



COMMONWEALTH of LEARNING



Innovation in Technical and Vocational Skills Training





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INVEST Africa challenges technical and vocational education and training (TVET) teachers, managers and policy makers to change the way they think about how they provide technical and vocational skills training.

INVEST Africa promotes a flexible and blended, or FaB, model of TVET which integrates educational media and technology with practical skills training. By investing in staff capacity building and information and communication technology (ICT) infrastructure, creating new organisational structures and designing new strategic objectives, TVET institutions are increasing the quality of their courses, meeting the demands of industry for work-ready people, becoming more efficient and opening up provision for learners who have historically been locked out of the TVET system. Flexible and blended approaches to TVET promote learning for sustainable livelihoods and sustainable development.





2009 – 2015 Impact Evaluation

The Commonwealth of Learning's External Impact Evaluators' comments on the TVSD initiative stated:

- this work is of critical important to governments and communities and is showing signs of significant impact
- modular, flexible, competency-based learning using ODL, OER and self-instruction with mentoring and coaching is paying off in TVSD and developing more flexible approaches to TVET is producing results institutions
- this work needs to be seen as an area of growth and success by COL



Why does Africa need INVEST?

The ADEA Triennale 2012 agreed that TVET systems in Africa are characterised by:

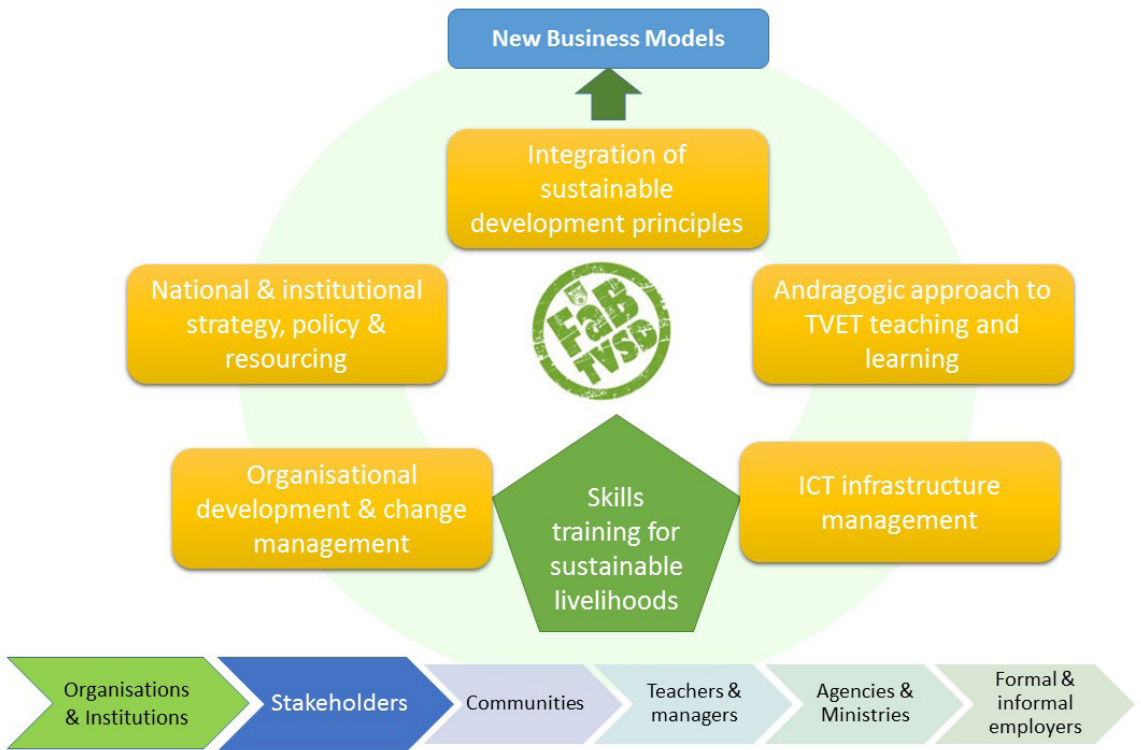
- an expanding informal sector and shrinking wage-employment opportunities
- huge numbers of poorly educated, frustrated and unemployed youth who are 'locked out' of the formal skills training system
- unequal training opportunities fostered by inequities based on geographical location, gender and socio-economic factors

The flexible and blended approach to TVET, which is advocated by the INVEST Africa partners, aims to mitigate these challenges at the local level. At COL, we believe that formal TVET institutions will never be able to meet the demand for skills training through 'bricks and mortar' approaches. Innovative flexible and blended TVET programmes which benefit from the application of ICTs offer the potential to increase access and make quality and efficiency gains.

