SITUATIONAL ANALYSIS & BASELINE STUDY
of
Open, Distance & Flexible Learning
in the
Technical Education, Vocational & Entrepreneurship Training Sector
in
ZAMBIA

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Prepared for: Commonwealth of Learning
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Acronyms & Abbreviations used in this Document

BEAR  
Better Education for Africa’s Rise Project, coordinated by UNESCO

BSE  
Basic Skills Education (see Sub-section 2.7)

COL  
Commonwealth of Learning

DfID  
Department for International Development, Government of the United Kingdom

DVET  
Department of Vocational Education & Training in Ministry of Higher Education

GRZ  
Government of the Republic of Zambia

ICT(s)  
Information and Communication Technology(-ies)

MESVTEE  
Ministry of Education, Science, Vocational Training and Early Education (between 2011 and September 2015), Government of the Republic of Zambia

MHE  
Ministry of Higher Education (since September 2015), GRZ

MOGE  
Ministry of General Education (since September 2015), GRZ

MoF  
Ministry of Finance, GRZ

MIS  
Management Information System

MSME(s)  
Micro-, Small and Medium Enterprise(s)

NER  
Net Enrolment Rate

ODFL  
Open, Distance and Flexible Learning (see Glossary for definitions of terms)

ODL  
Open and Distance Learning (see Glossary)

OERs  
Open Educational Resources (see Glossary)

PPP USD  
Purchasing Power Parity United States Dollars

RPL  
Recognition of Prior Learning (see Glossary of Terms)

SADC  
Southern African Development Community

STEM  
Science, Technology, Engineering and Mathematics disciplines/subjects

T&L  
Teaching and Learning

TDP  
TEVETA Development Support Programme, financed by the World Bank between 2002 and 2009

TEVET  
Technical Education, Vocational & Entrepreneurship Training (the preferred term for this sub-sector in Zambia)

TEVETA  
Technical Education, Vocational & Entrepreneurship Training Authority

TTI  
Technical Training Institute

TVET  
Technical and Vocational Education & Training

TVTC  
Technical and Vocational Teachers’ College, Luanshya, Zambia

ZIBSIP  
Zambian Institute of Business Studies and Industrial Practice, Kitwe, Zambia

ZQA  
Zambia Qualifications Authority

ZQF  
Zambia (National) Qualifications Framework
Executive Summary

The Commonwealth of Learning (COL) is an intergovernmental agency, established by the Commonwealth Heads of Government to promote the development and sharing of innovative approaches to the provision of learning for sustainable development. Since 1989, COL has been carrying out research, organising capacity-building activities, experimenting with new technologies and producing resources to support programmes of Open, Distance and Flexible Learning (ODFL) in member countries of the Commonwealth of Nations. In its Strategic Development Plan for the period 2015-2022, COL is targeting support for extending the use of ODFL approaches for skills development in Zambia.

Overview of Sub-Sector

Zambia is a middle-income country in Sub-Saharan Africa, with a population of 13.1 million (2010) and a GDP per capita of less than USD 4,000 (current PPP). Responsibility for the education and training sector has been assigned to two ministries. The Ministry of Basic Education manages systems for early childhood care and development (ECCD), as well as school-based education up to the completion of Grade 12. Post-secondary education and training is overseen by the Ministry of Higher Education (MHE), with a Directorate of Vocational Education and Training that administers funding for approximately twenty-five semi-autonomous training institutions. The Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) was established by legislation as the national body for setting standards, accrediting and regulating the activities of training providers in both the public and private sectors.

COL is working with these local partners – MHE and TEVETA – to plan and deliver a series of initiatives to build capacity at government institutions that plan to develop ODFL alternatives to conventional face-to-face training. As of mid-2015, two of these training institutions had been accepted as members of Innovation in Vocational Education & Skills Training (INVEST Africa), a partnership between COL and the Commonwealth Association of Polytechnics in Africa. This document was prepared to assess the current situation with regard to the use of ODFL by publicly-funded training institutions in Zambia, as well as to establish baseline indicators for monitoring and evaluating the planned initiatives.

Institution-based training is one of the main avenues for Zambians to acquire recognised qualifications in various trades and technical professions. Fewer than three hundred training providers have been accredited by TEVETA, and about a third of these are public institutions supported by different ministries, including MHE. Training providers are allowed to develop their own short courses, but the curricula for formal programmes must be accredited at national level by TEVETA to ensure standardisation in line with Zambia’s National Qualifications Framework. Each training provider is responsible for employing its own staff complement. Instructors are obliged to submit to accreditation by TEVETA, but concern has been expressed about the quality of instruction available at many centres. Approximately 35,000 students were enrolled for institution-based training in 2012, and the system produced roughly 8,000 ‘graduates’ in the same year.
Public training institutions are financed primarily through direct subventions from the Government of Zambia (GRZ), student fees, government bursaries and the sale of goods and services produced during the course of training. In addition to these sources of funding, there have been a number of donor-assisted initiatives for the sector in recent years. These include the Support to Science & Technology Education Project funded by the African Development Bank, the UK Department for International Development’s Skills Improvement Programme, funding from the Chinese Government for upgrading the skills of instructors and re-equipping GRZ training providers, and several smaller projects.

School-based training (also referred to as the ‘two-tier system’) is another important pathway for young people to acquire TEVET skills. The pilot phase of the Flexible Education and Training programme (FLET) began in 2014. Based on the German model, the two-tier system places equal emphasis on academic and basic skills education. The target is to enrol half of the adolescents who have been pushed out of formal schools due to the lack of sufficient places. As of May 2015, the two-tier system was being implemented by four training institutional hubs, linked to twenty technical secondary schools and ten schools for continuing education.

The informal sector is a major component of Zambia’s economy and labour force. Because of the importance of the informal economy, the Sixth National Development Plan includes a strategy to integrate modules on entrepreneurship and developing micro-, small and medium enterprises (MSMEs) in all FLET and TEVET programmes. In addition, the development of such skills are viewed as central to addressing the problem of unemployment, particularly among young people. To date, however, only two of the twenty-four public training institutions under MHE have designed and delivered short courses for workers in the informal economy. An unknown number of Youth Resource Centres under the Ministry of Youth and Sport offer TEVETA-accredited training in basic skills. This training is intended to enable unemployed youth to generate a livelihood in the informal economy.

Baseline Survey
An online survey was conducted between mid-June and early October 2015 to assess the readiness of the MHE training institutions in Zambia to adopt and/or expand their use of open, distance and flexible learning approaches for the provision of TEVET. The aim of this survey was to establish direct contact with potential partner institutions, to gather basic statistics on their operations and facilities, to identify the challenges they face and to assess the need for capacity-building among their staff members.

A total of twenty-three completed questionnaires were received. Thirteen of the public training institutions that responded to the survey offer programmes through DE methods. However, enrolments at all but three of these institutions are less than ninety students per year, raising concerns about the sustainability of these programmes. Almost all of these training providers offer other flexible options such as summer schools and part-time classes. Seventy-eight percent indicated that they currently offer courses that target marginalised groups, such as women and workers in the informal economy. More than half develop their own curricula, subject to external accreditation by TEVETA.
In terms of technical readiness to adopt ODFL methods, there were considerable variations between the surveyed institutions. The ratio of students to computers ranged from less than 3 to more than 33 learners per computer. All but 18% of the respondents reported that they have on campus access to the Internet. Among those institutions with Internet connectivity, there were considerable differences in bandwidth and service reliability. Estimates of the percentage of teaching staff with basic (or better) IT skills varied from 2% to 100%, with a mean of 49%. Most of the institutions had access to technical support for their ICT installations, but only three respondents indicated that they are completely satisfied with the available service. Most of the institutions have access to and make use of other technologies, such as data projectors and digital copying facilities, though these are generally inadequate to meet current needs.

The baseline survey indicates relatively low levels of pedagogic readiness among public training providers funded through MHE. Only small numbers of staff in a handful of these institutions have received any training in ODFL methods. It appears as if minimal use is made of ICTs to support teaching and learning in most of them. Only one training provider reported the use of technology to deliver e-learning modules, though most make use of their computer labs when teaching computer studies and other ICT-based courses (such as Computer-Assisted Design). A limited number of respondents reported that staff make use of computers to prepare their lesson plans, lecture notes and paper-based DE materials, as well as employing them in conjunction with a data projector for in-class presentations.

Organisational readiness was also relatively low. All but two of the respondents said that their institutions plan to expand existing ODFL programmes or introduce new ones. However, none of these institutions made reference to the possible use of open educational resources (OERs) to provide suitable content. Fewer than one in four of the institutions is currently making use of satellite centres to extend access to their programmes. Less than a third make provision for their students to use libraries/resource centres in the evenings or over weekends.

In terms of strategic readiness, the vast majority of institutions indicated that the use of DE, e-learning and other flexible learning options have been embedded in their strategic planning. While only 43% of respondents reported that their institutions had in place policies for ODFL, a majority indicated that they had policies in related areas, such as the use of ICTs, staff development and quality assurance.

The baseline survey also included four questions on the cross-cutting issue of gender. Just over half of the respondents indicated that their institutions had in place an approved policy to mainstream gender issues, while the remainder said that such policies were in various stages of development. Thirty-nine percent of the institutions had established gender committees, while most of them had embedded the principle of gender equity in recruitment and promotion practices, as well as in their mission statements and core values. Over eighty percent of the institutions reported that they had put in place systems to promote awareness of gender issues among staff and students. A similar percentage had taken steps to broaden participation by both male and female staff and students in decision-making processes. By contrast, just half of respondents said that their institutions have mechanisms for identifying and supporting
internal gender champions. All but one of the twenty-three institutions (96%) indicated that their student statistics can be disaggregated by gender.

Challenges
In summary, the TEVET system in Zambia faces a number of significant challenges, including:

- insufficient information about the changing demands of the labour market;
- training programmes that are not responsive to market needs;
- low priority for training workers in the informal economy;
- girls and women, rural residents, those living with disabilities and children of low-income families still do not have equal access to TEVET;
- poor quality of instruction because many teachers do not have recent experience in industry and/or lack pedagogical qualifications;
- under-utilisation of existing training facilities;
- other barriers to participation in TEVET, including fee levels, entry requirements and the lack of hostel facilities.

Seventy percent of the public training providers that responded to the baseline survey indicated that a lack of knowledge and skills was the biggest challenge they face when attempting to introduce ODFL approaches. This highlights the urgent need for capacity-building with different categories of staff in these institutions. When asked to prioritise the content of such training, the following areas were requested by 40% or more of respondents: e-learning methodologies, general ICT skills, instructional design and ODFL materials development, and DE teaching & learning methodologies.

