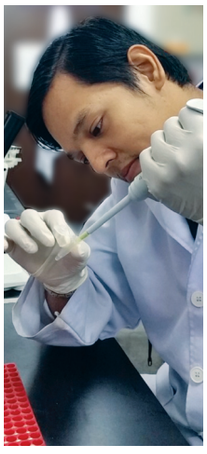
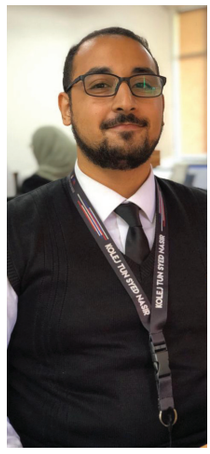
MINISTRY OF HIGHER EDUCATION

POLICY STUDY ON THE INTERNATIONALISATION OF HIGHER EDUCATION IN MALAYSIA





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MINISTRY OF HIGHER EDUCATION

Policy Study on the Internationalisation of Higher Education in Malaysia
[Internal – Not for Circulation]

Funded using the Education Policy Studies Fund by:
Policy Planning and Research Division
Ministry of Higher Education
No.2, Tower 2
Jalan P5/6, Precint 5
62200 Putrajaya
Malaysia

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Published by

International Institute of Public Policy & Management (INPUMA)
Universiti Malaya

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International Institute of Public Policy and Management

ACKNOWLEDGEMENTS

The Study Team was led by Lead Consultant, Professor Dr. Shakila Yacob (INPUMA, Universiti Malaya) and was composed of four consultants, Professor Dr. Chan Nee Nee (Quest International University), Dr. K. Thiruchelvam (INPUMA, Universiti Malaya), Mr. Danial Rahman (Sunway Education Group), and Associate Professor Dr. Ooi Pei Boon (Sunway University). The Study Team was assisted by an operations and administrative team: Ms. Nadya Subramaniam, Dr. Junaidah Binti Yusof, Ms. Chan Wei Wei, Mr. Satya Venugopal, Mr. Wilson Wong, and Ms. Nurul Shafiqah Hazelin.

The Study Team would like to thank the Ministry of Higher Education for the funding of this project. Additionally, recognition and appreciation are due to the following: Unit Perundingan Universiti Malaya (UPUM) and the administrative team at the International Institute of Public Policy and Management (INPUMA).

Above all, the Study Team expresses its gratitude and appreciation to all individuals and organisations who graciously agreed to be interviewed, surveyed and participated in the policy labs. The insights provided have allowed us to form the findings that will be used to drive positive change in Malaysia.

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ACRONYMS

Acronym	Full Name
AACSB International	Association to Advance Collegiate Schools of Business
ABET	Accreditation Board for Engineering and Technology
AKEPT	Higher Education Leadership Academy (Akademi Kepimpinan Pendidikan Tinggi)
ACF	Autocorrelation Functions
ACTS	ASEAN Credit Transfer System
ADF	Augmented Dickey-Fuller
AICc	Corrected Akaike Information Criterion
AQAFHE	ASEAN Quality Assurance Framework for Higher Education
AQRF	ASEAN Qualifications Reference Framework
ARCH	Autoregressive Conditional Heteroskedasticity
ARIMA	Autoregressive Integrated Moving Average
ASEAN	Association of Southeast Asian Nations
CBIE	Canadian Bureau for International Education
COPPA	Code of Practice for Programme Accreditation
COE	Certificate of Eligibility
CRICOS	Commonwealth Register of Institutions and Courses for Overseas Students
DLM	Dynamic Linear Modelling
DWPI	Derwent World Patents Index
EMGS	Education Malaysia Global Services
EPU	Economic Planning Unit, Prime Minister's Department
ERGS	Exploratory Research Grant Scheme
ETS	Exponential Smoothing
EU	European Union
FGD	Focus Group Discussion
FRGS	Fundamental Research Grant Scheme
FTE	Full-time Employment
GDP	Gross Domestic Product
GTE	Genuine Temporary Entrant
HEI	Higher Education Institution
HICoE	Higher Institution Centre of Excellence

Acronym	Full Name
IBC	International Branch Campus
IDP	International Development Programme
IEAA	International Education Association of Australia
IELTS	International English Language Testing System
IES	Internationalisation Experience Satisfaction
IHERI	International Higher Education, Research, and Innovation
IIE	Institute of International Education
INPUMA	International Institute of Public Policy and Management
JIM	Immigration Department of Malaysia (Jabatan Imigresen Malaysia)
JPPKK	Department of Polytechnic and Community College Education (Jabatan Pendidikan Politeknik dan Kolej Komuniti)
JPT	Department of Higher Education (Jabatan Pendidikan Tinggi)
KDHA	Knowledge and Human Development Authority
KKMM	Ministry of Communications and Multimedia (Kementerian Komunikasi dan Multimedia Malaysia)
KPI	Key Performance Indicator
KSU	Secretary General (Ketua Setiausaha)
LLF	Log-Likelihood Function
LRGS	Long Term Research Grant Scheme
MASTIC	Malaysian Science and Technology Information Centre
MEB (HE)	Malaysia Education Blueprint 2015–2025 (Higher Education)
MENA	Middle East, North Africa
MHA	Ministry of Home Affairs
MITI	Ministry of International Trade and Industry
MJIIT	Malaysia-Japan International Institute of Technology
MOA	Memorandum of Agreement
MOE	Ministry of Education
MOF	Ministry of Finance
MoFA	Ministry of Foreign Affairs
MOHE	Ministry of Higher Education
MOOC	Massive Online Open Courses
MOSTI	Ministry of Science, Technology and Innovation
MOTAC	Ministry of Tourism, Arts, and Culture
MOU	Memorandum of Understanding
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework

