Trends and Issues on Transition from Secondary to Higher Education: The Case of Malaysia

Professor Haji Ibrahim Che Omar, Professor Aida Suraya Md. Yunus & Wan Chang Da
7-8 March 2013
Education Research Institutes Network in the Asia Pacific (ERI-Net) Expert Meeting
Bangkok, Thailand
Landscape of Secondary Education

The Malaysian Certificate of Education (SPM) can be considered as the secondary school leaving certificate. Students sit for this examination at the end of Form 5 (equivalent to Year 11).

<table>
<thead>
<tr>
<th>Form 5 Enrolment in Gov. Schools</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>195,906</td>
<td>203,790</td>
<td>202,134</td>
</tr>
<tr>
<td>Science</td>
<td>121,529</td>
<td>122,110</td>
<td>123,032</td>
</tr>
<tr>
<td>Vocational/Technical/Technology</td>
<td>81,163</td>
<td>73,563</td>
<td>74,355</td>
</tr>
<tr>
<td>Religious</td>
<td>8,093</td>
<td>9,697</td>
<td>10,742</td>
</tr>
<tr>
<td>Others</td>
<td>903</td>
<td>2,348</td>
<td>2,558</td>
</tr>
<tr>
<td>Total</td>
<td>407,594</td>
<td>411,508</td>
<td>412,821</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Malaysian Certificate of Education (SPM)</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Candidates</td>
<td>443,962</td>
<td>445,586</td>
<td>446,256</td>
</tr>
<tr>
<td>Number of Passes</td>
<td>402,586</td>
<td>405,829</td>
<td>406,638</td>
</tr>
</tbody>
</table>
## Landscape of Higher Education

<table>
<thead>
<tr>
<th>Type of Inst.</th>
<th>No. of Inst.</th>
<th>No. of Students&lt;sup&gt;+&lt;/sup&gt;</th>
<th>Type of Inst.</th>
<th>No. of Inst.</th>
<th>No. of Students&lt;sup&gt;+&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>20</td>
<td>426,976</td>
<td>University</td>
<td>36</td>
<td>172,221</td>
</tr>
<tr>
<td>Polytechnic</td>
<td>30</td>
<td>89,292</td>
<td>Branch Campus of Foreign University</td>
<td>4</td>
<td>7,206</td>
</tr>
<tr>
<td>Community College</td>
<td>70</td>
<td>6,319</td>
<td>University College</td>
<td>15</td>
<td>38,561</td>
</tr>
<tr>
<td>* Technical &amp; Vocational Training Institutes (TEVT) and Public Skills Training Institutes (ILKA) conducted by other Ministries and governmental agencies</td>
<td></td>
<td></td>
<td>College</td>
<td>310</td>
<td>159,983</td>
</tr>
</tbody>
</table>

89,686 students are studying abroad across 55 countries

+No. of Students Enrolled for Bachelor’s, Advanced Diploma, Diploma, Certificate and Foundation Programme (Based on 2011 Statistics)
From Secondary to Higher Education

How do students progress from Secondary School with the SPM certificate to Higher Education?

We will discuss the following trajectories:

- Public Higher Education
- Private Higher Education
The Trajectories into Public HE

Ministry of Education
• Malaysian Higher School Certificate (STPM) in Secondary Schools
• Malaysian Matriculation Programme in Matriculation Colleges
• Malaysian Higher Islamic Religious Certificate (STAM) in Religious Schools

Ministry of Higher Education
• Foundation Programme in Public Universities
• Certificate/Diploma/Advanced Diploma in Polytechnics & Community Colleges

Bachelor’s Degree in Public HEIs
### The “MOE” Route into Public HE

<table>
<thead>
<tr>
<th>Malaysian Higher School Certificate (STPM)</th>
<th>Malaysian Matriculation Programme</th>
<th>Malaysian Higher Islamic Religious Certificate (STAM)</th>
</tr>
</thead>
</table>
| • A one-and-half year pre-university preparation conducted mainly in selected secondary schools. Modeled after the Higher School Certificate (A-Levels) in the United Kingdom.  
• Students are admitted based on SPM results.  
• Students typically study 4 subjects (max 5) either in the Science or Arts Stream.  
• Uses a Cumulative Grade Point Average (CGPA) system between 0 – 4.  
• Beginning with the 2012 cohort, a new modular assessment system will replace the final examination. | • A one or two year pre-university programme conducted at Matriculation Colleges, or at selected public universities.  
• Students are selected based on their SPM results, where students with lower grades will do a two-year programme.  
• Admission into the programme is also through an ethnic-based quota system.  
• Students typically study 4 subjects either in the Science or Commerce Stream.  
• Uses a Cumulative Grade Point Average (CGPA) system between 0 – 4. | • A similar form of examination like STPM, which is conducted in government-supported religious school.  
• Students are admitted based on SPM results.  
• The STAM is a pre-university qualification that allow students to proceed into Malaysian public universities for selected disciplines such as Islamic Studies  
• The STAM also allow students to continue their studies at Al-Azhar University in Cairo, Egypt. |
# The “MOHE” Route into Public HE

