TOWARDS A HIGHLY INCOME NATION: MALAYSIA VOCATIONAL EDUCATION TRANSFORMATION

ASEM EXPERT SEMINAR- DUAL STUDY PROGRAMMES
A STRATEGY TO EXPAND OPPORTUNITIES FOR ASEM YOUTH
NUREMBERG GERMANY 31 MARCH – 1 APRIL 2014

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MINISTRY OF EDUCATION, MALAYSIA
BACKGROUND DATA
Population: 28 million
No. of schools: 9,987
No. of schools with Voc Subjects: 860
No. of students: 5 million
Students per cohort: 500,000
Voc Ed in school system: MOE
Voc. Training post-secondary: 7 ministries

Voc. Schools: 70
Enrolment 2012: 97% (35,000) – 5% in VocEd
No. of voc teachers: 3,000

Pilot Vocational Colleges: 15
Enrolment: 98%

ISSUES faced by MOE
1. How to enhance the capacity in VocEd with the participation of other ministries?
2. Improve enrolment in VocEd
3. Improve Certification
4. Improve facilities
5. Improve links with industries
6. Cater for job market/Industries
MAIN ISSUES IN MALAYSIA TVET

- Defragmentation of TVET Provision
- TVET Student Enrolment
- Programme Quality
- Student Pathway
BLUE OCEAN STRATEGY Initiatives
(2009 – 2010)

Reform of Vocational Schools into Vocational Colleges

1. Introduce New vocational schools uniform.
2. Disciplinary actions o problematic teachers
3. Leadership: Remove and re-deploy non-performing school principals
4. **Introduction of Traineeship programme and Apprenticeship programs**
5. Re-skilling and up-skilling of teachers (NOSS and Malaysian Skills Certificate -MSC)
6. Introduction of 5S to transform the workshops (Quality Workplace Environment)
7. **Enhancing School Enterprise activities**
8. Promotion through Media
9. Benchmarking visits to regional and European countries
10. Future development- offer certificate courses not offered at Polytechnic
Economic growth demands additional ~1.3Mn quality TVET workers

Assumptions:
1. Total to be delivered by TEVT system: graduates required for NKEA (1,330), with 15 to 20% moving to further education + graduates to be delivered for non NKEA sectors based on 2010 data (350,000) and excluding 350,000 diplomas to be produced by universities (public, private and KTAR – source MOHE).
2. Optimization: additional capacity and redeployment to diplomas at Polytechnics (target: 356,000 diplomas by 2020), planned new institutes at MOHR and MOYS and hypothesis of potential optimization of utilization rate to 100% vs. 80-90% on average today (excl. Polytechnics).
3. Total graduates per year: 25 to 30K, or 50K capacity seats based on average of 2 enrolment years per graduate.

Source: Data request from TEVT agencies, Tracer Studies at MOHR, MOYS and Polytechnics, NKEA forecasts, BCG analysis

Our national economic growth demands an increasingly higher number of TVET graduates going forward.
Skilled Workers Demand

Labour shortage today

- Textile labour shortage of 70k
- Plastic manufactures labour shortage of 30k
- Hospitality labour shortage of 150k

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuf’ing</td>
<td>327,798</td>
</tr>
<tr>
<td>Agriculture</td>
<td>269,272</td>
</tr>
<tr>
<td>Construction</td>
<td>107,421</td>
</tr>
<tr>
<td>Financial l’mediation</td>
<td>89,044</td>
</tr>
<tr>
<td>Hotel and restaurant</td>
<td>55,360</td>
</tr>
<tr>
<td>Wholesale and retail</td>
<td>54,079</td>
</tr>
</tbody>
</table>

Demand in the future

- Number of high income jobs required, 2020

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>220,314</td>
</tr>
<tr>
<td>Tourism</td>
<td>180,047</td>
</tr>
<tr>
<td>Business</td>
<td>97,705</td>
</tr>
<tr>
<td>E&amp;E</td>
<td>63,219</td>
</tr>
<tr>
<td>H/care</td>
<td>46,006</td>
</tr>
<tr>
<td>W/sale Retail</td>
<td>40,266</td>
</tr>
<tr>
<td>Telco</td>
<td>28,217</td>
</tr>
<tr>
<td>Agri</td>
<td>20,717</td>
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<tr>
<td>Palm Oil</td>
<td>13,977</td>
</tr>
<tr>
<td>OG&amp;Eng</td>
<td>6,973</td>
</tr>
</tbody>
</table>