Acronym	Full Name
MSD	Malaysian Students Department
MyPAIR	Malaysia Partnerships and Alliances in Research
MyQuest	Malaysian Quality Evaluation System for Private Colleges
MNC	Multinational Corporation
NANOCAT	Nanotechnology and Catalysis Research Centre
NKEA	National Key Economic Areas
NGO	Non-Governmental Organisation
OBOR	One Belt One Road
OECD	Organisation for Economic Co-operation and Development
OIC	Organisation of Islamic Countries
OLS	Ordinary Least Squares
PEMANDU	Performance Management and Delivery Unit
PRGS	Prototype Research Grant Scheme
PSD	Public Service Department
QS	Quacquarelli Symonds
R&D	Research and Development
RUs	Research Universities
SDG	Sustainable Development Goal
SETARA	Rating System for Malaysian Higher Education Institutions (Sistem Penarafan Institut Pengajian Tinggi Malaysia)
SMEs	Small and Medium-Sized Enterprises
SOP	Standard Operating Procedure
SPM	Malaysian Certificate of Education (Sijil Pelajaran Malaysia)
SPSS	Statistical Package for the Social Sciences
STI	Science, Technology and Innovation
STPM	Malaysian Higher School Certificate (Sijil Tinggi Persekolahan Malaysia)
TNE	Transnational Education
ToRs	Terms of Reference
TVET	Technical and Vocational Education and Training
UAE	United Arab Emirates
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USP	Unique Selling Point
VAR	Vector Autoregressive

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GLOSSARY

Term	Definition
Higher Education Institution	Higher Education Institutions include all post-secondary education, training, and research institutions, such as universities or colleges that are authorised by state/national authorities.[1]
Student Mobility	Student Mobility is any opportunity for students to work or study abroad whilst undertaking their degree programme. It can be both incoming and outgoing.[2] Outbound Mobility: Malaysian students on a short-term exchange programme abroad or any international study experience. Inbound Mobility: International students at Malaysian Higher Education Institutions. International student mobility refers to any form of transnational mobility that exists within a student higher education study programme. The lengths vary from a study programme of full duration such as a degree to a short trip of no less than 7 days.[3] In addition to completing academic programmes at a foreign HEI, student mobility can also entail one of the following short-term mobility programmes with a period of one year or less: • Industrial trainings; • Semester-based international exchange programmes; • Experience learning, such as trips to other countries; or • Workshops.
Staff Mobility	Staff Mobility refers to a period of work in a country other than that of prior permanent residence or prior employment (finished or ongoing) for a restricted or extended duration. It may also refer to movement of staff in academic and non-academic related activities by international mobility agreements recognised by the organisation. Such international contact can be in the following forms.[4] Academic Staff: • Guest lectures/professorship visits; • Visits to study and research; • Evaluation work; or • Research collaboration. Outbound: Staff mobility includes any opportunity for local academic or administrative staff in an HEI to spend time for any academically related activity in another institution abroad. Inbound: International faculty who spend time for any academically related activity and they must be residents from other countries. Subsets: long-term, short-term, and nationalities.[5]
Academic Programmes	An academic programme is any combination of courses and/or other requirements (including internships, research papers etc.) leading to a degree or certificate.[6] Academic programme refers to a collection of modules which are designed to achieve the defined learning outcomes for a prescribed period and volume of learning which usually leads to the award of a qualification.[7]

Term	Definition
	The purpose of an academic programme is to: • Increase the knowledge and understanding of students in a field of study or discipline; • Qualify students for employment in a variety of occupations; and/or • Prepare students for advanced study. The academic programmes offered must: • Comply with the policies, procedures and guidelines of academic programmes; • Be internally consistent with shared goals, priorities and learning outcomes; and • Stand-alone without requiring the completion of other awards except for programmes designed to transfer and accept to graduate programmes.
Research and Development (R&D)	R&D is the process of creating and obtaining new knowledge in order to create new or improve current technology, products, services, systems, and processes.[8] R&D is any creative systematic activity undertaken in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this knowledge to devise new applications. The sectors involved range from natural sciences and engineering; social sciences and humanities and interdisciplinary fields.[9] Includes fundamental research and applied research that leads to new technologies, products or processes in fields such as agriculture, manufacturing and climate, and experimental development work.[10] The core elements that allow research and development are incentivising and providing the best environment for successful research as well as disseminating and giving work that generates information and technology transfer maximum visibility.[11]
Governance and Autonomy	Governance and Autonomy refers to the ways of decision making within an organisation, especially with reference to how much power that organisation has to make its own decisions. Governance refers to interaction between the government, the main elements of which are constitutions, legislatures, executive and judiciary, and HEIs that control and implement HEI policies and decisions on institutional growth.[12] The six dimensions of governance in relation to HEIs are financial relationships, administrative relationships, information and knowledge flows, staff flows, status conferencing issues, and ideology issues. Autonomy refers to the principles within the confines of a modern state which address fundamental ethnic and human issues. It is a means of tackling immediate problems.[13]
Social Integration and Community Engagement	Social integration is the process where newcomers are incorporated into the current social structure of the host society. Community engagement refers to communication and interaction between all members of a community in order to reach a social outcome. Social integration defines the patterns of human relationships formed within any given society. It aims to create or reinforce shared identities that diminish the likelihood of conflict and provide foundations for cooperation. Improving social inclusion can be seen as fostering empathy, peace, engagement, and unity at all levels of society.[14]

Term	Definition
	Community engagement refers to an organised process for the specific purpose of engaging with defined groups of people whether they are related by geographical location, special interest or association to address issues affecting their well-being.[15]
International Accreditation	Programmes with accreditation from overseas organisations.
International Student	International students are those who have crossed borders for the purpose of study. The UNESCO Institute for Statistics, the OECD and Eurostat define international students as those who are not residents of their country of study or those who received their prior education in another country. When data on international students are not available, data on foreign students are used. Foreign students are defined according to their citizenship. International students are thus a subset of foreign students.[16]
Internationalisation	Internationalisation is a term that discusses the international dimension in higher or postsecondary education.[17]
Pastoral Care	Pastoral Care covers a wide range of areas where support is needed for international students: educational and linguistic preparation; help adapting to a new cultural environment; advice on accommodation, travel, health and welfare; information and advice on harassment and discrimination; monitoring of student attendance and progress on the course; and mandatory communication with at-risk student families.[18]
International Branch Campus	An entity owned, at least in part, by a foreign educational provider; operated on behalf of a foreign educational provider; engages in at least some face-to-face teaching; and provides access to a whole academic programme leading to a credential awarded by the foreign education provider.[19]

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Introduction

Higher education – in both developed and developing countries – has become a major driving force of growth in national wealth and socioeconomic development. Over the past two decades, Malaysia's higher education system has undergone several transformations that has propelled it to the ranks of the world's leading education systems. Its success can be attributed to sustained government interventions and polices such as the 2011 Internationalisation Policy for Higher Education Malaysia as well as the Malaysia Education Blueprint 2015 – 2025 (Higher Education).

