of operation of the provider;
- 3) The role of non-training staff in the training and learning environment and success to the programme; and
- 4) The customers who are trainees or target groups and their concerns.

### **Trainee Services**

#### **NP/ODEL/STD/26**

A National Polytechnic shall facilitate orientation of trainees to prepare them to undertake ODEL programmes.

#### **Guidelines**

The orientation shall focus on skills for ODEL. The areas to be covered shall include:

- 1) Basic skills on ODEL;
- 2) Orientation and socialization including:
  - a) Provision of pre-entry guidance and counseling;
  - b) Course support after admission;
  - c) Post-course support service.

### **Residential Sessions**

#### **NP/ODEL/STD/27**

A National Polytechnic shall organize residential sessions for trainees for effective administration of the ODEL programmes.

## **Guidelines**

These sessions may be conducted at a central place for a given cohort or organized on regional basis to serve the following purposes:

- 1)To provide general orientation and introduction to the course materials at the commencement of the course;
- 2)To provide special sessions for difficult aspects of the course at middle of the programme/course; and
- 3)To provide some revision work to trainees before assessments.

## **Communication to Trainees Prior to Admission**

### **NP/ODEL/STD/28**

Trainees shall be fully supported by providing information on the programme before admission.

## **Guidelines**

The institution shall:

- 1)Commit itself to sustaining the programme;
- 2)Clearly communicate on the programme prior to admission of trainees;
- 3)Provide critical trainee services;
- 4)Provide a portal for e-learning trainee support.

## **Duration and structures of TVET CBET Programmes**

### **NP/ODEL/STD/29**

A National Polytechnic shall ensure that there is flexibility in the programme structures and duration.

## **Guidelines**

Flexibility in the programme shall be provided in the following ways:

- 1)Ensuring that the total units in a programme are tabulated with any prerequisites listed against such courses to guide the trainees/learners choice;
- 2)Providing for varied unit load for trainees; and

3)Ensuring that there is a minimum number of units to be taken to enable trainees complete the programme within the stipulated time.

### **Assessment Requirements**

#### **NP/ODEL/STD/30**

A National Polytechnic shall, at enrolment, inform the trainee of any assessments that would be required and declare the requirements of the said assessments.

#### **Guidelines**

Requirements for external assessments should include the responsibility of the provider and responsibility of the trainee:

- 1)Nature of any prior qualification or other entrance requirements imposed by such external organization;
- 2)How the assessment would be conducted;
- 3)Where and when the assessments would be undertaken; and
- 4) Assessment fees, if any.

### **Assessments Regulations**

#### **NP/ODEL/STD/31**

A National Polytechnic shall have assessment regulations that will be brought to the attention of the trainee during admission.

#### **Guidelines**

The assessments regulations shall include:

- 1)Types of assessments (Continuous Assessment Tests, End of Semester or Module, Final Assessmentss);
- 2)Ratio of Continuous Assessment Tests to the Final End of Semester Assessmentss;
- 3)Grading of assessments;
- 4)Disciplinary and mode of appeal; and
- 5)Special requirements that provide for flexibility and convenience to trainees, to include:
  - a)Organizing assessmentss at regional centres if possible.
  - b)Accumulate credits; and
  - c)At most three sittings in a unit.

## **Assessment Procedure**

### **NP/ODEL/STD/32**

A National Polytechnic shall put in place appropriate assessment procedures that will ensure proper assessment of the trainee's ability and achievement and communication of results to the learners.

#### **Guidelines**

The assessment procedures shall include:

- 1) Clear guidelines on setting, moderating, marking and processing assessments results.
- 2) Assessments regulations;
- 3) Documented trainee assessment and achievement in the course with respect to e-learning, the institution shall document trainee assessment;
- 4) Performance of online trainees against intended learning outcomes;
- 5) Assessments Security;
- 6) Personal Information Security.

## **Trainee Evaluation**

### **NP/ODEL/STD/33**

A National Polytechnic shall ensure that evaluation and assessment of trainees meet the objectives and learning outcomes of the curriculum and objectives of the trainees and the world of work.

