The change of Saudi Arabias TVET System

The Technical Trainers college is in the center of a general change of KSA‘s vocational training system

Dr. Michael Klees, Dean
November 21st, 2013

Speech at

Arab-German Chamber of Commerce and Industry e.V.
Content

• Saudi Arabian’s Vocational Training System – Basics

• Changes in the System

• TTC’s Hub Role
Saudi Arabia age pyramid

Source: CIA World Factbook

Median Age:
- total: 26 years
- male: 27 years
- female: 24.8 years (2013 est.)
KSA TVET Key Parameters

- Unemployment rate in the group of 15-24 old people – **total:** 28.2% (2008)
  - male: 23.6%
  - female: 45.8%

44% of all unemployed people in KSA

Numbers of TVET Students (2007)

- 33 Technical Colleges – 39.500 trainees
- 33 Vocational Training Institutes – 13.100 trainees
- 47 Vocational Training Centers – 13.900 scholars
- 70.800 scholars in the private sector

- **In total:** 66.500 young people or 1.1% of the group 15-24

**Germany** (2012): 29.4% of the group 15-24
Saudi Arabia: Basic Information

Public and private spending on education as share of GDP

- Saudi Arabia: 6.9
- OECD Average: 5.9
- USA: 7.2
- United...: 5.7
- Germany: 4.8

KSA spends more on education than the OECD

Source: World Bank / TVTC
...and where the investment goes....TVET

- 50 New Colleges of Technology (Male)
- 2 Trainers Training Colleges (Male)
- 162 New Industrial Secondary Institutes

- 50 Higher Institutes of Technology (Female)
- 2 Trainers Training Colleges (Female)

Source: TVTC
Education System in Saudi Arabia

- Public Education is open for every Saudi National (man & woman) from primary schools to higher education
- Education system in Saudi Arabia is primarily under the jurisdiction of the Ministry of Education, the Ministry of Higher Education and Technical & Vocational Training Cooperation under the power of Ministry of Labor – with King Saud University KSA founded the first university of the Arabian Peninsula
- 2007: 1,013,074 students (541,849 male and 471,225 female) with 87,823 teachers (41,108 male and 46,715 female)
Content

• Saudi Arabian’s Vocational Training System – Basics

• Changes in the System

• TTC’s Hub Role
Vocational Training in Saudi Arabia – until 2009

Colleges of Technology

Train new employees for industry

Trainers came from outside KSA or with an non pedagogic background – Trained by Training

33 Colleges of Technologies for Males and some Colleges for Females abroad the Kingdom
Vocational Training in Saudi Arabia – 2009-2013

**Stepstone 2009:** TTC was founded as KSA in-country facility to teach vocational trainers, based on German vocational training standards.

**Stepstone 2012:** First 200 TTC’s graduates enter TVTC’s vocational training system.

- **Responsibility**
  - TTC graduates become Trainer at CoT’s
  - Best Graduates go to TTC
  - Graduates from 6 CoT’s study at TTC to become a Vocational Teacher

**Colleges of Technology**
Train new employees for industry

---

Dr. Michael Klees
21.11.2013
Slide 10
Vocational Training in Saudi Arabia - 2013

Responsibility

Colleges of Technology

Train new employees for industry

Best Graduates go to TTC

Graduates from CoT’s and CoE’s study at TTC to become a Vocational Teacher

TTC graduates become Trainer at CoT’s

Stepstone 2013: First 6 CoE was founded by international providers under the responsibility of Colleges of Excellence
Content

• Saudi Arabian’s Vocational Training System – Basics

• Changes in the System

• TTC’s Hub Role
TTC is the onliest

- Only TTC offers the training for future vocational teachers within the Kingdom

- TTC forms the model of vocational training in Saudi Arabia with a dual approach combination from theory and practice

- TTC has the institutional experience for training in KSA and develop the curriculum continuously
What makes us unique:

- **One-phase training** which integrates Vocational Pedagogy with technical instruction
- Dynamic and **diverse faculty**, pedagogical experts as well as technical experts, ~ 25 Ph.D.
- **Action-oriented** teaching-learning methods
- One-shot educational experience, forming **Knowledge, Skills and Attitude** (Herz, Hirn und Hand”)
- Integrated out-of-class experience:

<table>
<thead>
<tr>
<th>40 % of Practical Training</th>
<th>60 % Theoretical Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Field Practice, Teaching Experience, Practical Courses</td>
<td>Courses in the Vocational Disciplines</td>
</tr>
<tr>
<td></td>
<td>Courses in Vocational Pedagogy</td>
</tr>
</tbody>
</table>
CAT Yanbu – TTC’s inhouse Training Facility

- **College of Applied Technology** in Yanbu founded 2012 to train the best TTC’s graduates in practical teaching

- **CAT Yanbu** was designed as training facility in operation under the responsibility of TTC’s Dean to improve the teaching skills of Junior Trainers, graduate under TTC’s approach
TTC within further KSA’s TVET system

- Establishing of other courses according to CoE’s development program
  next stepstone: February 2014 Automotive

- Build up a common sense with CoE’s and CoT’s Deans about curriculum

- About TTC’s alumni: What needs a good teacher in KSA’s TVET system

- Establishing evaluation program
Thank you!