In line with our aspiration to be a regional and globally competitive international education hub, this study critically examines Malaysia's internationalisation efforts in six policy areas and proposes new policy directions for the Ministry of Higher Education (MOHE) Malaysia. It evaluates Malaysia's strengths and limitations by drawing a comparison of our national achievements against selected countries.

6 Policy Areas in Internationalisation	Additional Areas
1. Student Mobility 2. Staff Mobility 3. Academic Programmes 4. Research and Development 5. Governance and Autonomy 6. Social Integration and Community Engagement	(a) Global and Regional Benchmarking (b) Branding and Marketing (c) Education Clusters (d) Alumni Engagement (e) Star Academics (f) Internationalisation Scorecard

Methodology and Summary of Findings

The study consists of a review of existing internationalisation policies:

Review of internationalisation efforts under the 2011 Internationalisation Policy for Higher Education Malaysia and the Malaysia Education Blueprint 2015 – 2025 (Higher Education)

- Our findings revealed partial progress of the 2011 Internationalisation Policy. Malaysia is unable to achieve the target of 160,000 international students in HEIs by 2020 specified under Malaysia Education Blueprint 2015 – 2025 (Higher Education).

What Malaysia does well in internationalisation

- Malaysia's internationalisation efforts are underpinned by top governmental and institutional commitment; a sound institutional framework; a safe, friendly and welcoming destination; a global reputation and the rising rankings of our HEIs; as well as affordable tuition fees.
- Other factors include student and staff mobility as well as research expenditure and co-authorships that have registered impressive gains in recent years.

Where Malaysia can improve

- However, much remains to be done in terms of governance, competencies and management, strategic direct-selling, branding and marketing, and pastoral care.

Key Takeaways

Our study has identified twelve key takeaways and recommendations for improving Malaysia's internationalisation efforts.

Key Takeaway 1 Strengthen the Governance Framework

Our framework for internationalisation is comprehensive and strategic, but there are weaknesses in linking and coordination mechanisms between relevant authorities. Regulations impeding private HEIs from recruiting international students also need to be reviewed.

Recommendations:

- Establish an Inter-Ministerial Committee on the Internationalisation of Higher Education jointly chaired by the MOHE and the Ministry of Home Affairs (MHA), with membership drawn from relevant ministries (in particular, the Ministry of Foreign Affairs) and agencies as well as industry players to ensure leadership commitment and a holistic approach to policy-setting and implementation.
- Recognise the new role and process of 'knowledge diplomacy', which should be adopted by our diplomats at embassies abroad.
- Liberalise regulations pertaining to governance and autonomy of private HEIs.

Key Takeaway 2 Deliver Forward-Looking, Responsive Visa Services

Visa issues were consistently raised as a top ranked concern among stakeholders which fundamentally undermines Malaysia's internationalisation efforts. While balancing concerns over national security, Malaysia must also enhance its visa-related services and implement a robust student visa process in line with countries such as Singapore, Australia, the UK, and Canada.

Recommendations:

- Adopt a transparent monitoring system to ensure the successful delivery of student visas in line with the 32 initiatives approved by Cabinet in November 2019.
- Consider incorporating the visa initiatives as part of the Ministry's Key Performance Indicators to ensure institutional commitment.

Key Takeaway 3 Expand During- and Post-Study Work Opportunities

During-study and post-study internship and work opportunities are key attractions in internationalisation, but Malaysia's current visa work conditions are too rigid. We must ensure that our visa arrangements and offerings are accessible, transparent, and in alignment with global best practices.

Recommendations:

- Enhance during- and post-study work opportunities for international students in line with global practices.

Key Takeaway 4 Enhance Intercultural Competencies

International students have expressed feeling “unwelcome”, or worse still, “discriminated” in Malaysia, either by local communities or HEI students and staff. Our findings, also report how English proficiency is below par in certain classroom and professional settings, besides a need to provide better support for the teaching and learning of Bahasa Malaysia among international students.

Recommendations:

- Strengthen levels of English language proficiency through staff and student training and provide additional language support in Bahasa Malaysia for international students.
- Formulate strategies that bolster intercultural competencies and appreciation of international outlooks among HEIs, government entities (including AKEPT), students, industry players, and communities.
- Recognise international students economic contributions and factor that in with regard to government support and the multiplier effect generated to the economy from the enrolment of international students.

Key Takeaway 5 Launch Pastoral Care Guidelines

A Code of Practice for Pastoral Care is vital to ensure that students are well-informed, safe, and properly cared for. Presently, there is no comprehensive code on how to support distressed students in HEIs in Malaysia. The absence of a unified code across all HEIs leads to varying treatment of both domestic and international students.

Recommendations:

- Introduce a comprehensive Code of Practice for Pastoral Care to be adopted by all HEIs to enhance the welfare of both domestic and international students.

Key Takeaway 6 Initiate an Alumni Engagement Strategy

Successful alumni engagement programmes that align institutional priorities with graduates’ interests, needs, and potentials can add value to an institution’s international efforts in meaningful and innovative ways. However, Malaysia does not have an effective alumni engagement strategy unlike Australia’s Global Alumni Engagement Strategy (2016 – 2020).

Recommendations:

- Develop an Alumni Engagement Strategy that will enhance HEI international alumni management and effectively mobilise international alumni.