#### **Guidelines**

The provider shall consider the following key aspects of trainee evaluations:

- 1) Collect data on the trainee profiles and competencies in order to determine their entry behavior;
- 2) Undertake intermediate evaluation to establish the progress of trainees and identify trainees' difficulties for corrective measures;
- 3) Undertake a summative evaluation to show how far the objectives have been achieved.

## **Course Evaluation**

### **NP/ODEL/STD/34**

A National Polytechnic shall ensure regular evaluation and review of programmes and courses to be carried out in the context of regular programmes evaluation.



## **Guidelines**

- 1)The provider should put in place a mechanism for receiving feedback from stakeholders on the programmes;
- 2)The provider shall undertake periodic self-assessment to address:
  - a)Requirements of stakeholders and expected learning outcomes;
  - b)The process;
  - c)The inputs;
  - d)Quality assurance;
  - e)Achievements and graduates;
  - f)Stakeholders' satisfaction; and
  - g)Analysis of strengths and weaknesses.
- 3)Records shall be kept to ensure overall programme effectiveness.

## **Evaluation of Trainees Support Services**

### **NP/ODEL/STD/35**

A National Polytechnic shall ensure that trainees support services are constantly assessed for effectiveness of the mode and medium of delivery.

## **Guidelines**

The assessment of trainees support services shall address among other things:

- 1)Availability and adequacy of facilities for trainee support;
- 2)Utilization of the services provided at the learning centres by the trainees;
- 3)Adequacy and competency of staff; and
- 4)Accessibility of the facilities and services to all trainees registered in the programmes.

## **Appraisal of Staff**

### **NP/ODEL/STD/36**

A National Polytechnic shall put in place mechanisms for evaluation of staff to establish their performance and effectiveness.

## **Guidelines**

Appraisal of staff should address the following:

- 1) Programme delivery
- 2) Training needs;
- 3) Priorities for training; and
- 4) Training effectiveness;

## **Marketing**

### **NP/ODEL/STD/37**

A National Polytechnic and its agents shall ensure that marketing, delivery and evaluation of programmes is done in a fair and ethical manner following acceptable best practices, to comply with all relevant legislation.

## **Guidelines**

The National Polytechnic shall develop effective marketing strategies. The provider shall ensure that advertising or promotional materials give clear and accurate view institution, its provision, objectives and outcomes of the programme.

- 1) The material for promotion should give, among others clear identification of the provider, indication of the body awarding any qualification and its status, indication of mode of delivery and the charges involved;
- 2) Enquiries from potential applicants should be handled promptly by competent staff;
- 3) The trainee should be given sufficient information to fully assess the suitability of a programme;
- 4) The trainee should be made aware of all terms and conditions relevant to the programme;
- 5) Enrolment when completed should be confirmed to the trainee, and the trainee given time to withdraw from the course;
- 6) The trainee must be informed of the financial obligations and agreements with the provider and mode of payments; and
- 7) The trainees must be informed of rights, obligations and commitments expected of them.

## **INFORMATION TO TRAINEES BEFORE ADMISSION**

### **NP/ODEL/STD/38**

Prior to admitting trainees, a National Polytechnic shall ensure that trainees are fully informed of the issues that affect them with respect to the management of the programme.

#### **Guidelines**

The information to trainees shall include, but not limited to:

- 1)Language of communication;
- 2)Required access to technologies;
- 3)Technical competencies of trainees required to enroll into the programme;
- 4)Time frame in which courses are offered and nature of learning outcomes;
- 5)Required texts and access to reference materials;
- 6)Understanding of independent learning expectations;
- 7)Schedules for face-to-face interactions;
- 8)Schedule of assessments;
- 9)Schedules of submission of assignments;
- 10)Collection of certificates.

**SCHEDULE FIVE**

**STANDARDS AND GUIDELINES FOR NATIONAL POLYTECHNIC**

**LIBRARY SERVICES AND FACILITIES**

**Vision, Mission and Objectives**

**NP/LIBR/STD/01**

A National Polytechnic library shall develop an explicit statement of its vision, mission and objectives that are aligned with those of the National Polytechnic.