Opportunities
While these limitations in Zambia’s TEVET sector pose serious challenges to the introduction of new approaches to training delivery, they also create certain opportunities to exploit the strengths of ODFL approaches. For example:

- By adopting Open Educational Resources (OERs), whether in digital form or printed on paper, TEVETA and training institutions can continuously update the content of courses in order to enhance their quality and relevance.

- ODFL approaches are ideal for in-service upgrading of the pedagogical skills of instructors, without withdrawing them from their teaching duties for significant periods.

- The dual-mode model of training can be an effective way of opening up access to TEVET for those living in remote areas. Learners are able to study the theoretical aspects of a course at a distance while gaining practical skills through workplace attachments near where they live.
Because the National Qualifications Framework for TEVET makes provision for competence-based Skills awards, this creates the potential to develop modular courses that enable learners to work towards a recognised qualification, as and when they wish.
Some Useful Facts and Figures

- Fewer than half of all young people complete senior secondary school, where girls and young women are significantly under-represented.

- The 2012 *Labour Force Survey* found that 10% of men in the working population (aged 15 years and older) had received some skills training, though the rate was less than 4% for women.

- In 2012, it was estimated that 34% of young females between 15 and 24 years of age were NEET – not in education, employment or training – while the comparable figure for males was only 22%.

- The 2012 *Labour Force Survey* found that only 15.4% of the working population was employed in the formal economy; of those in such employment, fewer than three in ten (28.8%) were female.

- In 2013 there were 275 training providers accredited by TEVETA, of which fewer than one third were government institutions residing under a number of different ministries, including MHE.

- Approximately 34,900 trainees were enrolled in training institutions of all types (public, private and not-for-profit) during 2012. Forty-five percent of this total were women, though female participation declined to 8% of enrolments at diploma level.

- Total enrolments in TEVET account for only about 4-5% of the population of young people leaving school each year.

- Just over half of all trainees were enrolled for courses in business studies or secretarial skills, while fewer than one in four trainees were pursuing craft programmes.

- Roughly 8,000 trainees successfully completed their programmes in the 2012.

- In 2014/15, a total of 1,573 learners were studying at a distance with public training institutions (inclusive of TVTC), of which 34.5% were female.

- A further 4,385 learners were pursuing their studies through other flexible options, such as summer schools or part-time classes. A slightly higher proportion of the latter group (36.5%) were female.
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INTRODUCTION

The Commonwealth of Learning (COL) is an intergovernmental agency, established by the Commonwealth Heads of Government to promote the development and sharing of innovative approaches to the provision of learning for sustainable development. Since 1989, COL has been carrying out research, organising capacity-building activities, experimenting with new technologies and producing resources to support programmes of Open, Distance and Flexible Learning (ODFL) in member countries of the Commonwealth of Nations.

In its Strategic Development Plan for the period 2015-2022, COL is targeting support for extending the use of ODFL approaches for skills development in Zambia. Working with its local partners – the Ministry of Higher Education (MHE) and the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) – a series of initiatives are being planned to build capacity at government institutions to develop ODFL alternatives to conventional face-to-face training.

This document was prepared to assess the current situation with regard to the use of ODFL in the TEVET sector in Zambia, as well as to establish baseline indicators for monitoring and evaluating the planned initiatives. It involved an Internet search and a desk review of documentation. In addition, the consultant conducted a survey of approximately twenty-five government training institutions accredited by TEVETA, which are better resourced and managed and thus in the best position to adopt innovative approaches to the delivery of training. The consultant’s terms of reference are shown in Appendix A.

This document is structured as follows: Section 1 presents an overview of the national education system in Zambia. This is followed by a summary of the technical and vocational training sector in that country. The third section explores the extent to which ODFL methods are currently being used to provide skills training. Because of the importance of the informal economy in Zambia’s overall development, Section 4 summarises the findings of the desk review with regard to the provision of training to support the development of micro-, small and medium enterprises (MSMEs). The following section discusses the methodology used to survey government training providers and outlines the findings in respect of institutional readiness to adopt innovative models of technical and vocational skills development. The issue of gender mainstreaming is considered in Section 6, including data from the online survey on its status in government training institutions. The concluding section of the report summarises key challenges and opportunities in Zambia’s TEVET sector, and discusses the “fit” between COL’s plans and the nation’s skill development needs.

* Between 2011 and September 2015, the GRZ ministry responsible for TEVET was the Ministry of Education, Science, Vocational Training and Early Education – MESVTEE.
1. **Overview of Education System in Zambia**

Education and skills development are considered central to the achievement of Zambia’s development goals,¹ and the government devotes a considerable portion of its annual budget to the sector – over 18% of public recurrent expenditure in 2014.² This section presents a brief summary of the existing education system in order to provide a context for the discussion of the skills development sector.

1.1 **Social and Economic Context**

Zambia is a land-locked country with a surface area of approximately 753,000 km². The country is divided into ten provinces, each administered by an appointed deputy minister, and further sub-divided into 89 districts. Zambia’s Central Statistical Office reported that the country’s population was just under 13.1 million persons in 2010, with an annual rate of growth of 2.8% over the ten-year period since the previous census. Six out of every ten Zambians lived in a rural area, and over 45% of the population was under 15 years of age.³ Zambia’s people comprise a large number of ethnic groups, and eight languages are recognised as regional languages, though English has been adopted for official purposes.

Zambia is classified by the World Bank as a middle income country, with a Gross Domestic Product per capita of USD 3,925 (current PPP) and a Gross National Income per capita of USD 3,810 (current PPP) in 2013. In 2010, 74% of the population were living on less than PPP USD 1.25 per day; poverty is concentrated in rural areas, where the percentage of the population living below the national poverty line was three times higher than among urban dwellers. The prevalence of HIV/AIDS among the population aged 15 to 49 years was 12.5% in 2013.⁴ Overall, Zambia was ranked 141st out of 187 countries in the UNDP’s 2013 Human Development Index. However, the annual rate of increase in Zambia’s HDI score over the past ten years was significantly higher than the average for Sub-Saharan Africa.⁵

1.2 **Legal & Policy Framework**

A new constitution for Zambia is currently in the process of being enacted, and the draft document enshrines the right to free primary and secondary education for all children.⁶ The legal framework for Zambia’s education system is based on the 1966 Education Act, although there have been several amendments since its promulgation. National educational aspirations have been articulated in various policy documents including *Educating Our Future* (1996), the Technical Education, Vocational and Entrepreneurship Training (TEVET) Policy (1996), the Ministry of Youth, Sport and Child Development Policy, the Ministry of Community Development Policy, the Basic Education Sub-sector Investment Programme (BESSIP) Implementation Plan, the Education Sector Plan (2002-2007) and the Sixth National Development Plan (2011-2015).⁷

Prior to 2011, responsibility for the education and training sector in Zambia was divided between several ministries: the Ministry of Education managed general and higher education; TVET was the purview of the Ministry of Science, Technology and Vocational Training; while oversight of early childhood care and education was split between MoE and the Ministry of Local Government and Housing, which was legally responsible for maintaining records of day nurseries.⁸ Subsequent restructuring of cabinet portfolios resulted in a single, combined Ministry of Education, Science, Vocational Training and Early
Education (MESTVTEE). However, in September 2015, the MESTVTEE was once again divided into two ministries for general and higher education. TVET has been placed under the Ministry of Higher Education (MHE), with the Hon. Michael Kaingu as Minister and the Hon. Sydney Mushanga as Deputy Minister for Science & Vocational Training.

1.3 National Education & Training Systems

Zambia’s national education system follows a (4+3)-(2+3)-4 structure, involving a total of seven years of primary education, followed by five years at secondary level and a further four years to the award of an ordinary B-degree. This structure is summarised in Table 1:

<table>
<thead>
<tr>
<th>Level/Sub-Sector</th>
<th>Sub-Levels in Zambia</th>
<th>Institutions</th>
<th>Grades/Awards</th>
<th>Official Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY CHILDHOOD CARE, DEVELOPMENT &amp; EDUCATION</td>
<td>Early Childhood Learning</td>
<td>Day Nurseries (regulated by the Ministry of Local Government &amp; Housing)</td>
<td></td>
<td>0 – 2 years</td>
</tr>
<tr>
<td></td>
<td>Pre-School</td>
<td>Pre-Schools (regulated by the Ministry of General Education)</td>
<td></td>
<td>3 – 6 years</td>
</tr>
<tr>
<td>PRIMARY</td>
<td>Lower Basic</td>
<td>Primary Schools</td>
<td>Grades 1 - 4</td>
<td>7 – 10 years</td>
</tr>
<tr>
<td></td>
<td>Middle Basic</td>
<td>Primary Schools</td>
<td>Grades 5 - 7</td>
<td>11 – 13 years</td>
</tr>
<tr>
<td>SECONDARY</td>
<td>Junior Cycle</td>
<td>Junior Secondary Schools</td>
<td>Grades 8 &amp; 9</td>
<td>14 – 15 years</td>
</tr>
<tr>
<td></td>
<td>Senior Cycle</td>
<td>Combined Secondary Schools</td>
<td>Grades 10 - 12</td>
<td>16 – 18 years</td>
</tr>
<tr>
<td>TEVET</td>
<td></td>
<td>School-Based Training</td>
<td>Trade Tests</td>
<td>16 years &amp; older</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training Centres</td>
<td>Certificates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vocational Training Institutes</td>
<td>Diplomas</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical Training Institutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERTIARY</td>
<td>Colleges</td>
<td>Certificates</td>
<td></td>
<td>19 years &amp; older</td>
</tr>
<tr>
<td></td>
<td>Universities</td>
<td>Diplomas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher Education Providers</td>
<td>Bachelor Degrees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUATERNARY (Post-Graduate)</td>
<td>Universities</td>
<td>Honours B-Degrees</td>
<td></td>
<td>23 years &amp; older</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PG Certs &amp; Dips</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Masters Degrees</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Doctorate Degrees</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the announcement of the Free Primary Education Policy in 2002 and the implementation of the 2011 Education Act, which made attendance at primary school compulsory for all children of school-going age, the Net Enrolment Rate at this level increased from 71% to a nominal 100% in 2014.9

Article 5.3 of the SADC Protocol on Education & Training10 defines Basic Education as nine years of continuous learning, comprising seven years at primary level (Grades 1 – 7) and two years at junior secondary level (Grades 8 & 9). Although moves have been made to align Zambia’s national education system with this definition, as of mid-2015 the historical divisions between primary and secondary schools are still in place. Currently many children leave school after Grade 7; the UNESCO Institute for Statistics database gives a Net
Enrolment Rate of 31.5% at junior secondary level in Zambian schools for 2013. However, plans are in place to ensure that every learner will automatically proceed to Grade 8 with effect from 2016, either in a school providing general education or through a parallel stream that will cater for Basic Skills Education (see Sub-section 2.7). There have been significant improvements in the rate of participation by girls in basic education, such that the Gender Parity Index for Grades 1 – 9 now stands at 0.98.