Key Takeaway 7 Promote the Internationalisation of TVET

Demand for Technical and Vocational Education and Training (TVET) qualifications is growing globally, especially TVET in applied technology. Malaysia's TVET sector is robust but its internationalisation efforts is insignificant even though there are demands for local programmes such as Politeknik Banting's professional licensing programme on maintenance, repair and operations (MRO) in the aviation sector.

Recommendations:

- Expand the scope of the internationalisation of higher education to incorporate the TVET sector.
- Consider piloting and expanding short courses that attract international students.

Key Takeaway 8 Launch a Cohesive Branding and Marketing Campaign

Uniquely positioning Malaysian Higher Education in our marketing, branding, and communications efforts is crucial given intense competition worldwide. A major gap in Malaysia is that there no single entity responsible for leading higher education branding and positioning efforts abroad.

Recommendations:

- Develop a unique brand for Malaysian Higher Education such as Germany's 'Land of Ideas' to effectively position Malaysia in the internationalisation space.
- Entrust Education Malaysia Global Services (EMGS) under the MOHE with the responsibility of coordinating and streamlining branding and marketing promotional campaigns among various relevant ministries such Ministry of Foreign Affairs and scholarship-providing agencies like Majlis Amanah Rakyat (MARA) and the Public Service Department (PSD) as well as private HEI associations.
- Adopt and enhance effective marketing campaign methods using technology and traditional methods such as agent management for promotional efforts.

Key Takeaway 9 Target and Profile International Students Strategically

International student numbers are plateauing. At the same time, there is growing worldwide competition for students from MENA, ASEAN, sub-Saharan Africa, and the Americas. It is crucial that Malaysia focuses its efforts on targeting international students using a data-driven and evidence-based strategy, implemented in a coordinated and cohesive manner.

Recommendations:

- Leverage on Malaysia's natural strengths as a (i) provider of economic and quality education; (ii) gateway to ASEAN countries; and (iii) moderate-muslim country with a diverse population.
- Coordinate strategic and targeted approaches for attracting international students, including promoting branch campuses and transnational education (TNE).
- Develop a culture of data sharing for informed policy-making on the internationalisation of higher education.

Key Takeaway 10 Promote Lifelong Learning Models in Tandem with 4IR / Digitalisation

International students are motivated to take up programmes that enhance their future job prospects and career trajectories. Although lifelong learning forms the third pillar of education, it is not being utilised effectively to attract international students. We must ensure that our offerings are in tandem with the 4th Industrial Revolution (4IR) and provide the latest in-demand courses to attract internationally mobile students.

Recommendations:

- Explore new learning models to attract lifelong-learning international students.

Key Takeaway 11 Promote Effective Internationalisation of R&D

Despite its achievements, Malaysia's public R&D system does not attract substantial funding from external sources. Our collaborative efforts with ASEAN are weak and we are not tapping into the expertise of global talents in our HEIs.

Recommendations:

- Strengthen management of R&D in HEIs to promote effective internationalisation by increasing external grants from abroad and by empowering international talents in our HEIs.
- Increase and strengthen R&D initiatives between Malaysian HEIs and the rest of ASEAN and the Asia Pacific.

Key Takeaway 12 Introduce an Internationalisation Scorecard

From our research, no country as yet has an effective system for measuring their performance against established internationalisation targets and strategies. The 2011 Internationalisation Policy attempted to create a scorecard across various indicators of internationalisation. While some elements of this endeavour are still relevant, it requires updating to be in alignment with various developments and priorities.

Recommendations:

- Entrust MOHE with the development of an Internationalisation Scorecard with adaptations from the 2011 Internationalisation Policy.

Expected Outcomes

The effective implementation of the twelve recommendations in this study is expected to yield the following outcomes:

✓	Doubling of research funding of HEIs from external sources including industry players by 2030 through the provision of better support services.
✓	Increased competency and global connectivity of faculty and students through strategic research collaborations and networks.
✓	Improved monitoring and evaluation of internationalisation efforts by HEIs through the introduction of the scorecard and the establishment of the inter-ministerial committee for internationalisation.
✓	Enhanced competence of HEI academic and support staff pertaining to intercultural competencies, English proficiency, and R&D management.
✓	Provision of forward-looking, efficient, and responsive visa and immigration services to support HEI internationalisation aspirations.
✓	Enhanced governance framework to enable HEIs to operate more flexibly and responsively to attract international faculty and students, including the introduction of new learning models and competitive research funding for all HEIs.
✓	Clear global positioning and brand recognition of 'Education Malaysia' through concerted, coordinated, innovative, and imaginative branding and marketing.
✓	Increased profile of TVET through phased internationalisation of sector.
✓	Acknowledgement of Malaysia as a safe and welcoming destination for international students through the adoption of a comprehensive Code of Practice for Pastoral Care by all HEIs.

Conclusion

The above outcomes cannot happen without the serious and collective efforts of all stakeholders – namely the Government, industry actors, NGOs, and the wider community. We are confident that the recommendations of this study will help the MOHE mobilise the internationalisation of HEIs for the benefit of all sectors in the country, in line with our aspirations on shared prosperity.

Epilogue

This report was prepared prior to the global impact of the COVID-19 pandemic and Malaysia's subsequent Movement Control Order on the higher education sector. Accordingly, it has not addressed the impacts of the pandemic on the various dimensions of internationalisation of higher education as examined in this report. However, this section briefly describes the complex challenges posed by COVID-19 on the internationalisation of higher education including attitudinal shifts among students, concerns over affordability and health, travel bans and restrictions on higher education as well as online learning challenges. It posits a number of strategic challenges for Malaysia in the new normal of internationalisation as well as underscores the need for the country to fast-track the adoption of digitalisation and innovative models of internationalisation that offer creative and sustainable solutions for a post-pandemic world. It is stressed that the recommendations presented herein are not made redundant by COVID-19 as the problems examined in the report were already present even before the onset of the pandemic. On the contrary, these recommendations assume urgency given the debilitating impact of the pandemic on the finances of governments and HEIs.