1 Preliminary labour estimates from NKEA labs
2 Jobs commanding RM 4k/month and above

SOURCE: MOHR Labour and Human Resources Statistics 2008, interviews conducted with industry association representatives
Primary and secondary education in Malaysia is similar to the foundation of high rise buildings. A strong foundation has to be laid to ensure the safety of the building. The lack of emphasis towards vocational education has seen a decline in the number of skill workers produced by the country.
Vision:
Vocational Education: The Best Path to Excellence Career

Mission:
Providing an innovative vocational education and training to meet the needs of individuals, communities, industries and the country.
HOW

STRAategic ACTION PLAN

Initiative 1: Transformation of vocational education curriculum.
Action 1:
To implement Junior Vocational Education (JVE) Programme
Initiative 2: Transformation of vocational education institution.
Action 2:
To implement Vocational College curriculum.
Initiative 3: Collaboration with industries.
Action 3:
To set up Junior Vocational Education (JVE) Programme
Action 4:
To establish MOE Vocational College (VC)
Action 5:
To establish Other Public Agencies Vocational Colleges.
Initiative 4: Transformation of vocational education assessment.
Action 6:
To set up Private Vocational College through the Private Finance Initiatives.
Action 7:
To set up a Vocational Education Advisory Council.
Initiative 5: Transformation of vocational education organization.
Action 8:
To implement assessment based on vocational standard competencies.
Action 9:
To set up a Technical and Vocational Education Sector.
Action 10:
To strengthen vocational education human resources through training.
Action 11:
To strengthen vocational education human resources through an improved Vocational Education scheme.
APPRENTICESHIP PROGRAMME STRUCTURE – 2 YEARS FLEXIBLE

MODEL A

TWO YEAR SYSTEM

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR 2 (LEVEL 2)</td>
<td>PRACTICAL TRAINING (6 MONTHS)</td>
</tr>
<tr>
<td></td>
<td>BASIC VOCATIONAL THEORY (3 MONTH)</td>
</tr>
<tr>
<td></td>
<td>ACADEMIC (3 MONTHS)</td>
</tr>
<tr>
<td>YEAR 1 (LEVEL 1)</td>
<td>PRACTICAL TRAINING (6 MONTHS)</td>
</tr>
<tr>
<td></td>
<td>BASIC VOCATIONAL THEORY (3 MONTH)</td>
</tr>
<tr>
<td></td>
<td>ACADEMIC (3 MONTHS)</td>
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MODEL B

TWO YEAR SYSTEM

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>ACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>YEAR 2 (LEVEL 2)</td>
<td>SUBJECT TO NEGOTIATION</td>
</tr>
<tr>
<td>YEAR 1 (LEVEL 1)</td>
<td>SUBJECT TO NEGOTIATION</td>
</tr>
</tbody>
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CO-FUNDING MODEL FOR KOLEJ VOKASIONAL APPRENTICESHIP PROGRAMME

<table>
<thead>
<tr>
<th>Programme Detail/ Duration</th>
<th>Curriculum &amp; Assessment</th>
<th>Implementing Agency</th>
<th>Details of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>BPK, BPTV, LP</td>
<td>Kolej Vokasional</td>
<td>Government Funding</td>
</tr>
<tr>
<td>Basic Vocational Theory</td>
<td>JPK, LP</td>
<td>Public Training Agency Private Training Provider</td>
<td>Government Funding</td>
</tr>
<tr>
<td>Hands-on/Practical</td>
<td>JPK, LP</td>
<td>Industry</td>
<td>Double Tax Deduction Initiative for Industry</td>
</tr>
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# Important Aspects of Apprenticeship Programme

<table>
<thead>
<tr>
<th>Programme Aspect</th>
<th>Details</th>
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<tbody>
<tr>
<td>Programme Certification/Acreditation</td>
<td>Sijil Pelajaran Aliran Kemahiran (SPAK) certificate with Malays language (SPM Equivalent) Malaysia Skills Certificate (Level 1 &amp; 2)</td>
</tr>
<tr>
<td>Value Added Certification/Acreditation</td>
<td>City &amp; Guild (UK), LCCI, TWI (Based on the Programme)</td>
</tr>
<tr>
<td>Student Career Prospect</td>
<td>Preferably Absorbed into the Practical Training Company or other related companies.</td>
</tr>
</tbody>
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Thank you