East Africa Skills for Transformation and Regional Integration Project (EASTRIP)
—Technical Assistance to Kenyan Regional TVET Centers of Excellence
—Ethiopia Experience
Contents

01 Ethiopia experience
02 What...
03 Why...
04 Challenges!
05 Our Solution!!
Experience in Ethiopia

Time: March 22-30, 2018
Venue: Kombolcha, Amhara Region, Ethiopia

Objectives:
- Consultation on upgrading to Center of Excellence
- Advice on TVET Flagship Solution
Vision
✓ Kombolcha Polytechnic College Automotive Technology Center of Excellence becomes the cradle of automotive technicians in Ethiopia and East Africa.

Mission
✓ To develop high-level and high-quality automotive technology mechanics/technicians.
360-degree Survey - Industry Linkage

Meet with leaders from Ministry of Industry and local associations
360-degree Survey - Educational Policy Environment

Meet with Mayor from Kombolcha

Meet with leaders from Ministry of Education
360-degree Survey-Enterprises

GM

Observe work environment

HR Manager

Interview with Graduates
360-degree Survey-
Target center and peer colleges

Teachers from KPC

Teacher Training Institute
## College Profile

<table>
<thead>
<tr>
<th>Establishment:</th>
<th>2001</th>
<th>Campus scale:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sectors involved:</td>
<td></td>
<td>2. Economic Infrastructure</td>
<td>3. Hospitality</td>
</tr>
<tr>
<td>Program offered:</td>
<td>1. Diploma course</td>
<td>Industry Linkage:</td>
<td></td>
</tr>
<tr>
<td>Major Setting:</td>
<td>Interaction with Enterprises:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Employment Quality:</td>
<td>Professional Development Progress:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contents

01 Ethiopia experience
02 What...
03 Why...
04 Challenges!
05 Our Solution!!
An old saying in China:

A bird standing on a tree never fears that the branch will break because what he believes is his own wings.
Why survey?

Suppose colleges are factories, the final products are our students.

What kind of products do we want to produce? (Objectives)

Is there a market for the products? (Market Demand)

How do we select the raw material? (Admission Requirements)

Is there a processing procedure? (Curriculum system)

Is there any space designated for the processing? (practical training room)

Are there any operators? (Teacher/Trainer)

How long does it take? (Length of academic year)

How to guarantee the quality? (Assessment & Evaluation)

Who is our customer? (Employment)
Why survey?

Ten Critical things for program development

Program Development

- Program Specification
- Program Development Pattern
- Student Enrollment
- Curricula Design
- Teaching Model
- Teaching Resources
- Faculty Readiness
- Teaching & Training Conditions
- Assessment & Certification

Employment

Creativity—Improves education quality
Suppose the program development is an engineering project, then industry survey is a STARTING POINT of this project.

Among the ten elements in Program development, **program specification** is the top priority.
Major Building Logic

- MAJOR ORIENTATION
- TEACHING EVALUATION
- TEACHING MANAGEMENT
- TEACHING METHODS
- FACULTY TEAM CONSTRUCTION
- DEVELOPMENT MODE
- CURRICULUM SYSTEM
- CURRICULUM RESOURCE

Industry Research

- Procedure Evaluation
  - Quality Analysis
  - Levels
    - Circle
    - Scale
    - Positions
    - Duties
  - Capacity Requirements
- Final Evaluation
- Data Analysis
  - Typical Work Task
  - Field of action
  - Fields conversion
- Working and Learning Alternation
  - Factory in College
  - "Order Type"
  - Work and learning in halves
  - Flexible Employment

Teaching material
- Courseware
- Teaching design
- Teaching resource
- Study work sheet
- Question Bank
- Informatization Teaching Platform

Creativity---Improves education quality
<table>
<thead>
<tr>
<th>Program Specification</th>
<th>Contents</th>
<th>Methodologies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Nature of College</td>
<td>Quality Analysis</td>
</tr>
<tr>
<td></td>
<td>2. Industry benchmarking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Graduates in demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Recruitment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Competency-based levels placement</td>
<td>Quantity Analysis</td>
</tr>
<tr>
<td></td>
<td>2. Training cycle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Qualifications correlation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Market-relevance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Job skills/Competency requirements</td>
<td></td>
</tr>
</tbody>
</table>
Multi-dimensional Survey:
National level, local level, college level

Types of survey:
Questionnaires; face to face Interview
Ethiopia is developing its own automotive manufacturing industry. An Industrial Zone in Addis Ababa (the capital) and the northern city of Mekelle is under construction. The industrial zone will cooperate with China in automotive parts assembly.