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PART 1
BACKGROUND AND LITERATURE REVIEW

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Introduction

1.1 The International Institute of Public Policy and Management (INPUMA) – hereafter referred to as the Study Team – was appointed by then Ministry of Education Malaysia on 6 September 2019 to undertake a study on the Internationalisation of Higher Education in Malaysia based on the Terms of Reference (ToRs) detailed in **Appendix A**: Terms of Reference (ToRs) of the Study. Considering the separation of the Ministry of Education (MOE) and the Ministry of Higher Education (MOHE) in March 2020, this study will present recommendations for MOHE. The Members of the Study Team are listed in **Appendix B**: Composition of Study Team.

1.2 The Inception Report was submitted and presented to MOE on 19 September 2019. The Study Team presented their preliminary findings and Key Takeaways at two briefing sessions with Education Malaysia Office (*Bahagian Education Malaysia*) on 4 October and 18 December 2019 respectively. A Progress Report was submitted to the Policy Planning and Research Division (*Bahagian Perancangan dan Penyelidikan Dasar*), MOE on 11 November 2019. The Interim Report was presented to MOE on 6 January 2020. And an early draft of the slideshow presentation for the Final Report was presented to Dr. Guan Eng Chan, Deputy Undersecretary, Policy Planning and Research Division, MOE, on 14 February 2020. The Draft of the Final Report was presented to the Steering Committee, chaired by the Secretary General of MOE, Dato' Ghazali Abbas on 6 March 2020. Minor amendments were made and sent to the Policy Planning and Research Division on 29 April 2020.

1.3 This Final Report describes the key tasks undertaken by the Consultant, including policy assessments and survey analyses, international comparisons, policy recommendations, and action plan development. The Report is divided into six parts:

(a) **Part 1** describes the background of the study including a brief literature review that contextualises this study;

(b) **Part 2** outlines the contextual framework and methodology used in this study;

(c) **Part 3** provides an overview of the current status and challenges faced by Malaysia in the six identified aspects of internationalisation: (i) student mobility, (ii) staff mobility, (iii) academic programmes, (iv) research and development, (v) governance and autonomy as well as (vi) social integration and community engagement;

(d) **Part 4** highlights lessons for Malaysia drawing from global comparisons as well as additional issues arising from this study;

(e) **Part 5** identifies the key takeaways and policy recommendations; and

(f) **Part 6** details recommended action plans.

Context of Study

1.4 Over the past two decades, Malaysia's higher education system has undergone several transformations that have propelled it to become one of the world's leading education systems. Its success can be attributed to sustained government interventions and policies such as the 2011 Internationalisation Policy for Higher Education Malaysia and the Malaysia Education Blueprint 2015 – 2025 (Higher Education). Given the changing economic, technological, and political environments, Malaysia must develop its higher education system to remain relevant and cost-effective while improving the quality of delivery. The Government recognises that these changes require new innovative responses and that our previous internationalisation approaches need to be adjusted. Accordingly, the Government has commissioned this study with the objective – among others – to ensure that our HEIs continue to attract and retain global talents (students and faculty) and generate world-class innovations in a changing global environment. Without strong and concerted actions, Malaysia will be significantly delayed in reaching its true potential for internationalisation.

Problem Statement

1.5 This study aims to critically analyse and evaluate the efficacy of the internationalisation policies, strategies, and programmes employed by HEIs since the launch of the Malaysia Education Blueprint 2015 – 2025 (Higher Education) and the 2011 Internationalisation Policy for Higher Education Malaysia. Both policy documents have clear objectives, strategies, and tracking measures. However, there has yet to be a comprehensive assessment of success. This study will assess the effectiveness of existing initiatives and recommend new approaches in light of growing competition from HEIs at regional and global levels. Furthermore, given global changes in the political, economic, and socio-demographic landscape since the first internationalisation policy was announced in 2011, this study will also recommend the future direction of internationalisation of higher education in Malaysia.

COVID-19 Impact

1.6 Given the study's timing, the research team was unable to anticipate the impact of COVID-19 on internationalisation in higher education as it is beyond the scope of this report. However, a section on COVID -19's impact on higher education will be included in this study's epilogue.

Literature Review

1.7 Internationalisation of higher education refers to a concept of sharing and integrating knowledge, cultures, and values or specifically a process that integrates "an international/ intercultural dimension into the teaching, research and service functions of the institution".[1,2,3] Internationalisation is growing in strategic significance to the government, fueled by the liberation of global education markets and contributing to the industry's overall growth.[4] The doyen of HE Internationalisation, Jane Knight, has promoted the concept of 'knowledge diplomacy', describing 'the role of international higher education and research in building and strengthening relations between and among countries' as a way forward in the changing landscape of global education.[5]

1.8 Internationalisation in higher education is comprised of two components: internationalisation at home and internationalisation of cross-border education.[6,7]

(a) **Internationalisation at home** consists of intercultural as well as international aspects of the teaching or learning process, curriculum and research that is integrated into an array of activities in order for students to develop intercultural skills and international understanding on their campuses without cross-border movements of students.[8]

(b) **Internationalisation of cross-border education** refers instead to movement or mobility of students, institutions, teachers, and programmes across countries such as study abroad programmes.[9] The flow of students is mainly from developing countries to developed countries, and much more rarely vice versa.[10]

1.9 The 2011 Internationalisation Policy for Higher Education Malaysia document covered six policy areas; Student Mobility; Staff Mobility; Academic Programmes; Research and Development; Governance and Autonomy as well as Social Integration and Community Engagement.

1.10 The literature review is structured accordingly to address developments in these policy areas, allowing for some overlaps.

Student Mobility

1.11 Intercultural skills or competence is key to developing academics and students into 'global citizens' without prejudiced attitudes and behaviours towards those who are different. Without intercultural competence, local and international academics and students would not interact with one another in meaningful ways. The lack of such competence is conterproductive as these interactions maximise a student's university experience and prepare them for a global workforce.[11] To attract and retain high-potential international students, the academic environment must also be free of discrimination and bias. Universities are also increasingly compelled to produce well-rounded globally competitive students as can been seen in its international education and internationalisation efforts through student exchanges, short term mobility activities, and study abroad programmes.[12,13]

1.12 In the US and Europe, students seldom pursue their studies abroad but instead participate in exchange programmes. Short-term student mobility has been the trend in most developed countries compared to students from developing countries pursuing their studies abroad full-time.