The senior cycle of secondary education is provided at high schools, which are of four types: government, private, community and faith-based. Many secondary schools, especially government-owned institutions, run morning and afternoon sessions for different cohorts of learners in order to accommodate the demand for places at this level. Plans have been made to construct 118 new government secondary schools by 2015, in addition to the 683 already in existence. Nevertheless, rates of participation in senior secondary education are much lower than for Grades 1 – 9. The UNESCO Institute for Statistics database does not include figures for the Net Enrolment Rate at this level, but the MESVTEE’s Education Statistics Bulletin for 2012 reported an NER of 33% for Grades 10 – 12. The GPI at senior secondary level was reportedly 0.84 in 2014, indicating a significant drop-off in educational participation by girls.

The Examinations Council of Zambia was established in 1983 to administer the national examination system for formal schooling, including: devising syllabuses, setting examinations, supervising their marking and making awards. External examinations take place at the end of Grade 7 (Primary School Leaving Certificate Examination), Grade 9 and Grade 12 (School Certificate Examination, equivalent to GCE O-levels). The Grade 9 examinations provide the basis for admitting candidates to different types of senior secondary schools or to TEVET, while the results of the Grade 12 examinations are used by higher education institutions for selection purposes.

Universities, specialised institutes and colleges offer a variety of two-year certificate, three-year diploma and four-year ordinary bachelor’s degree programmes. Post-graduate programmes at diploma, master’s degree and doctoral level are available through most of the university-level institutions, as well as through cross-border providers.

1.4 National Qualifications Framework

Part II of the Zambia Qualifications Authority Act [No. 13 of 2011] provides for the creation of a single, integrated, national framework for assessing learning achievements. The proposed Zambia Qualifications Framework (ZQF) comprises a number of sub-frameworks for different categories of education and training, each of which will be developed and managed by an appropriate authority. Although a final decision has yet to be taken on the combined ZQF, the proposed Framework is shown in Figure 1.

The Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) was assigned responsibility for developing and managing the Training Qualifications Framework in Zambia, which was formally approved in 2010. As of October 2010, fifty qualifications had been registered on the TQF.
FIGURE 1 – Proposed Zambia (National) Qualifications Framework

<table>
<thead>
<tr>
<th>ZQF Level</th>
<th>General Education/ Schooling</th>
<th>Technical and Vocational Education &amp; Training</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>Doctoral Degree</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>Post-Graduate Diploma</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Diploma (Technologist)</td>
<td>Diploma</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Advanced Cert. (Technician)</td>
<td>Certificate</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Craft Certificate</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Trade Test Level I Certificate</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>High School (Grade 12)*</td>
<td>Trade Test Level II</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Basic Education (Grade 9)</td>
<td>Trade Test Level III</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Body</th>
<th>Examinations Council of Zambia</th>
<th>TEVETA</th>
<th>Higher Education Authority</th>
</tr>
</thead>
</table>

*There appears to be an anomaly in the provisional ranking of general education awards relative to those in the TQF. As indicated in Figure 2, a young person with a Grade 9 Certificate can complete a training course leading to a Trade Test III Certificate in a single year. Thus, it is difficult to see how this award can be assessed as equivalent to a Grade 12 School Certificate, which requires three additional years of full-time study after Grade 9. The Zambia Qualifications Authority is in the process of harmonising the ranking of qualifications on the different sub-frameworks.
2. **The TEVET Sector in Zambia**

Since the mid-1990s, Zambia has embarked on a series of initiatives, with the support of international cooperation partners, to reform its systems for delivering technical education, vocational and entrepreneurship training (TEVET). These reforms have included enhancing responsiveness to the demands of both the formal and informal sectors of the economy; improving the quality of the training provided; ensuring greater equity of access (for women, those living with disabilities and other under-represented groups); and working towards the financial sustainability of the training system.²¹

2.1 **Regulatory Body**

In 1994 a national Task Force was appointed by the Minister to review the government’s policy on TEVET and to recommend changes that would ensure the nation’s training system could deliver a competent labour force to meet emerging economic challenges. The new policy was embodied in the Technical Education, Vocational and Entrepreneurship Training Act [No. 13 of 1998].²² Together with the TEVET (Amendment) Act [No. 11 of 2005],²³ this legislation provided for the establishment of the Technical Education, Vocational and Entrepreneurship Authority (TEVETA) as a semi-autonomous agency and defined its mandate. In addition, these statutes laid down the legal framework for the creation, support and regulation of government institutions in the sector.²⁴

The Department of Vocational Education and Training in MHE is responsible for formulating national policies and allocating public resources for the sector, as well as monitoring and evaluating implementation. In order to complement the Ministry’s roles, TEVETA has been given responsibility for the following functions:

a) administering and managing the TEVET Fund;

b) advising the Minister on improving the quality of human resources in Zambia;

c) regulating and advising institutions established or registered under the TEVET Act, 1998 [read together with the TEVET (Amendment) Act, 2005];

d) regulating and coordinating apprenticeship and trade testing systems;

e) facilitating the provision of technical consultancy to institutions established or registered under the Act;

f) facilitating the development of technical capacity in institutions established or registered under the Act;

g) developing national curricula in consultation with stakeholders;

h) setting minimum standards and qualifications for any occupation, skill technology or trade in accordance with trends in industry;

i) providing guidelines for the development of institutional curricula;

j) accrediting local and foreign examinations to be taken by persons attending courses at an institution established or registered under the Act;

k) regulating and conducting national examinations to be taken by persons attending courses at an institution stabled or registered under the Act;
l) charging and collecting fees in respect of examinations, assessments and other services provided by the Authority;

m) awarding certificates to persons who succeed in examinations and assessment undertaken under this Act;

n) approving curricula and standards of certificates in institutions established or registered under this Act;

o) registering institutions;

p) cancelling the registration of an institution established or registered under this Act;

q) collecting, managing and disseminating labour market information relating to technical education, vocational and entrepreneurship training;

r) initiating, monitoring and evaluating development programmes for the continued advancement of technical education, vocational and entrepreneurship training;

s) determining the equivalencies of local and foreign qualifications;

t) accrediting and registering trainers, examiners and assessors;

u) in consultation with the Minister –

  i) determining priority skills areas in technical education, vocational and entrepreneurship training for the purpose of enhancing social and economic development in Zambia; and

  ii) mobilizing financial and material resources for the provision of technical education, vocational and entrepreneurship training.25

2.2 TEVETA Strategic Plan

The TEVETA Strategic Plan for the period 2014-2016 specifies seven training and learning systems or pathways for pursuing TEVET:26

- training in secondary schools (see Sub-section 2.7),
- training in TEVET institutions,
- on-the-job or workplace-based training,
- dual-mode training (TEVET Learnership Scheme, involving both institution- and workplace-based training),
- recognition of prior learning (RPL) assessments (e.g. Skills Competitions),
- TEVET access/foundation/bridging courses,
- open, distance and flexible learning (ODFL – see Section 3).

It is this seventh pathway which provides the opportunity for COL, TEVETA and training institutions to collaborate.
2.3 TEVET Institutions

As of 31 December 2013, there were 275 training institutions registered with TEVETA, as shown in Table 2. Responsibility for corporate governance and management oversight of training providers is vested in the boards appointed by the respective proprietors. In this respect, government training institutions enjoy a degree of autonomy over their own affairs.

<table>
<thead>
<tr>
<th>Proprietor/Owner</th>
<th>No. of Institutions</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government of Zambia (various ministries)</td>
<td>88</td>
<td>32%</td>
</tr>
<tr>
<td>Private, for-profit entities</td>
<td>77</td>
<td>28%</td>
</tr>
<tr>
<td>Faith-based organisations</td>
<td>58</td>
<td>21%</td>
</tr>
<tr>
<td>Community</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td>Trust</td>
<td>13</td>
<td>5%</td>
</tr>
<tr>
<td>Company</td>
<td>16</td>
<td>6%</td>
</tr>
<tr>
<td>Non-Governmental Organisation</td>
<td>15</td>
<td>5%</td>
</tr>
</tbody>
</table>

Public training institutions reside under a number of different ministries, including: MHE; the Ministry of Youth and Sports; the Ministry of Community Development, Mother and Child Health; the Ministry of Tourism and Arts; the Ministry of Lands, Environment and Natural Resources; the Ministry of Labour and Social Security; the Ministry of Commerce and Industry; and the Ministry of Agriculture. Twenty-five training institutions fall under the Directorate of Vocational Education and Training in MHE, while a further fourteen Skills Development Centres are overseen by the Directorate of Open and Distance Education in the Ministry of General Education. An inter-ministerial committee has been established to discuss issues of common interest and to coordinate the activities of different government institutions.

Training institutions are graded on a three-point scale, from Grade One (Very Good) to Grade Three (Satisfactory). This grading system is based on several criteria, including: the qualifications and experience of management staff and trainers, the ratio of trainers to trainees, the training environment (physical facilities, equipment, tools and materials), the curricula in use and the standards used for assessment. In 2013, there were 42 (15%) Grade One institutions, 108 (39%) Grade Two and 125 (46%) Grade Three training institutions registered with TEVETA.

2.4 Staffing of TEVET Institutions

Each training institution is responsible for employing its own staff complement. Teachers/trainers/instructors are obliged to submit to accreditation by TEVETA, but those who do not meet the requirements can be employed for a probationary period while they upgrade their qualifications. However, concern has been expressed about the quality of instructors; while many have specific technical qualifications and work experience, they lack the skills required for effective teaching. In addition, some instructors have not had the opportunity to update their technical skills in line with changing technologies and practices.
in the workplace. For this reason, building capacity among TEVET instructors is considered an urgent priority by funders, such as DFID.  

2.5 Participation in formal TEVET  

The 2012 Labour Force Survey found that 10.0% of men in the working population (aged 15 years and older) had received some skills training, though the rate was only 3.7% for women. Those living in urban areas were more than twice as likely to have received some training as their rural counterparts. The most popular skill among women was design and tailoring, which accounted for almost a third (31.7%) of all trained female workers, whereas brick-laying and construction (18.4%), auto mechanics (10.0%) and carpentry (9.3%) were the most popular trades for men. The median duration of the training received was more than one but less than three years.

During 2012, approximately 34,900 trainees were enrolled in training institutions of all types (public, private and not-for-profit). Forty-five percent of this total were women, though female participation declined to 8% of enrolments at diploma level. Over half (50.6%) of all trainees were enrolled for courses in business studies or secretarial skills, while fewer than one in four trainees (24.1%) were pursuing craft programmes. Roughly 8,000 trainees successfully completed their programmes in the same year.