<table>
<thead>
<tr>
<th>Foundation Programme</th>
<th>Certificate/Diploma/Advanced Diploma</th>
</tr>
</thead>
</table>
| Several Public Universities have institution-specific Foundation Programme. These programmes are usually one or two years, depending on the intended study programme. The notable examples include:  
- Foundation Programme in Science at University of Malaya  
- Science Entrepreneurship Preparation Programme at Universiti Malaysia Kelantan  
- Matriculation Programmes for selected courses at International Islamic University of Malaysia  
- Students are selected into these programmes based on their SPM results, and in certain programmes, there is an ethnic-based quota system such as the Foundation Programme in Science at University of Malaya. | Certificate, Diploma and Advanced Diploma programmes are offered by Polytechnics and Community Colleges.  
The entry requirement for these programmes is the SPM results. Students with better SPM results may proceed to a diploma programme, while students who do not meet the minimum requirement for diploma will instead do the certificate programme.  
- These programmes are feeders for the Bachelor’s programme in a particular course/discipline. |
Selection Mechanism in Public Universities

- Students are selected into public universities based on academic result (the CGPA across different pre-university programmes), with a small proportion (10 percent) allocated to involvement and participation of extra-curricular activities.
- Students are allowed to make eight choices of universities and programmes based on their interest, and normally students with higher grades will be selected for the courses of their choices.
- The selection mechanism was done centrally at the Student Admission Management Division, Department of Higher Education, Ministry of Higher Education. In principle, the role of the division is to consider the application based on the students’ request and field of study of interest, as well as the qualification and academic results.
- Universiti Sains Malaysia is the only public university that was granted the autonomy to admit students directly into its undergraduate programmes. Normally, younger universities will have less better students than older established universities.
- The number of students accepted per university is decided based on the university’s capability and availability of places (also as outlined in the university’s Strategic Plan).
The Trajectories into Private HE

**General Programme**
- Based on SPM results, students may pursue pre-university programme or attend courses to prepare for examinations like the A-levels and SAT
- Normally, students have to study several subjects

**Discipline-specific Programme**
- Students enter a discipline-specific programme at the level of certificate or diploma, depending on their SPM results.
- With the certificate/diploma, students can either pursue an advanced diploma or degree programme.

Bachelor’s Degree in Private HEIs
Selection Mechanism in Private HEIs

• Selection mechanism in private HEIs is fully managed and implemented by the respective institution.
• Selection mechanism is programme specific.
• For every programme offered by private HEIs that has been accreditated by the Malaysian Qualifications Agency (MQA), the following criteria needs to be met:
  ➢ A clear statement on the criteria and processes of student selection that are free from all forms of discrimination and bias
  ➢ The prerequisite knowledge and skills must be clearly stated, published and disseminated to the public
In events where the HEIs violated the criteria in selecting students, the MQA may acts to:

- Refer the HEI to the Ministry of Higher Education (MOHE) for further action
- Request MOHE to bar the student from graduating
- Request MOHE to disallow the HEI to recruit new students for the particular programme
- Request the National Higher Education Fund Corporation act on the HEI
Issues
Initiatives
Impacts
Ethnic Quota System

• An ethnic-based quota system for public universities was introduced following the Racial Riot in 1969 to address the ethnic imbalance.
• The quota system was abolished in 2003 and the first cohort of students were admitted to public universities purely based on merits.
  – Currently, ethnic-based quota system is only practice in the Malaysian Matriculation Programme and some Foundational Programmes.
Gender Gaps

• There is gender disparity in higher education, especially in public universities.
• Although there is a higher proportion of males in Engineering courses, and an equal ratio in Medicine, the overall gender ratio in public universities is 65% female to 35% male.
• A plausible explanation to the disparity is that the selection mechanism in public universities which is based on academic merit give more advantage to the girls.
The Government has established the National Higher Education Fund Corporation in 1997 to provide funding for higher education.

This fund is to ensure that no students who is able to pursue higher education is deprived of the opportunity due to financial circumstances.

To date, RM44.62 billion has been disbursed to 1.99 million students.

Increasingly, the proportion of students in private HEIs has increased significantly: 8,956 (in 2000) to 76,454 (in 2009).

Limited scholarship provided by the government, government agencies, government linked companies, financial institutions and private institutions
The most significant impact would have been the pressure to obtain excellent academic results for students to be able to get the course they desired, as well as to compete for scholarships to pursue higher education locally and abroad.

Particularly for SPM and STPM examinations, there are elements of shadow education in the form of private tutoring to complement the learning and preparation in schools.

Kenayathulla (2012), from examining the 2004/05 household expenditure survey in Malaysia, found that 20.1% of households indicated expenditures on private tutoring.

Tan (2011), through surveying 1,600 students in eight schools around Kuala Lumpur, concluded that 88% of students had received private tutoring.
Proposed Plan & Method
Proposed Plan and Methods

1. Semi-structured Interview
   – Proposed Interviewees/respondents:
     • Administrators in MOHE, MQA and MOE
     • Officials in selected public and private HEIs
     • Teachers in Schools

2. Document Analysis

3. Questionnaire
   – Survey questionnaires with students in schools and universities
Aspects to be Covered

- Exam results/performance of students/cut off grades for admission to universities
- Relationship between their courses and exam results
- Selection mechanism
- Preparation of students at schools for university education
- Mode of entrance to higher education (SPM/STPM/STAM/Other modes – second intake, second mode of admission)
- Direct admission to second year
- Students, teachers, university officials, and administrators perception/opinions on selection mechanisms.
- The concept of meritocracy in selection mechanism
- Ethnic selection for certain programmes at public universities/ethnic quota
- Admission or selection mechanism for foreign students
- Differences in terms of entrance requirements between public and private HEIs