**Guidelines**

- The library shall develop guidelines on assessment and achievement of the mission and objectives;
- The mission should include the business, purpose and value statements while the objectives should be “SMART”;
- The vision and mission statements should be reviewed periodically and revised as necessary. They should be compatible with the institution’s vision, mission, its goals and objectives; and
- The library shall develop such other policies to facilitate the achievement of its objectives. These shall include security policy for library users and for information resources.

**Information Resources**

**NP/LIBR/STD/02**

A National Polytechnic library shall provide, for all TRAINING CBET Programmes, varied, authoritative and up-to-date information resources, which facilitate training, learning, research and community service for all categories of its users.

**Guidelines**

- The information resources shall be relevant, adequate in quality and quantity;

The information resources shall include those that cater for users with special needs;

- The library shall develop and implement a collection development policy which shall be reviewed within a period not exceeding five years;
- The library shall subscribe and facilitate access and availability of electronic information resources;
- The library shall establish and sustain institutional repositories; and
- The Library Advisory Committee shall be responsible for collection development.

These guidelines shall be used in conjunction with the appendices in these standards.

## **ICT Resources**

### **NP/LIBR/STD/03**

A National Polytechnic library shall adopt and maintain Information Communication Technologies in information management and its operations.

#### **Guidelines**

The library shall embrace opportunities created by Information and Communication Technology (ICT) by:

- Establishing ICT policies to guide adoption and maintenance;
- Establishing library ICT infrastructure and systems that integrate with the National Polytechnic-wide ICT environment;
- Installing library systems that support data exchange using standard protocols and formats;
- Establishing disaster recovery and business continuity plans;
- Providing ICT hardware and software that adequately facilitate the information management needs of the library;
- Providing appropriate levels of internet bandwidth to facilitate downloads and uploads;
- Providing for the digitization of information resources; and
- Providing a competent library professional dedicated to the management of library ICT infrastructure.

#### **These guidelines should conform to the following minimum requirements:**

- i. The library shall provide space for installation of computers for users;
- ii. The computer workstation/terminal space shall be 2 square meter for single user;
- iii. The library shall have several dedicated computer terminals connected to Intranet and Internet for users and with relevant software for research;
- iv. There shall be adequate ICT personnel for computer maintenance;
- v. There shall be provided a closed access server room with adequate air conditioning for managing library system and other ICT services.

## **Organization and Access to Information Resources**

### **NP/LIBR/STD/04**

The National Polytechnic library's information resources shall be organized, for efficient access and retrieval, using internationally recognized conventions and standards.

#### **Guidelines**

- The resources shall be organized using appropriate international recognized classification systems;
- The resources shall be accessed through a comprehensive catalogue of the library holdings;
- Access and retrieval of resources shall take into consideration persons with special needs;
- The library shall ensure reasonable and convenient access to information resources for the users; and
- Adequate measures shall be put in place to ensure the availability of information resources.

## **Library Services**

### **NP/LIBR/STD/05**

A National Polytechnic library shall establish, promote and sustain quality services that will facilitate training, learning and research.

#### **Guidelines**

The established services shall include:

- Reference and information services;
- Information resources;
- Circulation services;
- Current awareness services;
- Inter Library services;
- Information Literacy services;
- Reprographic services;
- Multimedia services;
- Knowledge management services;
- Preservation services; and
- Archiving services.

## **Library Facility**

### **NP/LIBR/STD/06**

A National Polytechnic shall provide adequate facility for trainees, trainers, staff and other authorized users as a convenient and conducive place for study and research.

#### **Guidelines**

- The building and its furnishings shall create an ambience appropriate for scholarship and conducive to learning, access to information and the delivery of high quality services;
- The building shall have in place mechanisms to minimize or avoid security risks associated with the users, the collection, the equipment and data;