Nevertheless, total enrolments in TEVET account for only about 4%-5% of the population of young people leaving school each year. Almost all training institutions operate below their capacity, with trainee to instructor ratios well below the prescribed norm of 20:1. According to the responsible ministry, trade schools fail to attract large numbers because traditional artisans (such as brick-layers and carpenters) are looked down upon, despite the fact that Zambia has a major shortage of such skills. Other barriers to participation in TEVET include fee levels in excess of the capacity of low-income families and the minimum academic requirements for entry to programmes (Grade 9 or Grade 12 completion). In addition, the existing training institutions are concentrated in Lusaka, Copperbelt and Southern Provinces. The latter adds to the costs for prospective trainees who rely on boarding facilities, which often lack capacity to accommodate all of the prospective students who require them.

2.6 TEVET Curricula

Training institutions are allowed to develop their own short courses, but the curricula for formal programmes must be accredited at national level by TEVETA to ensure standardisation. Curriculum development is a collaborative process, typically involving panels of subject experts drawn from participating institutions and coordinated by TEVETA. Entrepreneurship education is a required subject, while work attachments form an integral part of most training programmes. Table 3 summarises the framework for TEVET qualifications and the average duration of courses at each level.

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1 Of those who had received skills training, 71.8% lived in urban areas and 38.2% lived in rural areas. Given the fact that six out of ten Zambians live outside the cities and towns, these data illustrate the concentration of skilled workers in urban areas.
### TABLE 3 – TEVET Qualifications and Duration of Courses

<table>
<thead>
<tr>
<th>TEVET Qualifications</th>
<th>Timeframe</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma (Technologist)</td>
<td>3 years</td>
<td>Of which 3 months (one whole term) is for internship. This is the shortest work placement of all TEVET programmes.</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>2 – 2½ years</td>
<td>The duration differs from programme to programme. However, the longest takes 2½ years, with 6 – 8 months spent in a trainee-ship.</td>
</tr>
<tr>
<td>(Technician)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate (Craft)</td>
<td>1 – 2 years</td>
<td>Business programmes normally last one full year. The duration of engineering programmes is up to two years, with one year (50% of programme) devoted to practicals or work attachments.</td>
</tr>
<tr>
<td>Certificate (Trade Test 1)</td>
<td>±1 year</td>
<td>30% theory: 70% practical</td>
</tr>
<tr>
<td>Certificate (Trade Test 2)</td>
<td>6 months</td>
<td>20% theory: 80% practical</td>
</tr>
<tr>
<td>Certificate (Trade Test 3)</td>
<td>3 months</td>
<td>100% practical</td>
</tr>
</tbody>
</table>

Source: DfID (2014) Skills Improvement Programme in Zambia, pp. 8-9, Table 1.

In addition to the formal qualifications listed above, training institutions offer short courses leading to Skills awards, which recognise a narrow set of competencies that are needed in the labour market but are too limited to merit a separate qualification. There is considerable variation in the entry requirements for these short courses, but they often involve a measure of recognition of prior learning. Because Skills awards are typically competency-based, those with on-the-job experience or skills acquired elsewhere can achieve certification for informal learning.

### 2.7 Assessment & Certification

Assessment is a structured system for gathering evidence of an individual’s ability to perform to recognised standards. The assessment system thus offers diagnostic feedback on trainees’ performance in order to provide direction and motivation, it confirms that their performance has reached the level defined in the standard, and it assists in evaluating the effectiveness of training. It involves both continuous assessment and terminal testing. Continuous assessment is carried out by the training provider, though evidence is accumulated for external verification. The terminal testing of trainees’ competency is conducted by external assessors and examiners, either on site or at a trade testing centre. TEVETA is responsible for training, accrediting and monitoring verifiers, assessors, examiners and trade testing centres in order to ensure that their marking is in line with national standards. Once the marking sheets of external assessors/examiners have been validated by TEVETA, certificates are awarded to successful trainees. The grading system for awards ranges from Level III (pass) to Level I (distinction).

TEVETA also reviews applications from examination boards outside of Zambia so that the qualifications they offer can be officially accredited and equivalencies with qualifications on
the national Training Qualifications Framework can be established. As of 31 December 2013, there were fifteen external examination boards/associations accredited by TEVETA.41

### 2.8 School-Based TEVET (Flexible Education & Training)

During the colonial period, the practice was to provide sufficient technical and vocational training for Africans to meet the needs for basic manual trades (carpentry, bricklaying, plumbing, etc.). However, such jobs offered no opportunities for real socio-economic upward mobility. As a result, at the time of independence, the TVET system was underdeveloped and undervalued. Those who had access to education preferred to pursue an academic stream that qualified them for further studies or white-collar jobs.

Since achieving independence in 1964, the Government of the Republic of Zambia has made commitments to ensure that young people have skills that enable them to be productive citizens. Through various educational reforms, successive governments have attempted to achieve a sharper focus on skills education. Historically, however, the concept has almost always been understood to refer to technical and vocational training.42 During the 1960s TVET was an integral part of the education provided in primary and secondary schools, and it was designed to accommodate students who were less academically able. However, because of the high costs of providing such training and the inevitable stigmatisation of those who took part, this approach was progressively abandoned.43

Over the last fifteen years, two initiatives have been undertaken by the responsible ministries in order to integrate skills training and basic education. The first of these is referred to as Basic Skills Education (BSE), an initiative associated with the former Ministry of Education when school-based skills development and technical and vocational training were under separate ministries. BSE does not refer exclusively to TEVET, but also embraces the acquisition within schools of pre-vocational and life skills, and the development of individual learner talents for survival, development and self-worth. In order to address the need for BSE, GRZ has established Continuing Education and Trade Skills Training Centres across the country.44 More than 14,000 learners were taking part in BSE at designated centres in 2004.

The second initiative is called the Flexible Education and Training (FLET) programme or the “two-tier system”. In addition to the provisions of the 2004 Education for All policy framework, GRZ has made several pronouncements on the importance of skills education and commitments to the development of a two-tier education system, targeting children who are pushed out of formal schooling. The education policy that is currently under development as the successor to the Educating Our Future document (which concluded at the end of 2015) will also include measures to address the needs of those who will not be absorbed in the formal education system after Grade 9. It is envisaged that every learner in Grade 7 will automatically proceed to Grade 8, beginning in 2016. However, the government plans to create a parallel stream under the two-tier system to cater for FLET.45

The two-tier system will have the versatility to offer equal opportunities for learners who wish to follow alternative pathways, leading either to academic studies at senior secondary level or to formal TEVET. Sufficient flexibility will need to be built into the programme so
that learners can move both horizontally and vertically between the two systems, and can acquire both academic and TEVET qualifications at the same time. This will be achieved by linking schools to vocational training centres in a “hub and spoke” arrangement, as illustrated in Figure 2:

**FIGURE 2 – Proposed linkages in the FLET System**

In line with the current programme for educational reform, the roll-out of a two-tier education system began in 2014. Based on the German model, the two-tier system places equal emphasis on academic and basic skills education. The target is to enrol half of the adolescents who have been ‘pushed out’ of formal schools due to the lack of sufficient places. As of May 2015, the two-tier system was being implemented by four training institutional hubs: Lukashya Technical Training Institute (197 learners), Chipata TTI (191 learners), Mansa TTI (376 learners) and Nkumbi International College (75 learners). These institutional hubs have been linked to twenty technical secondary schools and ten schools for continuing education during the pilot phase. Teachers provide instruction in academic subjects at the schools, while learners go to the training centre to develop practical skills. Other schools have also begun to provide vocational skills training on their own campuses and can arrange for learners to be tested if they are ready.

The following courses are currently available: Carpentry & Joinery; Metal Fabrication; Woodwork; Bricklaying & Plastering; Design, Cutting & Tailoring; and Food Production. However, curricula have been developed for nine additional courses (Engineering Mathematics; Engineering Science; ICTs; Communication Skills; Graphic Communications;
Fabrication & Welding; Power Electrical; Entrepreneurship; and Design & Development). The latter are still awaiting approval by TEVETA.49

2.9 Financing of TEVET

Financing for the TEVET sector comes from four main sources:

- **Government Funding** – Public training institutions receive direct subventions from the GRZ recurrent budget, but this source of financial assistance is not available to non-State training providers. In 2009, only 0.6% of the GRZ budgetary allocation for education was devoted to the TEVET sub-sector,50 though the amount was more than doubled between 2010 and 2012, from ZMW 7.3 million to ZMW 18.0 million.51

- **Fees** – All training providers require students to pay fees for registration, tuition, room and board, etc. At government training institutions, maximum fees are set by the MHE, but other institutions are allowed to determine their own fee levels. However, the fee income collected by training institutions has not kept pace with price inflation, creating budgetary constraints that limit the scope for increasing staff salaries or procuring adequate training materials.

- **Bursaries** - Although the government provides some bursaries for needy trainees, this scheme is reportedly being phased out for cost and efficiency reasons.52 A quota of 30% of funding is set aside for female applicants who wish to pursue training in technical and science-related fields, while a further 10% is earmarked for persons with disabilities.53

- **Sale of Goods & Services** – Many institutions market the goods and services produced as a by-product of the training process in order to secure additional income.

While a number of SADC countries have legislated for employer levies as a means of building up a pool of funds to support TVET provision, as of 2012 this had yet to be introduced in Zambia.54

In addition to the above-mentioned sources of funding, there have been a number of donor-assisted initiatives for the sector in recent years. These include:

- **African Development Bank** – The ADB-funded Support to Science & Technology Education Project commenced in 2014 and is expected to provide USD 33 million over a period of four and a half years. The bulk of funds have been allocated for the rehabilitation of facilities and the procurement of equipment at five public training institutions and three public universities. In addition, the project provides for the training of 300 instructors and managers, the review of curricula for twenty-five TEVET programmes, enhancing work-based and entrepreneurship skills, and some public-private pilot initiatives in the mining sector.55

- In 2014, the UK Government’s **Department for International Development** began a six-year Skills Improvement Programme (SKIP). A total of GBP 15 million will be provided to support enhancements to the overall quality and relevance of TEVET
programmes, as well as improvements in access and equitable outcomes. Roughly one third of the total amount will be allocated to the TEVET Fund (administered by TEVETA), which will be dispersed for training institute development, enterprise-based traineeships and the introduction of skills training for youth in the informal economy. In addition, SKIP will involve strengthening capacity within TEVETA and MESVTEE, in-service training for managers and instructors, scholarships for girls/women and those living with disabilities, and upgrading the infrastructure at five training institutes to facilitate access by those with physical disabilities.66 The main output indicators for SKIP include:

- 8,362 male and 4,502 female graduates of relevant and quality TEVET programmes;
- 800 additional instructors and managers, plus 6,460 additional learners trained in public and private training institutions, with enhanced quality TEVET provision;
- 2,320 additional learners have received better quality enterprise-based training;
- scholarships for 1,000 additional learners drawn from the following target groups: girls and young women, rural youth and those living with disabilities;
- 3,800 additional youths supported through training in the informal economy.