Visit us at www.ttcollege.edu.sa
or on our Campus in Riyadh
How we got here

11/2007G:
Signing of a memorandum of understanding by His Majesty King Abdullah in Germany

22.05.09G:
Signing of implementation contract in Riyadh

2006 2007 2008 2009 2010 2011 2012 2013 2014

17.11.08 – 31.08.09G:
Preparation phase

08/2009G:
First intake starts

05/2012G:
Accredited according to European standards

06/2012G:
First Graduation

2013G:
TTC’s Open Day

2014G:
Start Automotive as new course

2006 2007 2008 2009 2010 2011 2012 2013 2014

02/2014G:
Start Automotive as new course

Dr. Michael Klees
21.11.2013
Slide 19
The German model: Theory and Practice

Practical insights and profound understanding of the conditions in today’s globalized world of work

→ Knowledge, Skills and Attitudes (K.S.A.)
→ “Out of college learning opportunities”

Two periods of six weeks in Company Field Practice (CFP-1, CFP-2) during the summer break

**Summer 2011:** 420 trainees in CFP
**Summer 2012:** 642 trainees in CFP

Cooperative approach to build sustainable partnerships with companies all over the Kingdom of Saudi Arabia, including:
TTC programs

a. Mechanical Engineering
   - Production Technology
   - Refrigeration and Air Conditioning
   - Automotive (*Start*: Fall 2013)

b. Electronics and Electrical Engineering
   - Electrical Machines
   - Electrical Power
   - Electronics

c. Information and Communication Technology
   - Telecommunication
   - Application Development
   - Network and System Administration

d. Islamic Studies

e. Vocational Pedagogy

f. English Language Training
Our Degree and our Graduate

- TTC offers a *Bachelor of Engineering Technology* (BET)
  - Combination of technical and vocational education
  - 240 Credit Points
  - 6 (8) semesters
  - English as main language of instruction

- Trainers at *Colleges of Technology* (CoT)
  - Existing CoTs
  - Foster Colleges
  - Colleges under foreign management
What makes us unique:

- **One-phase training** which integrates Vocational Pedagogy with technical instruction
- Dynamic and **diverse faculty**, pedagogical experts as well as technical experts, ~ 25 Ph.D.
- **Action-oriented** teaching-learning methods
- One-shot educational experience, forming Knowledge, Skills and Attitude (Herz, Hirn und Hand”)
- Integrated out-of-class experience:

<table>
<thead>
<tr>
<th>40 % of Practical Training</th>
<th>60 % Theoretical Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Field Practice, Teaching Experience, Practical Courses</td>
<td>Courses in the Vocational Disciplines</td>
</tr>
<tr>
<td></td>
<td>Courses in Vocational Pedagogy</td>
</tr>
</tbody>
</table>
Student distribution according to disciplines

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Technology</td>
<td>80</td>
</tr>
<tr>
<td>Refrigeration and AC</td>
<td>56</td>
</tr>
<tr>
<td>Electronics</td>
<td>95</td>
</tr>
<tr>
<td>Electrical Machines</td>
<td>45</td>
</tr>
<tr>
<td>Electrical Power</td>
<td>98</td>
</tr>
<tr>
<td>Network &amp; System Administration</td>
<td>146</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>62</td>
</tr>
<tr>
<td>Application Development</td>
<td>42</td>
</tr>
</tbody>
</table>

Currently more than 850 students our target - 1.200

+ more as 200 Pre Semester Students

Age: 22-28, Saudi nationals and Graduates of CoT
### Student distribution according to semesters

<table>
<thead>
<tr>
<th>Semester</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Semester</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Semester</td>
<td>21.2 Procent</td>
<td>132</td>
</tr>
<tr>
<td>3. Semester</td>
<td>18.3 Procent</td>
<td>114</td>
</tr>
<tr>
<td>4. Semester</td>
<td>17.5 Procent</td>
<td>109</td>
</tr>
<tr>
<td>5. Semester</td>
<td>20.7 Procent</td>
<td>129</td>
</tr>
<tr>
<td>6. Semester</td>
<td>22.4 Procent</td>
<td>140</td>
</tr>
</tbody>
</table>

**Total Students:** 624

+ More than 200 Pre Semester Students

Dr. Michael Klees

21.11.2013
Slide 26
TTC Organization

**Dean's Office**
Preparation of Courses in the different fields of TTC’s syllabus

**Administration**
Finance, Human Resources, IT Service and Infrastructure, Visa and Procurement

**Student Service**
Relations to students, intake process and examination matters

**Strategy & Quality**

**Dean's Office**

**Private & Public Cooperation**

---

Dr. Michael Klees

21.11.2013
Slide 27
Positioning of TTC within GIZ

• TTC operates on an annual budget of currently SAR 90,000,000 corresponding to close to 20 Million € pa.

• TTC generates the single largest overhead for GIZ IS of any project with strict ZAS planning, monitoring and expenditure control.

• TTC is one of the few successful German international university projects. It is a project but also an institution.

• TTC is a growth venture, with replicable potential.

• GIZ IS employs at TTC currently 80 dispatched staff ("Entsandte Mitarbeiter") Enormous, successfully mastered recruitment achievement

• Not all professional staff are "Entsandte Mitarbeiter", but counting all contract types, TTC employs 140 professionals.

• 23 faculty, staff and leadership personnel count with a Ph.D.

• There are in total 138 occupied positions.