- The design of the building shall enable the library to develop, and provide services that are responsive to the changing library and information needs of learning and scholarship;
- The building shall have a high degree of flexibility or adaptability so that the use of space can easily be changed by rearranging the furniture and equipment;
- Sufficient doorways which are openable outwards, to ensure rapid exit in case of an emergency shall be provided;
- The building shall be convenient for all including users with special needs;
- The building shall have adequate ventilation and conducive aeration;
- The building shall be provided with secure windows; the effective areas of which shall not be less than 20 per cent of the floor area of the room and 75 per cent of the windows should be openable to external air;
- The library shall provide spaces for the collection, display, reading, meeting, space for electronic workstations, multimedia workstations, viewing rooms and listening rooms, open use seating, user instruction rooms, staff working areas including staff lounges and kitchenettes, space for special use, preservation and conservation such as bindery;
- The building shall have adequate emergency and fire safety measures;
- The professional librarians shall be involved in the planning of the library building at every stage;
- Each study space shall occupy between 2.5 and 4 square metres;
- Each stack area for books shall be at least 10.75square metres;
- The library building shall be regularly maintained;
- The building shall incorporate ICT needs and function as an integral part of the design concept including trunking and cabling and wireless connectivity; and
- The library building shall conform to the requirements for building in Group IB of the sixth Schedule of the Building Code of the Republic of Kenya.

These guidelines shall be used in conjunction with Appendices I, II and III of these standards

## **Staffing**

### **NP/LIBR/STD/07**

A National Polytechnic library shall have appropriate, qualified and adequate staff commensurate with the TRAINING CBET Programmes offered, the institutional population, the number of service points, and the hours during which services are offered.

## **Guidelines**

- The National Polytechnic shall appoint a designated head of the National Polytechnic library;

- The head of the National Polytechnic library shall be one of the senior officers of the National Polytechnic;
- The library staff shall comprise of professional and technical staff. The professionals shall constitute at least 35% of the library staff;
- Librarians shall have training status and be on the same terms and conditions of service as training staff;
- Library staff shall have access to different forms of ongoing/continuing education with a view to exposing them to new developments in all areas of information work;
- The library shall be adequately represented in the academic Board and other governing bodies; and
- Library staff shall be sufficient in quantity to meet the diverse training, learning and research needs of trainers and trainees.

These guidelines should conform to the minimum academic and professional requirements stipulated in the table below.

<b>Position</b>	<b>Minimum Qualifications</b>
Head of National Polytechnic Library	A Masters in Library and Information Science or related fields; At least Five years' experience as senior librarian from a reputable educational institution.
Deputy Head of National Polytechnic	A Masters in Library and Information Science or related fields; At least three years' experience as senior librarian from a reputable educational institution.
Librarian	A Bachelor's degree in Library and Information Science or related fields; At least three years' experience as assistant librarian from a reputable educational institution.
Assistant Librarian	At least a diploma in Library and Information Science or related fields; At least one year experience as an assistant librarian from a reputable educational institution.

### **Administrative Structure**

#### **LIBR/STD/08**

A National Polytechnic library shall have an administrative structure that is fully integrated with the institutional organizational structure.

#### **Guidelines**

- The place of the library in the National Polytechnic shall be clearly stipulated in the Proposed and accredited National Polytechnic;



- The library shall be a fully-fledged academic organ within the National Polytechnic structure. It shall be formally represented in the academic committee.
- The Head of the National Polytechnic Library shall be designated in the legal order;
- The Head of the National Polytechnic Library shall report to the Deputy Principal/CEO responsible for training of the National Polytechnic or equivalent;
- The National Polytechnic shall establish a Library Advisory Committee/ library management committee, which will deal with the aspects of library policy, its development and integration in the National Polytechnic's TRAINING CBET Programmes;
- A clear library internal administrative structure shall be established with well-designated job responsibilities at the various levels.

### **Library budget**

#### **NP/LIBR/STD/09**

The National Polytechnic shall provide at least five percent (5%) of the total institutional operational budget annually for acquisition of information resources excluding personal emoluments and capital development.

#### **Guidelines**

The library budget shall:

- Be adequate to support the ongoing and appropriate needs of the library;
- Be adequate for the library to acquire print and electronic information resources;
- Take into consideration the instructional methods of the institution;
- Provide for the current and anticipated size of the user population; and
- Be prepared, justified and administered by the Head of the National Polytechnic Library.

### **Information Literacy and Competency**

#### **NP/LIBR/STD/10**

The National Polytechnic library shall facilitate the success of TRAINING and encourage lifelong learning through information literacy and competency initiatives.