- The Chinese Government is providing funding for re-equipping fourteen public training institutions to update selected programmes (automotive, welding, electrical and mechanical engineering) and to re-train instructors to use the new equipment.

- A variety of smaller projects are also underway or in various stages of planning, including Finnida support for the construction sector; regional support for youth skills in the mining sector from the Australian Aid Programme; UNESCO’s Better Education for Africa’s Rise (BEAR) project (with funding from the Government of the Republic of Korea) to build capacity for planning, policy formulation and a management information system; the ILO/One UN programme for Sustainable Livelihoods for Young People through the Development of Rural MSMEs (with funding from the Swedish Government); other ILO initiatives, including a Green Jobs programme and PROPEL (Promoting Rights and Opportunities for People with Disabilities in Employment through Legislation).67
3. **Open, Distance & Flexible Learning in TEVET**

There is a long history of using ODFL approaches for technical and vocational training in Zambia. Specific reference is made to distance education in the 1996 policy document for the education and training sector – *Educating Our Future* – which recognised “…the central importance of continuing and distance education for personal development, updating knowledge and skills, and for overcoming disadvantage suffered during initial education.” In order to capitalise upon the potentialities of DE, the Policy aimed to integrate this mode of provision into its mainstream planning processes; to increase access to quality DE as another avenue to education for out-of-school children, youths and adults; and to promote the use of DE for the initial and ongoing training of teachers. Open, Distance and Flexible Learning is also included as one of the seven pathways or approaches to the provision of training identified in the TEVETA Strategic Plan.

### 3.1 Directorate of Open & Distance Education, MOGE

In line with the 1996 policy, a separate Directorate of Open & Distance Education (DODE) was created within the Ministry to expand access to quality education and training for out-of-school youths and adults through alternative methodologies and technologies. DODE is based at the Ministry of General Education (MOGE) headquarters in Lusaka and comprises three sub-ordinate units: Educational Broadcasting Services, Distance Education (DEU), and Open Learning (OLU, including adult literacy). DODE has disseminated Guidelines for Distance Education programmes to all education and training providers in Zambia and is spearheading the development of a national Open and Distance Learning (ODL) Policy, which will be aligned with the SADC Regional ODL Framework.

The mandate of the Distance Education Unit (DEU) is to coordinate the provision of DE programmes and materials at all levels of education. One of its sections is the Zambia Collage of Open & Distance Education (ZACODE), which plays a central role in the development and production of self-instructional materials. The DEU is working on streamlining the operations of ZACODE in order to make it more relevant to the needs of potential learners in Zambia and more efficient in line with international trends in the field of ODFL. In addition, the DEU has been involved in a COL project to develop a range of Open Education Resources (OERs) that can be accessed freely from the Internet by teachers and learners in both conventional schools and ZACODE.

By contrast, the Open Learning Unit (OLU) of DODE is responsible for the provision of afternoon and evening classes at both basic education and high school level, using conventional face-to-face methods. In addition, the OLU operates thirteen Schools for Continuing Education (SCEs), which are located in every province apart from Lusaka and Muchinga. These SCEs offer a blend of academic, vocational and entrepreneurship training. Many of these courses lead to Trade Test Certificates, though the OLU is endeavouring to expand their offerings to higher levels of the TQF by improving infrastructure and upgrading the qualifications of instructors/teachers. In order to increase access for potential students from other districts, the OLU is also prioritising the construction of boarding hostels at SCEs. In 2007/08, there were over 154,000 learners taking part in classes offered...
through the OLU, including small numbers (up to 250) in the following trades: carpentry and joinery; design, cutting and tailoring; metal fabrication; secretarial skills; catering & hotel; computer studies; automotive mechanics; and social work.59

3.2 Policy support for ODFL in TEVET

Zambia’s Sixth National Development Plan, 2010-2015 includes specific mention of introducing alternative modes of delivering basic skills education and TEVET, including the use of ICTs, as a means of increasing efficiency and equitable access in the sector.60 The third objective in TEVETA’s Strategic Plan, 2014-2016 is “… to develop and promote innovative Training Systems in order to increase annual access to and graduation rates from the TEVET system”.61 The adoption of ODFL approaches is one of the pathways by which the Agency aims to achieve this objective.

In 2004, TEVETA published Distance Vocational Education: A guide to implementation in order to provide guidelines for training institutions that wished to offer programmes through the DE mode. The objectives of this initiative included:

- extending access to TEVET for a wider pool of potential trainees/students;
- developing affordable options for pursuing training;
- providing opportunities for skills development to disadvantaged citizens in the country;
- eliminating distance as a barrier to the acquisition of knowledge, skills and values;
- devising alternative means of offering TEVET programmes in line with developments in the region and globally.62

As part of consultative process undertaken by the then Ministry of Science, Technology and Vocational Training, COL supported a consultancy by George Herd in 2010. The purpose of this mission was to advise on the drafting of an ODFL policy for the TEVET sector and to ensure that it was harmonised with the work of committees in the then Ministry of Education that were engaged in similar exercises to develop national policies on ODL and e-learning. The latter consultations were undertaken in response to a SADC initiative to develop a regional perspective on ODL, which has largely been influenced by the experience of member states in the use of such approaches for teacher training and open schooling. For this reason, it was necessary to explore the modalities for extending the potential benefits of ODFL to the TEVET sector. The major output of this mission was the drafting of a document entitled, TEVET Open and Distance and Flexible Learning Strategic Framework and Policy Guideline.63

In 2013, formal Guidelines for Open, Distance and Flexible Learning were promulgated by TEVETA. This document set out the minimum requirements for institutions to register as ODFL providers, in respect of: policy, financial resources, infrastructure, learner support, learning materials, qualifications and management of staff, admissions, curriculum, and assessment.64

3.3 TEVET Institutions making use of these approaches

The Baseline Survey indicates that, in 2015, there were thirteen public training institutions in Zambia that offered distance education programmes. In all but two of these institutions, the
number of registered students was quite small, ranging from just over eighty to as few as three learners. The low level of enrolments raises concerns about the sustainability of such programmes. Currently the largest provider of distance education is the Technical and Vocational Teachers’ College (TVTC), with an enrolment of over 1,400 ODL students in 2011, though numbers have declined since then.\textsuperscript{65,66} In 2014/15, a total of 1,573 learners were studying at a distance with these public institutions (inclusive of TVTC), of which 34.5\% were female. A further 4,385 learners were pursuing their studies through other flexible learning options, such as summer schools or part-time classes, which are offered at a majority of the twenty-three institutions that responded to the survey. A slightly higher proportion of the latter group (36.5\%) were women.

In 2010, COL launched the Innovation in Vocational Education & Skills Training (INVEST Africa) initiative in partnership with the Commonwealth Association of Polytechnics in Africa (CAPA). INVEST Africa aims to support the integration of ICTs and Flexible Skills Development (FSD) approaches to the delivery of TVET among member institutions. Following a baseline assessments of institutional readiness in June 2010, TVTC and the Zambia Institute of Business Studies and Industrial Practice (ZIBSIP) joined the INVEST Africa programme. Since that time, staff from both institutions have taken part in several capacity-building events, including attendance at various workshops and meetings, completion of online courses and participation on the INVEST Africa community learning network (CLN). Significant progress has been made by these institutions in building their strategic, technical, organisational and pedagogical capacity to develop and support training delivered through open, distance, flexible and blended learning methods.\textsuperscript{67}
4. Training for the Informal Economy

The informal sector is a major component of Zambia’s economy and labour force. The 2012 Labour Force Survey found that only 15.4% of the working population was employed in the formal economy; of those in such employment, fewer than three in ten (28.8%) were female. Because of the importance of the informal economy, the Sixth National Development Plan includes a strategy to integrate modules on entrepreneurship and developing micro-, small and medium enterprises (MSMEs) in all basic skills education and TEVET.69

In addition, the development of such skills are viewed as central to addressing the problem of unemployment, particularly among young people. In 2012, 7.8% of the labour force (15 years of age and older) were unemployed. Women were almost twice as likely to be unemployed as men, and the unemployment rate among young people (between 20 and 24 years of age) was almost twice the national average.70 Of those in employment, 10.2% were underemployed.71

4.1 Training Courses available at Public Institutions

On the basis of the available documentation, it appears as if the training institutions registered with TEVETA have made only limited progress in devising short courses or longer programmes specifically-targeted for workers in the informal economy.

A noteworthy exception was a short course in Basic Joinery and Entrepreneurial Skills developed and delivered by TVTC from mid-November 2013. Sponsorship for this pilot course was provided through TEVETA, while the District Commissioner’s office assisted in recruiting potential students. The course comprised three weeks of classes on the College’s main campus in Luanshya, with a further week spent in industrial attachments. A total of 29 participants took part in the programme, all but five of whom (82.8%) were male.

The Zambia Institute for Business Studies and Industrial Practice (ZIPSIP) also designed a short course in Food Production, which was launched in 2014. Following training from COL in Course Design for the Informal Sector in 2012 and 2013, ZIPSIP identified informal traders offering food for sale in local markets as a target group. After carrying out an analysis of their needs for training in food preparation, hygiene, customer service, basic IT skills and entrepreneurship, ZIPSIP secured funding from TEVETA to pilot this short course. Fifty learners (48 or 96% of whom were women) were enrolled for the four-month course in September 2014. Training took place through face-to-face sessions, blended with video demonstrations, site visits to food outlets and mentoring by former students of the Institute.72

4.2 Other providers of MSME training

Apart from the above-mentioned initiatives, the Ministry of Youth and Sport (MYS) provides skills training at a number of Youth Resource Centres across the country. A majority of these centres have been registered with TEVETA and offer the nationally-accredited TEVET curricula. However, a review of the available documentation has thrown up references to a number of other programmes, many of which are organised by MYS in cooperation with the International Labour Organisation. These programmes provide basic skills training for unemployed youth with the aim of empowering them to generate a
livelihood in the informal economy. In some cases, they have devised their own training programmes, but these training providers are expected to approach TEVETA for assistance to enable these curricula to be accredited.

### 4.3 Curriculum for informal economy training

TEVETA does not have separate courses for those intending to work in the MSME sector, but *Entrepreneurship* is a component of all formal training programmes. This means that graduates have not only the skills required for employment in the formal sector of the economy, but also the know-how to set up their own small businesses. Case studies of successful entrepreneurs who benefited from such training have been published in the newsletters of TEVETA and various donors. Apart from this, it appears as if little research has been conducted to identify and assess the outcomes of capacity-building initiatives for workers in Zambia’s informal economy.
5. **Baseline Survey**

A survey was conducted by the consultant in order to assess the readiness of public training institutions in Zambia to adopt and/or expand their use of open, distance and flexible learning approaches for the provision of TEVET. The aim of this survey was to establish direct contact with potential partner institutions, to gather basic statistics on their operations and facilities, to identify the challenges they face and to assess the need for capacity-building among their staff members. Data obtained from this research will be used by COL to establish baseline indicators for planning, monitoring and evaluating development initiatives for the sector in partnership with TEVETA.