What needs to change?

INVEST supports innovation in TVET institutions to bring about change: change in the way teaching and learning happens, change in the way courses are structured, change in organisational structure, and change in the types of students who get an opportunity for skills training. Through educational media and appropriate technology, formal TVET systems are becoming more flexible and responsive to the needs of their local community and are meeting national policy objectives.

The FaB TVET model



Sustainable Development and Sustainable Livelihoods

There are three pillars to sustainable development: economic prosperity, social inclusion and environmental protection.

TVET contributes to individual, community and national economic development by training people for employment and self-employment. It further contributes to sustainable development when it is designed to resolve social inequity in terms of access and opportunities for success amongst all citizens and when courses are integrated with job-specific principles of sustainable development.

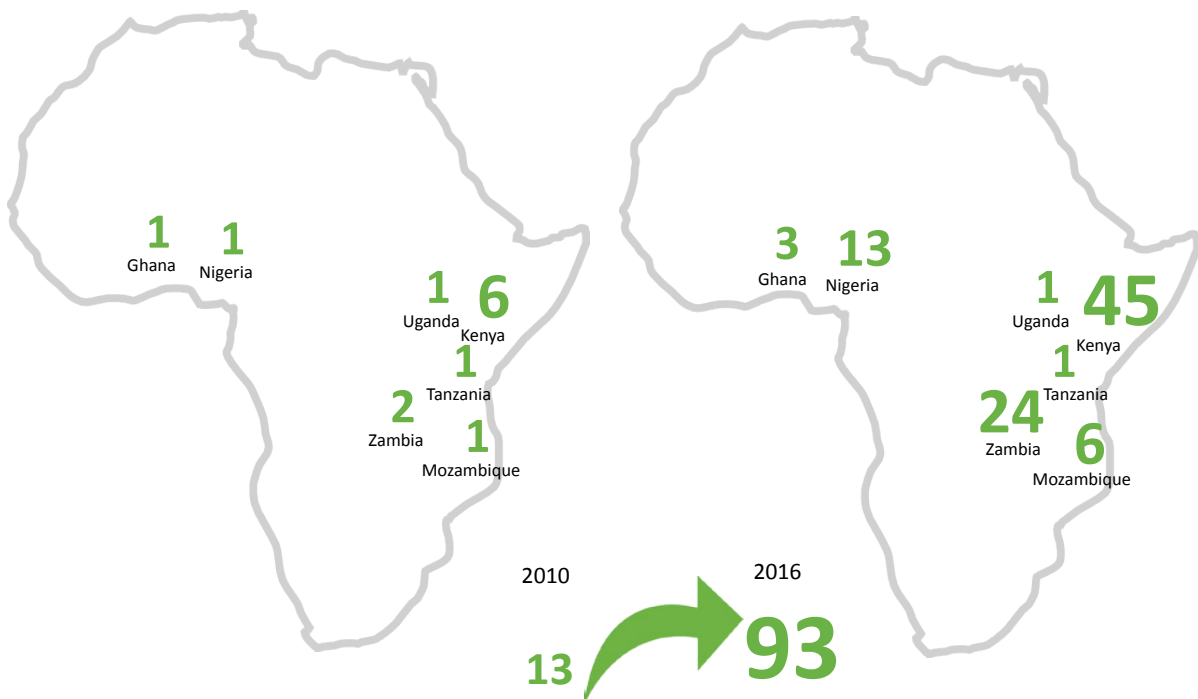


The FaB TVET model aims to integrate concepts of environmental protection and social inclusion into all courses developed with our partners as well as develop specialist courses such as Environmental Impact Evaluation, Food Security or Renewable Energy.

National challenges: local solutions

Scaling up INVEST Africa

In 2010 there were 13 partner institutions from seven countries - Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda and Zambia - all belonging to the Commonwealth Association for Polytechnics in Africa. By 2015 the partnership was strengthened by including national TVET agencies and ministries. Through their recognition of the FaB TVET model as a vehicle for finding local solutions to national challenges, INVEST Africa has scaled up to 93 partner institutions.