Staff Mobility

1.13 Staff mobility is mapped against two axes: i) incoming or outgoing staff mobility and ii) short-term or long-term staff mobility. On the incoming vs. outgoing spectrum, staff mobility can be capacity building or revenue generating.[14] Most countries are either net exporters of academic staff on staff mobility programmes, or net importers of academic staff on such programmes, with more developed countries exporting their academics to less developed countries.[15] Malaysia has been identified as an intermediate nation in this spectrum, where both incoming and outgoing mobility is equally important.[16]

1.14 Explicit policies on staff mobility is uncommon in countries. Although several European countries have national policy goals that promote staff mobility, less than half of them actively measure the outcome of these goals. Instead of having clear, quantitative targets, it is usually implicit in nature, using broad and vague terms like 'encouraged'. Quantifying the target however is important to ensure that policy goals are met. Instead of setting an absolute number for staff mobility, the target should be a percentage of total staff.[17]

Academic Programmes

1.15 In terms of academic programme design and execution, it is important to have international and intercultural dimensions embedded into the curriculum, teaching, and learning as well as support services for any given study programme.[18] Internationalising content and approaches can also promote inclusive teaching that accommodates the different learning needs of students from diverse regions. This is one aspect of internationalisation that is seldom given adequate attention to when guidelines are drawn to attract and retain global students.

1.16 Although it can be difficult to measure internationalisation within an academic programme (it is often measured in very general terms), course content and learning outcomes can be developed according to curriculum theory.[19] Using student and staff mobility as the sole means of evaluating internationalisation success is a narrow way of looking at the matter. The curriculum should also be considered, so that internationalisation becomes a holistic educational goal and not merely a political and economic objective.[20] Furthermore, it is important that the goals are explicitly formulated and not implicitly assumed.[21]

1.17 Countries have adopted two approaches to internationalisation, either independent or cooperative. Some countries like Japan and Taiwan focus on initiatives that can be executed nationally to drive internationalisation, while other countries focus on engaging with foreign providers and immersing their HEIs in the global education system.[22] The strategies for both approaches are seen in **Table 1.1**.

1.18 Malaysia's adoption of the cooperative approach can be seen through the establishment of International Branch Campuses (IBCs) of foreign universities. One example would be EduCity at Iskandar Malaysia in Johor, which is host to several IBCs. Other IBCs include Newcastle University of Medicine, University of Southampton Malaysia Campus, Curtin University Sarawak, Monash University Malaysia, Nottingham University Malaysia, Swinburne University of Technology Sarawak, Netherlands Maritime Institute of Technology, and Raffles University.[25]

1.19 The cooperative approach can also include the development of education clusters, a complex of HEIs within a specified geographical area. Education clusters can take shape through national cooperation or broader participation with international cooperation supported by efficient cluster policies. The positive impacts of a cluster may be in terms of increased research and development as well as employment through academia-industry linkages. The study briefly explores if these positive outcomes can be seen in educational hubs around Malaysia.

Table 1.1 Strategies for Internationalisation

Independent Approach[23]	Cooperative Approach[24]
• Government scholarships and even health insurance for students • Accommodation facilities and centres where international students can meet • Diversifying programme offerings (especially for postgraduate and short courses), increasing the number of programme offerings in English and providing options to learn the local language and culture • Enhancing internal systems for receiving international students and promoting strategic international cooperation • Establishing two separate international student offices at each university, one for outgoing students and another for incoming students • Relaxed entry requirements for international students • Providing local internship opportunities for international students and options to remain in the country upon graduation	• Leverage international networks to attract international students • Forming alliances with international universities through dual degrees, joint research, and international branch campuses (IBCs) • Development of innovative models such as the education cluster model for IBCs

Research and Development

1.20 HEIs are vital actors in a nation's innovation ecosystem. Their contributions – through knowledge generation, application, and diffusion – to economic competitiveness and social welfare are now widely recognised. Presently, about 81% of the nation's STI (Science, Technology and Innovation) researchers are found in our HEIs although they account for about 43% of the total expenditure on R&D.[26] Over the past three decades, the Government has introduced several funding schemes and initiatives designed to enhance the research capabilities of our HEIs as well as to foster linkages between academia, government, industry, and the community including international bodies (the quadruple helix model).

1.21 The outcome of these efforts has been mixed. Although there is an increasing trend of researchers co-publishing with their peers from abroad, the amount of international research funding to HEIs continue to stagnate at less than 7%. In an increasingly knowledge-intensive economy, universities cannot afford to operate in isolation. Knowledge-flow channels within and between countries are vital in ensuring a dynamic and vibrant innovation system. Such flows, however, do not form organically and must be made to happen through aggressive strategies that promote HEI collaboration with the community, industry and international partners.

Governance and Autonomy

1.22 There are several education conventions and declarations at national, regional, and global levels. For instance, the Declaration of the Bologna Process in the increase of international competitiveness of the European higher education system, emphasising on the need to "ensure that the European higher education system acquires a world-wide degree of attraction equal to our extraordinary cultural and scientific traditions".[27] While Malaysia voluntarily works on a regional basis, intergovernmental coalitions like ASEAN and even ASEAN+10 should draw inspiration from the EU Cooperation by streamlining its educational and promotional activities.

1.23 Furthermore, since the democratisation of higher education in the 1990s, HEIs were no longer regarded solely as public goods. Universities would instead become commodities and "actors in a competitive market".[28] This change meant that certain universities – primarily private institutions, including those in New Zealand, the UK, and the US – regarded international students as a critical source of revenue, focusing on undergraduates and countries that were able to afford to send students abroad. Universities worldwide have since strategically focused internationalisation efforts on targeted markets. In New Zealand, internationalisation efforts focused on "the recruitment of fee-paying international students" in Asia in order to "generate revenue and overcome domestic funding".[29] While the New Zealand International Education Strategy 2018 – 2030 calls for a broader vision of internationalisation, there is a possibility of continued focus on Asia due to underfunding in universities.[30] Governments may set blueprints that call for more inclusivity amongst global students, but financial considerations may constrain the achievement of these goals.