5.1 **Survey Methodology and Instrument**

An online questionnaire was developed, based on the institutional profile instrument used for the INVEST Africa initiative. Because COL has adopted a focus on the cross-cutting issue of gender, several questions were added to the original instrument to assess the status of gender mainstreaming among training institutions (see Section 6 of this document). The questionnaire comprised 52 questions and was hosted on the Survey Monkey portal.

A letter of introduction from the Director General of TEVETA, explaining the purpose of the exercise and requesting the cooperation of principals/managers/heads of training institutions was circulated by e-mail on 14 June 2015. The consultant followed up the initial circular with at least three e-mailed reminders to institutions that had not responded. Several of the e-mail addresses for institutional contacts supplied by TEVETA were no longer operational, and it proved impossible to find current e-mail contacts for these institutions. In addition, a number of the training providers reported problems with Internet connectivity and electricity black-outs that caused difficulties in completing the online survey.

In order to maximise the number of responses, participants from institutions that had not filled in the online questionnaire were asked to bring along a completed, paper copy to an introductory workshop, which took place from 7 – 10 September 2015 at the Chrismar Hotel in Lusaka. This data was subsequently captured on the Survey Monkey site.

As of 14 October, twenty-three complete questionnaires had been received, representing a response rate of 88%. (See Appendix B for a full list of the institutions that submitted information.) Readiness for adopting a flexible and blended (FaB) learning approach is assessed over four domains: technical, pedagogic, strategic and organisational. The findings of the survey in respect of each of these domains are summarised below.

5.2 **Survey Findings: Institutional Readiness**

As discussed in Sub-section 3.3, more than 20,000 learners are pursuing their studies through ODFL methods (including DE, part-time and summer school students) at twenty-one public institutions.\(^1\) Nine out of twenty-three institutions (39%) reported that they

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\(^1\) The Technical and Vocational Teachers’ College (TVTC) was not asked to complete the questionnaire, as it had provided updated statistics in December 2014 as part of a monitoring and evaluation exercise. However, for the sake of completeness, this data from TVTC has been included here, though not when reporting responses to other questions. Those institutions that reported having DE programmes are highlighted in bold typeface in Appendix B.
waive the entry requirements for some of their courses in order to accommodate deserving candidates or those with on-the-job experience. All but five of the institutions (78%) indicated that they currently offer courses that target marginalised groups, such as women or workers in the informal economy.

In terms of awareness of national policies, 64% of the respondents said that they did not know or weren’t sure whether DE or e-learning for TEVET was specified in such documents. (One additional respondent did not answer this question.) Ten respondents (44%) indicated that their institutions make use of the national policy on the Recognition of Prior Learning at their institution. More than half (52%) of the institutions responded that they develop curricula for some of their own courses, though this may be subject to external approval for the purposes of accreditation.

**Technical Readiness**

The questions probing an institution’s technical readiness to adopt ODFL methods relate primarily to ICT infrastructure and support services. A key indicator is the ratio of students to computers (of all types”) on campus, which ranged from less than 3 to more than 33 to one, with an average of 16.2 students per computer across the twenty-two institutions that provided information. Fifteen of the twenty-two institutions (68%) reported having broadband Internet available on campus, though all but three reported that it was inadequate for their needs. The available bandwidth ranged from 1 Mbps to 20 Gbps (sic). Sixteen of these institutions (76%) reported that wireless networks could be accessed at certain places on their campuses, though the question did not specify whether this coverage was provided by the institution’s own network or through public cell phone towers. Only four of twenty-two institutions (18%) reported a complete lack of Internet connectivity. The ratio of students to Internet-linked computers ranged from 7 to more than 100, with an average of 22.1 students per networked computer for those institutions that are connected. The bandwidth per student ranged from a reported 45 Mbps to 1.4 Kbps.

When asked what percentage of instructors/teachers/lecturers have been assigned a computer (all types) for their individual use, the responses ranged from none to 100%. Only three of the twenty-two institutions (14%) had put in place schemes to provide financial support for instructional staff who wish to purchase their own computer. Estimates of the percentage of teaching staff with basic (or better) IT skills varied from 2% to 100%, with a mean of 49%. Most of the institutions had access to technical support for their ICT installations, but only three respondents indicated that they are completely satisfied with the available support.

In terms of other media, fourteen of the twenty-two institutions (64%) indicated that they had digital projectors for classroom use, though in most cases the number is limited. All but two of the respondents had the capacity to print/reproduce paper study materials, but

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The questionnaire did not make a distinction between computers that are accessible by students and those that are reserved for use by teaching, administrative or managerial staff. The ratio was derived by dividing the total number of students by the total number of devices on campus.
sixteen of the twenty institutions with such facilities indicated that they were inadequate for their present needs.

**Pedagogic Readiness**
Apart from internal and external communication and record-keeping, the use of ICTs to support teaching and learning in the twenty-two institutions that responded to this question (Q. 36) is relatively under-developed. Computers and the Internet are used in almost all institutions for research by students and staff. A limited number of respondents reported that staff make use of computers to prepare their lesson plans, lecture notes and paper-based DE materials, as well as employing them in conjunction with a data projector to make in-class presentations. Where computer studies or other ICT-based programmes (e.g. Computer-Aided Design) are offered, these devices are used in the course of teaching and learning. Only one institution reported that it uses ICTs in order to deliver e-learning modules (CBT in Mechanical, Electrical and Automotive Engineering).

**Organisational Readiness**
At present, only five of the twenty-three institutions (22%) indicated that they offered training programmes at outreach centres away from their main campus. Almost a third of the respondents (32%) said that their students do not have access to the library or learning resource centre in the evenings or at weekends. All but one of the institutions are funded by a combination of GRZ subsidies and student fees, and the proportion of government funding ranged from 2% to 98% of total recurrent income.

Notwithstanding the limited internal capacity and funding, all but two of the twenty-three institutions said that they have plans to develop new distance and flexible learning programmes or expand existing ones. The courses in question range from Trade Certificate to Bachelor’s Degree level, and the fields of study include a very broad range of disciplines. All of the institutions planned to develop self-instructional materials for these new programmes either in partnership with another academic/training institution or by calling upon their own teaching staff. None of the respondents made any reference to the possible use of open educational resources (OERs), though some made reference to searching the Internet for suitable content.

**Strategic Readiness**
The online questionnaire also included three questions to assess the strategic readiness of each institution to introduce ODFL programmes or to expand existing ones. Question 45 asked whether the institution’s strategic plan includes specific objectives to expand access to TEVET. Only two of the twenty-two institutions that responded to this question replied in the negative. Of the other twenty respondents, fourteen (64% of the total) indicated that their institutional plans include strategies to offer flexible learning options, eleven (50%) planned to adopt distance education approaches and seven (32%) aimed to use e-learning to expand access. The following question probed the planned use of various alternative approaches to improve the quality of teaching and learning, and the responses were similar to those reported above.

The final question in the section on strategic readiness sought information on what policies are currently in place at each institution. Out of twenty-three institutions, the following results were obtained:
### Table 4 – Institutions with various types of Policies in place

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>Percent</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>43%</td>
<td>Internet/Network Acceptable Use</td>
</tr>
<tr>
<td>16</td>
<td>70%</td>
<td>Information Technology</td>
</tr>
<tr>
<td>3</td>
<td>13%</td>
<td>Plagiarism or Academic Deceit</td>
</tr>
<tr>
<td>15</td>
<td>65%</td>
<td>Quality</td>
</tr>
<tr>
<td>10</td>
<td>43%</td>
<td>Open and Distance Learning</td>
</tr>
<tr>
<td>20</td>
<td>87%</td>
<td>Staff Development</td>
</tr>
<tr>
<td>11</td>
<td>48%</td>
<td>Curriculum</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Disability-Inclusive Training</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Admissions</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Consultancy Policy</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Short Courses Policy</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Research Policy</td>
</tr>
<tr>
<td>1</td>
<td>9%</td>
<td>Extension Studies Policy</td>
</tr>
</tbody>
</table>

### 5.3 Challenges to the introduction of ODFL/FSD

Various documents have identified the shortcomings of the TEVET sector in Zambia and the challenges faced by stakeholders in meeting the goal of providing high quality training to those who require it. While the adoption of innovative approaches holds out the potential for expanding access and improving quality, the baseline survey highlighted the many needs and challenges faced by government training institutions that wish to develop ODFL alternatives to conventional skills development programmes or to expand existing initiatives.

Question 44 of the online questionnaire asked respondents to identify the three main challenges facing their institution when considering the introduction or expansion of ODFL approaches. The responses can be summarised as follows:

### Table 5 – Challenges to the introduction of ODFL

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>Percent (n=23)</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>70%</td>
<td>Limited capacity (knowledge and skills) among institution’s staff in relation to various aspects of ODFL programme development, learner support, management and use of ICTs</td>
</tr>
<tr>
<td>8</td>
<td>35%</td>
<td>Lack of or inadequate financial resources</td>
</tr>
<tr>
<td>7</td>
<td>27%</td>
<td>Lack of or inadequate ICT infrastructure and/or software</td>
</tr>
<tr>
<td>7</td>
<td>27%</td>
<td>Problems with Internet connectivity (e.g. lack of reliability, ...)</td>
</tr>
<tr>
<td>No. of Institutions</td>
<td>Percent</td>
<td>Challenge</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>(n=23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of or inadequate equipment and physical infrastructure (e.g. to reproduce paper-based DE materials)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost and time required to develop ODFL materials/modules</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obtaining approval/accreditation from TEVETA</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of suitable textbooks or teaching materials</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inadequate support systems</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of awareness and understanding of ODFL methods</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can’t keep up with the fast pace of technological change</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arrangements for continuous assessment</td>
</tr>
</tbody>
</table>

These responses confirm conclusions that can be drawn from other indicators derived from the survey results, including: the student to computer ratio, the student to Internet-linked computer ratio, the Internet bandwidth per student, and the number/percentage of staff members who have received training in DE and e-learning.

### 5.4 Capacity-building for ODFL

Several initiatives have been undertaken to build capacity for the adoption of ODFL within the TEVET sector in Zambia. For example, in April and May 2012, TEVETA and COL partnered to facilitate a week-long workshop in Ndola to introduce participants to basic principles for planning, developing and managing ODFL programmes. The workshop was attended by 30 participants from MESVTEE, TEVETA and eleven training institutions.\(^9\) In 2012 and 2013, UNESCO and MESVTEE supported workshops in the use of ICTs for ODL for forty TEVET lecturers in Livingstone, Kabwe and Kitwe.\(^9\) In addition, staff from TVTC and ZIBSIP have benefited from participation in capacity-building activities through their membership of the INVEST Africa partnership.