Innovative Staff Development

Capacity for innovation in vocational education and skills training is being built through workshops and institutional visits, but we take a flexible and blended approach to capacity building, so we also offer blended online training. Teachers, policy makers, managers and other TVET stakeholders are engaged in learning through specially designed online courses on the COL Moodle LMS. The INVEST Community Learning Network is an online informal learning and social networking platform offering a community of practice for 1800+ members.



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What changes are happening in institutions?

Strategic

- Strategic objectives specify a flexible approach
- Converting courses to ODFL
- Targets set to increase learners through ODL
- Achieving government performance contracting targets
- ODFL/OER policy in place

Organisational

- Establishing FaB Champions and teams
- Cascade training of teachers
- Creation of FaB/ODL centres and institutes to lead the change
- Strengthening ICT technical support units
- Establishing satellite and outreach centres

Infrastructure

- Loan scheme for teachers to purchase laptops
- Expanding wi-fi LANs on campus
- Installing Moodle LMS
- Upgrading servers
- Increasing bandwidth
- Increasing PC lab capacity through virtualisation
- Use of campus radio in course delivery

Teaching & Learning

- Integrating educational media into teaching
- Producing and using OERs
- Developing elearning components and courses
- Focus on quality assurance
- Offering new short courses for working people
- Offering non-formal skills training courses

INVEST PARTNERS REPORTED 8,600 NEW LEARNERS BENEFITING FROM SKILLS TRAINING IN 2015-2016

New Organisational Structures

Introducing a new teaching and learning paradigm requires not only a new way of thinking but also new organisational structures. Each INVEST partner has an institutional Champion for flexible skills development (FSD) and most have departmental FSD teams who support and champion the integration of technology in teaching and learning. Some have created new departments to support the change. *Strong institutions are built on strong structures. These organizational structures must be anchored on transformational systems and people. Institutions that want to transform will need to put in place new structures especially those focusing on helping people to adopt new models of service delivery.* Abdi Kirwa Tiony, Head of Department eLearning & External Linkages, Rift Valley Technical Training Institute, Kenya.

Restructuring the organisation to support the new approach leads to sustainable change. Koforidua Polytechnic in Ghana has established an Institute of Open and Distance Learning with a staff of 10 to support flexible skills development in campus based programmes. This includes new radio lessons and the installation of the Moodle LMS to provide eLearning opportunities. They also provide new courses for the informal sector. Their first enrolment offered training for 300 people working in the informal sector. They have 3,500 online students and 600 distance learning students.

Yaba College of Technology in Nigeria has created a new Centre for Flexible Skills Development to spearhead and support the integration of flexible approaches to programme delivery for both formal on-campus students and non-formal courses for the local community.



An idea becomes an innovation only when it can be replicated reliably on a meaningful scale at practical costs.

Senge 1999
The Fifth Discipline



Being the FSD Champion has transformed the way I think, handle, relate to and lead people in exploring innovation in flexible and blended learning.

Francis Wambua, Masai TTI

Being FSD Champion has equipped me to bring creativity and change in the teaching and learning processes of my institution.

Samuel Okae-Adjei Director,
IODL, Koforidua Polytechnic

Being an FSD champion has transformed my life. I have become a lover and user of ICT. Delivering OER quality learning content has become enjoyable and easy. I have become a virtual learner. FSD changed me from a teacher to a facilitator, from being a giver of knowledge to a guide in the learning process.

Rose Kiiru, Thika TTI

Social Inclusion in TVET

This activity is grounded in a rights-based approach to skills development. COL supports the Sustainable Development Goals and the belief that people have a right to education and a right to work. Resolving inequity is a central philosophy in INVEST. Urban dwellers access

TVSD more than rural dwellers; boys more than girls; those with higher levels of basic education more than those with lower levels; and of course, the able bodied more than those with special needs. This activity will positively discriminate towards the previously disadvantaged in order to deliver increased equity and inclusion. People working in the informal sector

can rarely access TVET. INVEST

Africa institutions have addressed this with the offering of more than 80 new non-formal courses since 2012, providing opportunities for nearly 7,000 people, of which 65 per cent are women.

If the general picture is grim, it is even grimmer for girls.

UNESCO-UNEVOC
2006



INVEST Africa partners have established WITED (Women in TVET & Development) Chapters which bring together individuals who work together to increase women's participation in TVET.