Social Integration and Community Engagement

1.24 A broad understanding of international students should go beyond individuals who come to Malaysia for the express purpose of education. Some immigrants have moved to Malaysia for various reasons and intend to continue their studies here. These include the children of expatriates and retirees who have moved to Malaysia under the MM2H visa. This group are potential international students, who have thus far been neglected by HEIs.[31]

1.25 Education as a whole, furthermore, needs to involve the development of intercultural capabilities.[32] Studies on the intercultural experience of international students in Malaysian universities, for example, show that local students fail to interact with their international peers, mainly because of poor language proficiency.[33,34,35,36,37,38] Therefore, intercultural knowledge – including language proficiencies – must be leveraged since this will, in turn, develop a sense of global consciousness and international citizenship amongst students and staff.[39]

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PART 2

CONCEPTUAL FRAMEWORK, OBJECTIVES OF STUDY AND METHODOLOGY

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Conceptual Framework

2.1 Internationalisation in higher education includes:[1,2,3]

(a) **Internationalisation at home** – refers to the integration of intercultural and international elements into teaching and learning; curriculum development as well as research on campus to enhance a student's multicultural skills and global outlooks.[4,5]

(b) **Internationalisation of cross-border education** – comprises of all types of educational activities across borders, including mobility of students, teachers, scholars, programmes, courses, curriculum, and projects.[6]

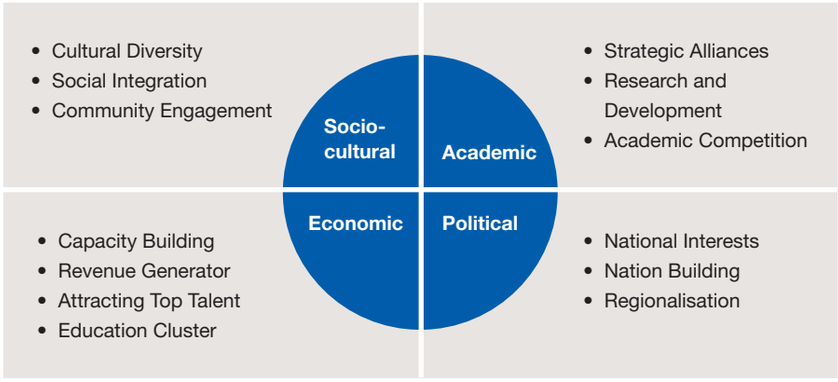
2.2 In Malaysia, the Government introduced the 2011 Internationalisation Policy for Higher Education Malaysia to realise its ambition of becoming a leading international education hub. The policy drew inspiration from Knight's idea of 'rationales' acting as drivers for internationalisation.[7] Rationales comprise of four groups: socio-cultural, political, academic and economical, with specific issues and characteristics that define each group.[8,9]

Table 2.1 Definition of Key Terminology in Internationalisation

Terminology	Definition
Internationalisation	Internationalisation at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education.[10]
International students	Students physically crossing borders between two countries for the specific purposes of studying and the destination country is different from his or her country of origin.[11]
Staff mobility	• *Local staff on outbound activities at HEIs abroad* – includes short and long-term programmes such as conferences, workshops, forums, visiting fellowships, visiting scholars, and scholars on sabbatical, among others. • *International staff (including faculty) on inbound activities* – includes, among others, international academia, marketing experts, and management positions. Again, these activities range in their time frame from a few days to several years.

2.3 **Figure 2.1** depicts the conceptual framework of the four rationales used in the 2011 Internationalisation Policy. This study further adopts these rationales.

Figure 2.1 Rationales for the Internationalisation of Higher Education



Key Objectives of the Study

2.4 This study aims to analyse and evaluate the efficacy of the 2011 Internationalisation Policy and the various strategies and initiatives by HEIs to realise the Malaysia Education Blueprint 2015 – 2025 (Higher Education). The study will also make recommendations for the future direction of internationalisation in Malaysian higher education. The key objectives of the study are to:

(a) Identify issues, challenges, and institutional gaps in the internationalisation strategies used by HEIs through communication with multiple stakeholders;

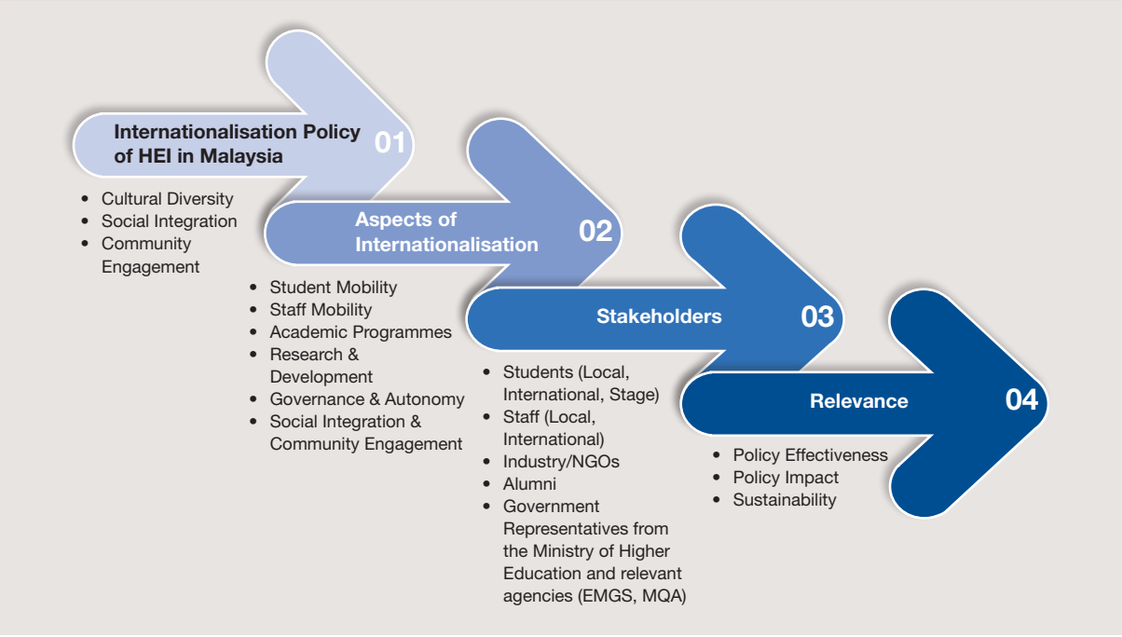
(b) Review existing internationalisation strategies and implemented initiatives in HEIs in the six identified aspects of internationalisation;[12]