However, the baseline survey indicated that staff members in just over half of the twenty-three institutions (52%) had received training in the creation of DE materials, supporting DE learners, managing DE systems or e-learning. Apart from a few in-house training initiatives and short workshops facilitated by staff at ZIBSIP and TVTC, no more than a handful of participants in the other institutions had received such training.

Question 37 in the online questionnaire asked respondents to identify their institution’s top three priorities for in-service training and professional development of teaching staff. The responses can be summarised as follows:

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\(^9\) Private e-mail communication with Mr. Gabriel S Konayuma, Senior Vocational Education and Training Officer (Entrepreneurship), MESVTEE, dated 20 August 2015.
TABLE 6 – Capacity-Building Needs

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>Percent (n=23)</th>
<th>Content or Type of Staff Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>83%</td>
<td>e-Learning technologies, methodologies and materials development</td>
</tr>
<tr>
<td>15</td>
<td>65%</td>
<td>General skills in the use of ICTs and common software applications</td>
</tr>
<tr>
<td>9</td>
<td>39%</td>
<td>Instructional design and ODFL module (materials) development</td>
</tr>
<tr>
<td>9</td>
<td>39%</td>
<td>Distance learning/education/teaching methodologies</td>
</tr>
<tr>
<td>4</td>
<td>17%</td>
<td>Management of ODFL programmes and systems</td>
</tr>
<tr>
<td>4</td>
<td>17%</td>
<td>Further training in teacher’s area of specialisation</td>
</tr>
<tr>
<td>1</td>
<td>4%</td>
<td>How to write (funding) proposals</td>
</tr>
<tr>
<td>1</td>
<td>4%</td>
<td>Research methods and writing for publication</td>
</tr>
<tr>
<td>1</td>
<td>4%</td>
<td>Inclusive training methodologies</td>
</tr>
</tbody>
</table>
6. Gender Mainstreaming in publicly-funded TEVET Institutions

As noted in Sub-section 2.4, girls and young women are under-represented in formal TEVET programmes, particularly at the advanced certificate and diploma levels. In addition, women are more likely to be unemployed than men. In 2012, it was estimated that 34% of young females between 15 and 24 years of age were NEET – not in education, employment or training – while the comparable figure for males was only 22%.74

6.1 Policy support for gender mainstreaming

Zambia has recognised these challenges and has explicitly targeted the promotion of participation by women in Basic Skills Education and TEVET, particularly in technical programmes.75

In line with the MESVTEE’s policy to increase access to and participation in skills development programmes, TEVETA’s Strategic Plan 2014-2016 also explicitly aims to promote integration and main-streaming of cross-cutting issues in the sector, including inter alia gender.76

6.2 Gender mainstreaming in publicly-funded institutions

The online questionnaire included four items to determine each institution’s progress towards putting in place a policy or policies on gender issues and to assess the extent to which gender issues have been embedded in official documentation, systems and record-keeping.

A total of 22,690 trainees (of all categories) are enrolled with the twenty-three institutions that completed the questionnaire, of which only 31.6% are female. This is significantly below the national average of 45%, perhaps reflecting the fields of study and programme levels offered by the self-selected sample of respondents. A total of 1,005 teachers/instructors/lecturers are employed at these training institutions, with women representing less than a quarter (22.3%) of the total number.

Of the twenty-three institutions, twelve (52%) indicated that they have in place a policy on gender issues that has been approved by the competent authority (e.g. board of governors) and is being implemented. A further three (13%) said that a gender policy has been approved but has yet to be fully implemented, while the remaining eight institutions (35%) indicated that such a policy is under discussion or in the process of being developed.

The second question asked respondents to indicate the extent to which gender issues have been integrated into institutional systems. Fifteen of the twenty-three respondents (65%) reported that it forms part of the institution’s mission and core values, while seventeen (74%) said that gender had been incorporated into institutional recruitment and promotion practices. Eleven of the institutions (48%) indicated that gender issues form part of departmental work plans and performance appraisals, and nine (39%) had established gender committees. Only four of the institutions (17%) had created a separate allocation of human and/or financial resources for implementing gender action plans.

Nineteen out of twenty-two institutions (86%) reported that they had put in place systems to promote awareness of gender issues among staff and students. Slightly fewer (82%) had
taken steps to broaden participation by both male and female staff and students in decision-making processes. By contrast, just 50% of respondents (eleven out of twenty-two) have mechanisms for identifying and supporting internal gender champions. Only four institutions (18%) use gender analysis as a tool when planning and designing curricula and learning materials that are appropriate for the needs of both men and women.

The final question in this section explored the way in which information on students is collected and whether these records can be disaggregated by gender, as well as a range of other characteristics that are of relevance to monitor equitable access. All but one of the twenty-three institutions (96%) indicated that gender is a field in their student record management systems. However, only eleven respondents (48%) were able to disaggregate data by age, while four institutions (17%) collected information on the geographic location of origin for students. Even smaller numbers maintain data on students’ socio-economic status (three institutions or 13%) and ethnicity (one institution or 4%).
7. Challenges & Opportunities for the introduction of ODFL in Zambia’s TEVET Institutions

The TEVETA Strategic Plan includes a target of increasing annual enrolments in Zambia’s training system to at least 154,000 by the end of 2016, a four-fold increase over existing numbers. However, the country faces a number of significant challenges in reaching this target. At the same time, increasing the number and range of programmes offered through Open, Distance and Flexible Learning creates opportunities for expanding access to quality training and ensuring an output of competent graduates.

7.1 Challenges

Zambia’s TEVET sector faces a number of significant challenges in meeting the economy’s needs for skilled workers, including:

- The TEVET system does not have adequate information about labour market demands and the supply of qualified candidates to plan comprehensive provision. This lack of information is principally because of limited capacity in MHE and TEVETA to maintain linkages with employers. As a result, many training programmes are outdated and fail to produce the skills needed in the labour market.

- There is insufficient flexibility in the system to enable training programmes to respond to the changing needs of Zambia’s labour market. While TEVET providers are able to develop short courses, curricula for formal programmes must be approved by a centralized, regulatory authority.

- The TEVET system has limited capacity to address the skills development needs of workers in the informal economy. Although public training providers have been able to apply to the TEVET Fund since 2014 to finance initiatives that target this important group, the informal economy is still under-prioritised.

- Girls and women, rural residents and those living with disabilities still do not have equal access to TEVET, despite a number of initiatives that have been designed to address this issue. Even when women do take part in training programmes, they are under-represented in the system, particularly at the diploma level. The geographical distribution of training institutions favours those living in urban areas, and the level of fees presents a significant barrier to access for low-income candidates.

- While the majority of instructors have technical qualifications and experience in their field of expertise, many of them lack pedagogical qualifications and practical skills to provide their trainees with an effective teaching and learning experience. However, there are only very limited opportunities available for instructors who wish to upgrade their skills. For this reason, building capacity among this group is considered an immediate priority.

- Funding constraints have also had a negative impact on the quality of training. For many years, the level of capital investment has not been adequate to maintain and upgrade facilities and equipment. In addition, fees at public training institutions are
subject to approval by the Minister of Higher Education, and income from this source has not kept pace with inflation, posing constraints on recurrent budgets.

- The TEVET system is characterised by significant under-utilisation of existing training facilities. This may be related to their unaffordability for those from low-income families or to the lack of boarding facilities, but it also reflects changing attitudes toward manual trades and blue collar occupations.

### 7.2 Opportunities

While these limitations in Zambia’s TEVET sector pose serious challenges to the introduction of new approaches to training delivery, they also create certain opportunities to exploit the strengths of ODFL approaches. For example:

- By adopting Open Educational Resources (OERs), whether in digital form (either online or offline) or printed on paper, TEVETA and training institutions can continuously update the content of courses in order to enhance their quality and relevance. Virtual simulations can also deliver training in certain skills that can go a long way towards overcoming the lack of expensive technical equipment.

- Because of the shortage of instructors, upgrading their pedagogical skills should be conducted on an in-service basis without withdrawing them from their teaching duties for significant periods. ODFL approaches are ideal for this purpose.

- The dual-mode (or alternance) model of training can be an effective way of opening up access to TEVET for those living in remote areas, especially when the theoretical components are delivered through ODFL methods rather than conventional means. Typically, this approach enables learners to study the theoretical aspects of a course at a distance while gaining practical skills through workplace attachments near where they live. The model also involves blending distance education and on-the-job learning with periodic workshops at a training institution.

- Because the National Qualifications Framework for TEVET makes provision for competence-based Skills awards, this creates the opportunity for training institutions to devise flexible approaches to training workers for the informal economy. Through the recognition of prior learning, such initiatives will enable those with different levels of education and skills to take part and to progress at their own pace. There is also the potential to develop modular courses that enable learners to work towards a recognised qualification, as and when they wish.

### 7.3 The Fit between COL’s Plans and Zambia’s Needs

The Technical and Vocational Skills Development (TVSD) component of COL’s Strategic Development Plan for the period 2015 to 2021 includes the following outcomes:

- 12 new national ODFL strategy and/or policy statements are produced which include implementation and resourcing plans;

- 85 organisations adopt or strengthen the Flexible and Blended model of TVSD and introduce curricula relevant to sustainable livelihoods;
- 2,500 teachers are integrating technology (including OERs) into TVSD practice;
- 45,000 learners complete courses using new learning resources relevant to sustainable livelihoods.

The objectives in the COL plan dovetail closely with the development needs of Zambia’s TEVET sector. Although the national ODFL policy document is largely complete, COL may be able to assist in the drafting of implementation plans and resourcing strategies. However, the ODFL Policy Guidelines for the TEVET sector have remained in draft form since COL’s work with the Ministry in 2010, and there is an urgent need for MHE to finalise this document in consultation with key stakeholders. Given the small number of training institutions currently making use of the FaB model, it would be reasonable to project that 10–15 of the institutions will have adopted this approach by 2021. All stakeholders are in agreement that capacity-building for distance education and e-learning among existing staff is a pressing need.

Finally, if TEVETA is to meet its ambitious target for increasing enrolments, there is an urgent need to expand the capacity of existing training institutions. Given the emphasis on skills development for workers in the informal economy in Zambia’s Sixth National Development Plan, this is likely to be carried over as a priority into the next planning period. Since ODFL approaches offer a more cost-effective means of increasing access to quality training, particularly for hard to reach groups, COL’s assistance in the development of new learning materials should be most welcome.
APPENDIX A – Terms of Reference

COL plans to engage more deeply in Zambia to support the widespread introduction of good quality flexible and blended learning in 24 Grade 1 government TVET institutions. Through continuous engagement with the Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) and officials of the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) of Zambia a relationship has been established. Lessons learned through COL support to two institutions through the INVEST Africa partnership have informed this plan.