#### **Guidelines**

- The librarians, in partnership with the departments, shall provide information and instruction to all users through a well-structured information literacy and competency programme;
- The library shall stock materials relevant for the implementation of curricular to meet the emerging information literacy needs of the trainees and departments;
- The library shall prepare an information literacy policy.

### **Open, Distance and e- learning library services**

#### **NP/LIBR/STD/11**

The National Polytechnic shall provide adequate resources to support open, distance and e-learning library services where applicable. The requirements for open and distance learning library services shall be the same as for the traditional libraries except for standards on library building.

#### **Guidelines**

- The National Polytechnic shall provide facilities, equipment and communication links, sufficient in size, number, scope, accessibility to reach all users and to attain the objectives of the open and distance learning programs;
- The library services offered to the open and distance learning community shall be designed to ensure reliability and sustainability.

### **Library Outcomes Assessment**

#### **NP/LIBR/STD/12**

The National Polytechnic library shall establish a sustainable and continuous user-centred mechanism for library outcomes assessment aligned to the National Polytechnic outcomes.

#### **Guidelines**

The library shall identify measurable outcomes both qualitative and quantitative which focus on:

- Whether the performance of trainees on TRAINING improved through their contact with the library;
- Whether trainees improve their chances of having a successful career;
- Whether the library’s bibliographic instruction program results in a high level of “information literacy” among trainees;
- Whether trainees perceive the library to be valuable to them;
- Whether staff members are more likely to view use of library as an integral part of training, learning and research; and
- Whether the study environment is well established.

## **APPENDICES**

### **Appendix I – Library Facility**

- 1) A high standard of internal finish and furnishings is essential to withstand heavy use over an extended period;
- 2) Stable environmental conditions are required not only for long-term preservation of library materials but also for operation of computers and other equipment;
- 3) Functionally, the space must be adequate for print and IT based resources and to facilitate for the delivery of services. The design should recognize the crucial importance of people, books and information technology and information services;
- 4) The building design shall permit future growth with minimum disruption to the services being offered;
- 5) The building shall be designed for ease of movement of users, staff and library resources;
- 6) Access to all parts of the library, shall be as straightforward as possible, requiring minimum directional signs and guiding;
- 7) The entrance and exit points for users, which are essential for good security and safety, shall be clearly defined;
- 8) A separate door for delivery and dispatch of materials shall be provided;
- 9) The building shall have controlled temperature, humidity, dust and pollution levels;
- 10) Conducive fenestration is essential to bring more natural light and users can enjoy good surrounding views;
- 11) The building shall be built so as to enhance the psychological and social aspects of space;
- 12) The building must place a high priority on indoor air quality, electrical safety, fall protection, ergonomics, and accident prevention;
- 13) Emphasis shall be placed upon good systems of fire detection, use of sprinkles, fire extinguishers and other ways of fire suppression;
- 14) Visible fire and other emergency evacuation exits shall be provided with no obstruction to their access;
- 15) Keys to the emergency exit doors shall be stored at a location which is secure but easily accessible;

- 16) The building design shall also involve implementing countermeasures to detect, delay, deny and deter attacks from human aggressors;
- 17) Library stacks and records storage area shall typically be designed to bear full stack weight at all points;
- 18) Ambient lighting, whether natural or artificial, sufficient for shelving, circulation, reading and workrooms shall be provided;
- 19) Carrels and tables shall be sized to accommodate users with laptops.
- 20) Stack area for bound journals and reference books shall be 10.75 square metres for 1000 volumes;
- 21) Display area for current journals shall be 9 square metres for 100 titles;
- 22) Aisles between fixed ranges of book stacks shall be 42-inch (107cm) in order to accommodate wheelchairs and permit them to turn;
- 23) Library staff and service areas shall constitute 18 to 25 per cent of the combined user space and stack area;
- 24) Service areas such as toilets and corridors shall constitute 18 per cent of the usable space;
- 25) Minimum ceiling heights should be uniform at minimum of 3.5 metres.
- 26) The sitting capacity shall be adequate for at least 10% of the total student enrolment and 25% of full time teaching staff.
- 27) A National Polytechnic Library shall provide adequate and relevant textbooks and other resources in the programmes offered at a ratio of 1:5 readers. In addition, a library shall have one electronic resource facility for every five readers