With funding from the Women's Representative of the County, Thika Technical Training Institute in Kenya established a non-formal skills training programme for 380 unemployed youth in 10 different trades. Fifty one per cent of the learners were young women. The courses provided technical skills and entrepreneurship to enable the youth to establish livelihoods in the informal sector. The students are part of a tracer study to measure the impact of the training on their livelihoods



What do teachers say?



FaB TVET Model is an excellent learning strategy that is promoting equity, quality, efficiency, relevancy and access to formal and non-formal education among Thika TTI community, leading to strengthened sustainable livelihoods.
Rose Kiiru, Thika Technical Training Institute, Kenya

Implementing the FaB TVET model provides lifelong learning opportunities for all the groups in society and enhances individual sustainable livelihoods and institutional revenue.

Gaspary Mwanyika, Mbeya University of Science & Technology, Tanzania



I never knew the teaching and learning process can be such a rewarding and fulfilling experience. My students are getting motivated to learn 24/7; improving performance and discovery of students' potentials are daily occurrences with FaB TVET Model. You never know how much you miss, as a teacher, until you embrace FaB TVET Model.

Buckman Akuffo, Koforidua Polytechnic, Ghana

Incorporating the FaB approach in my classes has enabled my learners to be more engaged and benefit from the training as they practically participate in seeking for and creating knowledge. In the just released July 2016 series National exam results, I was gratified to register above 80 per cent distinction pass in my subject through integration of FaB TVET model.

Richard Lukuyu, Rift Valley Technical Training Institute, Kenya



Honestly speaking, teaching is getting more exciting. I created a class email and am posting all my notes there. I am no longer wasting time dictating the notes. The students write from the net at their own pace and then we discuss. I am saving 50 per cent of my time. Come next term we will discuss over Facebook. Flexible ni mambo yote! (Flexible is everything!).

Agnes Karambu Maigallo Thika Technical Training Institute, Kenya

What do policy makers say?

Kenya adopted the FaB TVET Model to develop TVET teachers that are conscious of the evolution of curriculum delivery for continuous professional excellence.

Bashir Mursal, Director Technical Education, Kenya



COL's FaB model allows young people and adults, workers and the unemployed to choose the best time to participate in training, regardless of location. It is a great model for anyone who believes that time should be better managed in order to achieve great results in his lifelong learning process.

Gilberto Botas, TVET Special Adviser to the Minister, Mozambique

The FaB TVET model is important for Nigeria because it is learner-centric and provides the required skills needed for national development. It is a cost effective mode of increasing access to quality training based on the current economic realities.

Amina Idris, Director TVET Centre of Excellence, National Board for Technical Education, Nigeria



What do managers say?



Integrating the FaB TVET model has motivated the College to develop new programmes. This has in turn increased access to our programmes especially for ODFL students and the ultimate benefit is that our resource base has also increased.

Sangster Jere, Principal, Technical & Vocational Teachers' College, Zambia

FaB offers trainees access to highly developed, relevant course materials outside of class situations. FaB not only enhances enrolment, but also assists learners to understand difficult concepts more easily.

Wesley Yegon, Principal Masai TTI, Kenya



The FaB TVET approach we have adopted has helped transform livelihoods in our community, particularly learners from the informal sector whose lives have improved tremendously as a result of the entrepreneurial and skill training we offer them.

Prof Smile Dzisi, Rector, Koforidua Polytechnic, Ghana

INVEST Africa brought awareness, insight and capacity building for staff and now Thika TTI is a pioneer in ODFL and integration of ICT in learning programmes in TVET institutions in Kenya.

Jeff Kariuki, Principal, Thika Technical Training Institute, Kenya





Critical Success Factors and Quality Assurance

INVEST partners have agreed a quality assurance framework which assesses the competence of teachers in FaB approaches and the capability of the institutions. Completion of an externally verified e-portfolio of evidence of achievement results in COL recognition of FaB teachers and FaB institutions. The eportfolio covers policies and strategies, leadership and organisation, curriculum and assessment processes, quality of learning and teaching, and the measurement of impact.

Critical success factors have been identified as:

- vision and leadership from institutional heads
- flexibility enshrined in strategic objectives
- passion and commitment from educators
- support from national policy makers

National and International Partners in INVEST Africa





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