Objectives of this consultancy
It is against the TVSD and COL corporate and cross cutting outcome statements and the targets in these indicators against which the results of the TVSD initiative are to be monitored and evaluated. The objective of this consultancy is to prepare a baseline study for the effective monitoring and evaluation of the TVSD initiative to start in July 2015. The baseline study will focus on the current status of ODFL in the TVET sector in Zambia.

Scope of Work
The consultant will:

a) carry out a desk study to include a review of existing country resources and online data collection through key respondents;

b) prepare a summary situational analysis of ODFL in the TVET sector in narrative form;

c) collect data on each of the TVSD and cross-cutting indicators:
   - status of national TVET ODFL policy - number of institutional policies on ODFL,
   - number of institutions using ODFL – to what extent,
   - number of teachers involved in institutions that are offering ODFL,
   - number of learners involved in institutions that are offering ODFL,
   - status of gender mainstreaming in institutions;

d) research the current state of provision of training for the informal economy by government institutions to include a list of courses offered/institutions and number of learners. Summarise the current informal economy curriculum;

e) utilise the TVSD online data collection tool to collect information from TVET institutions on their readiness for ODFL;

f) consult and engage with TVET stakeholders to understand the situational context and obtain guidance on the needs and challenges.
## APPENDIX B – Training Providers that responded to the Baseline Survey

<table>
<thead>
<tr>
<th>Provider</th>
<th>Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chipata TTI</td>
<td>Chipata Trades Training Institute</td>
</tr>
<tr>
<td>Choma TTI</td>
<td>Choma Trades Training Institute</td>
</tr>
<tr>
<td>EHC</td>
<td>Evelyn Hone College of Applied Arts and Commerce</td>
</tr>
<tr>
<td>Kabwe IT</td>
<td>Kabwe Institute of Technology</td>
</tr>
<tr>
<td>Kaoma TTI</td>
<td>Kaoma Trades Training Institute</td>
</tr>
<tr>
<td>Kitwe VTC</td>
<td>Kitwe Vocational Training Centre</td>
</tr>
<tr>
<td>LIBES</td>
<td>Livingstone Institute of Business &amp; Engineering Studies</td>
</tr>
<tr>
<td>LTBC</td>
<td>Luanshya Technical and Business College</td>
</tr>
<tr>
<td>Lukashya TTI</td>
<td>Lukashya Trades Training Institute</td>
</tr>
<tr>
<td>LBTC</td>
<td>Lusaka Business &amp; Technical College</td>
</tr>
<tr>
<td>Lusaka VTC</td>
<td>Lusaka Vocational Training Centre</td>
</tr>
<tr>
<td>Mansa TTI</td>
<td>Mansa Trades Training Institute</td>
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<tr>
<td>Mongu STI</td>
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<tr>
<td>NORTEC</td>
<td>Northern Technical College</td>
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<tr>
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<tr>
<td>ZASTI</td>
<td>Zambia Air Services Training Institute</td>
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<tr>
<td>ZCBE</td>
<td>Zambia College of the Built Environment (non-government)</td>
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<tr>
<td>ZIBSIP</td>
<td>Zambia Institute of Business Studies &amp; Industrial Practice</td>
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<tr>
<td>ZAMIM</td>
<td>Zambia Institute of Management</td>
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Glossary of Terms

In order to ensure consistency and promote a shared understanding, the following definitions are offered for the terms used in this document:

**Accreditation** is a systematic assessment of an academic programme to ascertain whether it does or does not meet set standards. In terms of Section 2 of the Higher Education Act, 2004, accreditation refers to “… the process leading to the issuance of a certificate of accredited status by an educational institution or recognised local or international body attesting to the quality or standards of one or more educational programmes and to the effectiveness of the management and operations of the higher education institution offering the programme.”

**Apprenticeship** refers to a formal, organised programme of learning based in a workplace, which is governed by legislation and an apprenticeship contract. The duration of a typical apprenticeship is two to four years.

**Assessment** is the process of measuring the extent to which learners have mastered the concepts, knowledge, skills and behaviours that have been prescribed as outcomes for a programme or a course of study.

**Assessment of Prior Learning (APL) or Assessment of Prior Experiential Learning (APEL)** is a practice that measures the knowledge, skills and behaviours that learners exhibit as a result of their past education and experience on the job and of life, with a view to exempting them from some of the requirements of a programme of study that they wish to follow.

**Audit**: In the context of quality in higher education, auditing entails a systematic review of the entire operations of an institution of higher learning including policies and systems, plans, processes and resources that are in place to assure quality, integrity or standards of provision and outcomes. Normally, audits investigate whether institutions have in place internal quality-monitoring procedures, including identification of responsibilities and intra-institutional communication and co-ordination of practices.

**Award**: Any formal recognition of an achievement in which there has been an official decision to grant such recognition. Within the Qualifications Framework for Lesotho, awards can be made at ten different levels.

**Blended Learning**: This term refers to any approach that combines elements of face-to-face teaching, distance education and/or e-learning to enable academic staff members to deliver a programme in various ways that both suit their subject matter and meet the needs of their students.

**Bursary**: This term refers to a subsidies given to students and trainees regardless of merit in order to cover tuition, living expenses and other costs associated with their education and training. (Compare with Scholarship.)

**Certification** means a formal acknowledgement, by way of documentation, of the attainment of a specified combination and aggregation of learning outcomes that represents
a particular qualification. The issue of a Certificate, Diploma, Degree or other award signifies that a learner has studied to a satisfactory standard.

**Course** is a distinct and identifiable component part of a programme of study, successful completion of which leads to the award of a specified number of credits towards the total required to obtain a qualification.

**Course Level** is the level at which a course is taken. The course level is normally related to the year of study in an overall programme.

**Credit Accumulation:** The process by which an individual learner adds the number of credit points gained through successful completion of a course towards the points required to obtain a particular qualification.

**Credit Transfer:** the process that allows a learner to apply credits gained in one programme of study towards the credit requirements laid down in another programme of study. Credit transfer may be within two programmes in the same faculty or between two faculties at the same institution, or it may operate between two different HEIs.

**Distance Education** is a form of study in which learners spend all or most of their time separated from their teacher(s) in time or in space. This divide is bridged by using a variety of technologies, which means that distance education programmes can vary considerably in the mix of media they use.

**e-Learning** is a type of education that utilises computer technologies and applications to access learning materials. Where e-learning is mediated through the Internet it is sometimes referred to as online or virtual learning.

**Enterprise-Based Training:** This term denotes the process by which workers acquire skills in an enterprise or organisation. The training may take place informally on-the-job, off the job but in the workplace, or off the job in a third location (e.g. formal training.)

**Evaluation** is the process whereby monitoring and other information collected about a programme or institution is used to make judgements, based on a defined set of values, principles or standards. Typically, the information used to evaluate a programme or institution also suggests ways in which it can be changed and improved. **Evaluation of quality or standards** is the process of examining and passing a judgment on the appropriateness or level of quality or standards.

**Face-to-Face Education:** This term is normally used to describe a situation in which the teacher and one or more learners interact with one another at the same time in the same physical space, typically a classroom, lecture hall, training workshop or laboratory.

**Internship** refers to a relatively short-term attachment of the trainee to a workplace in order to acquire practical knowledge of the trade or business.

**Learnership:** This refers to a work-based learning programme, involving both theory and practice. The duration of a learnership varies depending upon the occupation and level, but it usually takes between six and twenty-four months in Sub-Saharan Africa. Learnerships
are formalised through written documents – a learnership agreement and an employment contract – which must be registered with a competent authority.

**Media** is the plural form of the term **medium**, which refers to any generic form of communication associated with particular ways of representing knowledge, viz. print, audio, video, face-to-face, and computer-based environments.

**Module** refers to a “chunk” of learning that is less than a whole course, but comprises more than a single “lesson objective” or Specific Learning Outcome. Modules can be thought of as the coherent parts or “chapters” within a course.

**Open Educational Resources (OER):** The term OERs refers to “… teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.”

**Open learning:** A philosophy or value system inspiring the design of educational programmes, which aims to make programmes more learner-centred by increasing flexibility and choice for the learner.

**Programme of Study** is the sum of all the modules and/or courses that a learner is required to take in order to obtain a qualification. Successful completion of the programme of study will be based upon the accumulation of a specified number of credits, and will lead to the award of the qualification.

**Qualification** means any award which represents the attainment, following robust assessment processes, of a coherent cluster of specified outcomes of learning to prescribe standards of performance. A qualification is a certificate, diploma, degree or other academic award issued on completion of a period of defined study. Certificates of attendance or completion of a particular course of study are not recognised as qualifications.

**Quality Assurance** refers to any process, mechanism or system applied or adopted to ensure that a product or service meets specified standards. As a regulatory mechanism, quality assurance focuses on both accountability and improvement, providing information and judgments through an agreed and consistent process and well-established criteria. The processes can be internal to an organisation and/or can be applied by an external body or agency.

**Recognition of Prior Learning (RPL)** refers to a practice of giving credit towards formal qualifications for knowledge and skills that a learner has already acquired in employment, formal education and training, and/or income-generation. RPL is normally used to exempt candidates from some of the requirements of a programme of study that they wish to follow.

**Scholarships** are financial supports for students or trainees based upon merit or other criteria, such as membership of an educationally-disadvantaged group. (Compare with **Bursary**.)
**Student Support (Learner Support):** A generic term covering a range of services that may be offered to learners, including:

- **Academic Support**, covering the support that a teacher provides to a learner as an integral part of their academic study of a course, including feedback on their performance, clarification of areas where they indicate they are having difficulties or where it is likely learners will have difficulties;

- **Study Support**, covering such areas as learning skills (writing skills, note taking skills, revision and examination skills, etc.), learning styles, etc.;

- **Advice and Guidance**, covering such areas as career advice and guidance, course choice, further study options after graduation, etc.;

- **Counselling**, covering areas of life that may impinge on study success, for example, health problems, how to deal with unsympathetic spouses or employers, etc.;

- **Administrative Support**, covering such as issues the clarification of regulations and procedures, processes to gain financial aid, rectification of operational failures (e.g. non-delivery of course materials), etc.

*Technology* refers to various means of communicating or delivering a learning programme through a particular medium. For example, when delivering learning content through the medium of audio a variety of technologies can be used, including: radio broadcasts, audio-cassettes, CDs, podcasts, telephone, or Voice Over Internet Protocol (e.g. Skype).

**TEVET Fund:** A fund for allocating grants based on competitive proposals, established by the TEVETA Act of 2005 and operating under TEVETA’s Finance and Administration Unit.

**Traineeship:** This is a generic term for workplace-based training of different lengths. It encompasses internships, learnerships and apprenticeships.
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