A new Industrial Park funded by the government is under construction near the college; a railway is to be constructed in the region, 500 vehicles will be allotted to service this project; Employers have higher expectation on graduates’ competency, work ethics, creativity, and their foundational knowledge.

Teachers’ capability (Hand-on skill & Theoretical knowledge) is insufficient; Curriculum structure between general courses and skill development courses is imbalanced; Linkage with industry is weak; Classrooms, practical training rooms and training devices are not enough for students to use; Traditional teaching model limit the learning pace and practice quality.
360-degree Survey

- National level
- Local level
- College level

- Post survey analysis and diagnosis
- Identify challenges and propose solutions
Contents

01 Ethiopia experience
02 What...
03 Why...
04 Challenges!
05 Our Solution!!
Challenges that we are facing at Kombolcha Polytechnic College

• The **Occupational Competency Standards Framework** in use was released 10 years ago.
Challenges that we are facing at Kombolcha Polytechnic College

- KPC’s current curriculum system is based on the existing Five-tier Occupational Competency Standards, resulting in shortage of high-skilled technicians.
- Current curricula setting leads to students’ lack of access/exposure to general knowledge framework.
Challenges that we are facing at Kombolcha Polytechnic College

- Skill wise, graduates are not equipped with the skill set demanded by the position requested by employers.
Challenges that we are facing at Kombolcha Polytechnic College

• Traditional teaching mode results in lower learning efficiency comparing to Blended Mode (O2O);
• Teaching materials are outdated;
• Teaching equipment are insufficient;
• Teachers’ hands-on skills need to stay current;
• Teaching materials does not relate to job requirement specified by employers.
Contents

01 Ethiopia experience
02 What...
03 Why...
04 Challenges!
05 Our Solution!!
Our Solution for KPC

The goals are:

• to provide high skilled workforce for Ethiopia automotive industry
• to improve the employment quality and well-being of the future generation
• to facilitate the development of KPC as Center of Excellence
• to expand the influence and image of Kombolcha Polytechnic College as a flagship center
Challenges

• The **Occupational Competency Standards Framework** in use was released 10 years ago.

Solution

• Restructure Occupational Competency Standards Framework for Automotive Industry

• Introduce internationally recognized certificate for specific occupation (or major cluster)

• Adjustment of Occupational Competency Standards in Automotive Industry & pilot operation
Our Solution for KPC

Challenges

- KPC’s current curriculum system is based on the existing Five-tier Occupational Competency Standards, resulting in shortage of high-skilled technicians.
- Current curricula setting leads to students’ lack of access/exposure to general knowledge framework.

Solution

- Talents Cultivation Mode Reform and Innovation
- Curricula Design and Development
- Emphasis on soft skills and learning skill development
Our Solution for KPC

Challenges

• Skill wise, graduates are not equipped with the skill set demanded by the position requested by employers.
• Teachers’ hands-on skills need to stay current.
• Teaching materials does not relate to job requirement specified by employers.

Solution

• Industry-education Integration Mechanism;
• College-enterprise Cooperation;
• Capacity Building for college faculty
Our Solution for KPC

### Challenges
- Traditional Teaching Mode results in low efficiency;
- Teaching Materials are outdated.

### Solution
- Teaching Reform and Innovation
- Upgrade on practical training facilities and devices
- Curriculum Design and Development

创新—改进教育品质
Creativity--Improves education quality
For sustainable development:

- **Quality Assurance Mechanism**
  - Teaching Evaluation
  - Competency-based Student Academic Achievement Evaluation
  - Graduate Employment Evaluation
Thank You