## **Appendix II – Office Space**

- 1) Staff Offices
  - a) Library staff at managerial level (head of National Polytechnic library, deputy head of National Polytechnic library, senior librarian and equivalent heading department shall be allocated office space separate for self and secretary (where relevant);

- b) Office space shall be either open plan or enclosed with minimum space in total 9 square meters;
  - c) The office shall be furnished with office chair, table, computer workstation/terminal, and chairs for visitors and including file cabinet and shelving; and
  - d) The office shall be supplied with power to enable installation of computer system that provides access to Intranet and Internet connectivity.
- 2) Staff Workrooms
- a) Library staff shall be provided with office space to be used as workrooms for receiving, processing, storage, and dispatch of information materials such as books, periodical, media, and other (cultural) artefacts;
  - b) The workrooms shall be open plan with minimum space of 4 square metres per individual staff (inclusive of space for materials being worked on and computer workstation/terminal);
  - c) The workspace for each individual staff shall be furnished with office chair, table, and book trolley, and computer workstation/terminal;
  - d) The staff workroom, in general, shall have shelves for storing materials awaiting processing or dispatch;
  - e) The workroom in general shall be supplied with power to enable installation of computer system that provides access to intranet and internet connectivity.

### **Appendix III – Furniture and Equipment**

- 1) Furniture
- a) The library shall be furnished with appropriate furniture for public use;
  - b) There shall be provided a chair of acceptable quality for each individual reader;
  - c) There shall be provided a reading/writing table (shared or not) measuring 2 square feet for individual reader;
  - d) There shall be provided easy chairs and coffee table for use in readers lounge one set for every 1000 readers; and
- 2) Equipment
- a) The library shall be equipped with appropriate equipment for public use;

- b) Standard metal/wooden shelves measuring seven foot and five-foot-high and two and half feet wide shelving for books and journals;
- c) The library shall have sufficient computers for library users
- d) There shall be provided at least one photocopier and printer in the library building for library users;
- e) The library shall provide basic communication equipment for library users;
- f) The library shall provide equipment for preservation and conservation of information materials.

#### **Appendix IV – Computer Space**

- 1) The library shall provide space for installation of computers for users;
- 2) The computer workstation/terminal space shall be 2 square meter for single user;
- 3) The library shall have several dedicated computer terminals connected to Intranet and Internet for users and with relevant software for research;
- 4) There shall be adequate ICT personnel for computer maintenance;
- 5) There shall be provided a closed access server room with adequate air conditioning for managing library system and other ICT services.

## **SIXTH SCHEDULE**

### **STANDARDS FOR CENTRES OF EXCELLENCE**

These standards will be abbreviated as SCE/STD/00.

General Provisions:

Except for the requirements on land size, enrolment and number of training programmes, a centre of excellence shall meet the institutional, CBET Programmes and library standards as set out in the National Polytechnic schedules.

#### **Training Programme(s)**

##### **SCE/STD/01**

**A centre of excellence shall have programmes in training and/ or research that are deemed to be of strategic national importance.**

Guidelines

- The programmes offered in a centre of excellence shall fill a niche in the national development agenda;
- The programmes offered shall be limited to the mandate and core values of the centre of excellence;

#### **Training Resources**

##### **SCE/STD/02**

A centre of excellence shall have adequate training resources to ensure quality delivery of programmes.

Guidelines

The institution shall:

- Have a critical mass of qualified staff in a specific discipline of national importance;
- Have specialized facilities and equipment that meet the standards of the discipline; and
- Have a resource centre and a library that meets the needs of the discipline.

#### **Global Best Practice**

##### **CE/SDAI/STD/03**

A centre of excellence shall benchmark for best practices in the discipline.

Guidelines:

The institution shall maintain linkages with:

- Accredited National and International institutions/ centres of excellence offering similar disciplines; and
- Industry relevant to its training programmes.