(c) Undertake benchmarking against leading international institutions/countries to ensure that current internationalisation policies are relevant, valid, efficient, and effective; and

(d) Recommend initiatives and actions based on the findings and conclusions of this study.

2.5 The study addresses six main policy areas that the 2011 Internationalisation Policy has identified, namely, student mobility, staff mobility, academic programmes, research and development, governance and autonomy, as well as social integration and community engagement. The focus of this study goes beyond increasing international student enrolment numbers. Instead, this study recommends approaches to developing a robust higher education system that can produce global graduates with global skills. **Figure 2.2** depicts the approach adopted for this study.

Figure 2.2 Approach Adopted for the Study



Methodology and Design

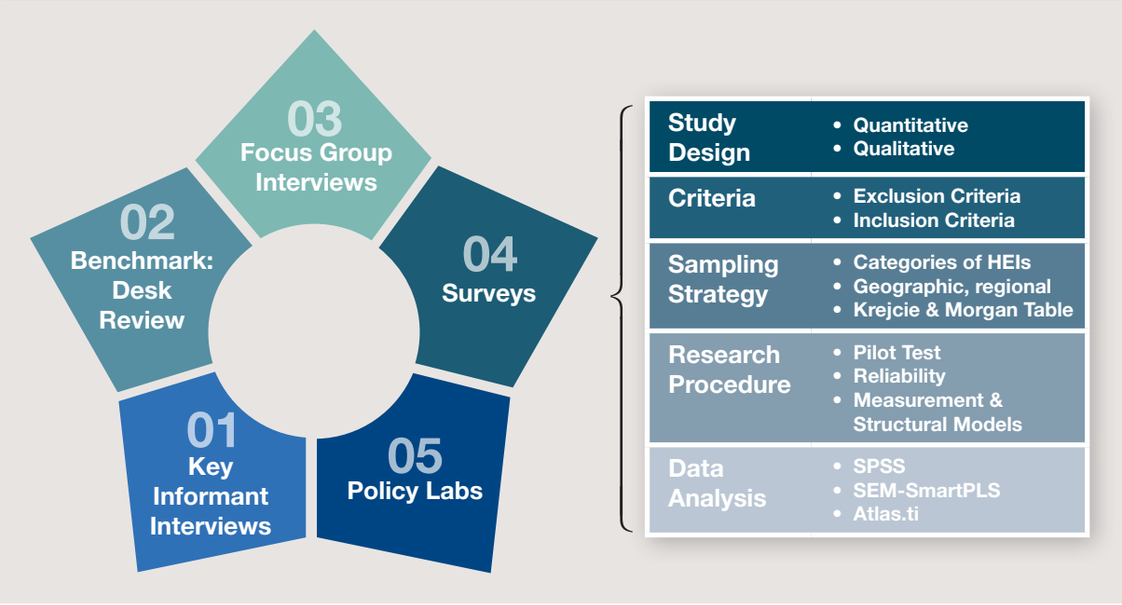
Study Design

2.6 The study adopted a mixed-method approach that utilised both quantitative and qualitative methods. Data triangulation of the primary sources (listed below) was used to gain insights on our research objectives as well as to validate findings (refer to **Figure 2.3**). The research activities undertaken include:

(a) **Survey questionnaires** (online and manual) to HEI community (including faculty, students, and alumni);
(b) **Policy labs** with HEI lecturers, students, and key HEI officials in charge of internationalisation as well as a range of other stakeholders;
(c) **Semi-structured interviews** with key staff in HEIs and relevant agencies;
(d) **A mini focus group discussion** (FGD) conducted with Malaysians who studied abroad; and
(e) **Focus groups** held to further understand the viewpoints of specific profiles of students.

2.7 The study used a stratified random sampling method (dividing a population into subgroups) to represent local and international students, domestic and international staff as well as alumni.

Figure 2.3 The Triangulation of Data Sources in this Study



2.8 Several criteria also determined the selection of institutions. Refer to Appendix C1: Public HEIs Invited to Participate in the Study; **Appendix C2**: Private HEIs Invited to Participate in the Study as well as **Appendix D**: The 61 HEIs Who Participated in the Study. The criteria for selection include:

(a) SETARA rankings;
(b) Mode of delivery (i.e. conventional and distance learning);
(c) Regional status (e.g. international branch campuses) and geographic representation (i.e. northern, southern, central, east coast, East Malaysia); and
(d) HEI ownership (i.e. private or public) and HEI type (i.e. research, non-research universities and colleges).

2.9 Survey respondents also had to satisfy the following inclusion and exclusion criteria:

Table 2.2 Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
HEIs: • 10% of total student population are international students • 5% of total staff population are international employees Students: • Active student status • From foundation, diploma, undergraduate and postgraduate studies	HEIs: • Total number of students < 100

Sampling Procedure

2.10. The sampling strategy (see **Figures 2.4** and **Figure 2.5**) used (i) categories of HEIs as defined by the Ministry of Higher Education (2019) as well as (ii) geographical regions delineated by the Ministry of Higher Education (2019).

Figure 2.4 Sampling Criteria for Public HEIs

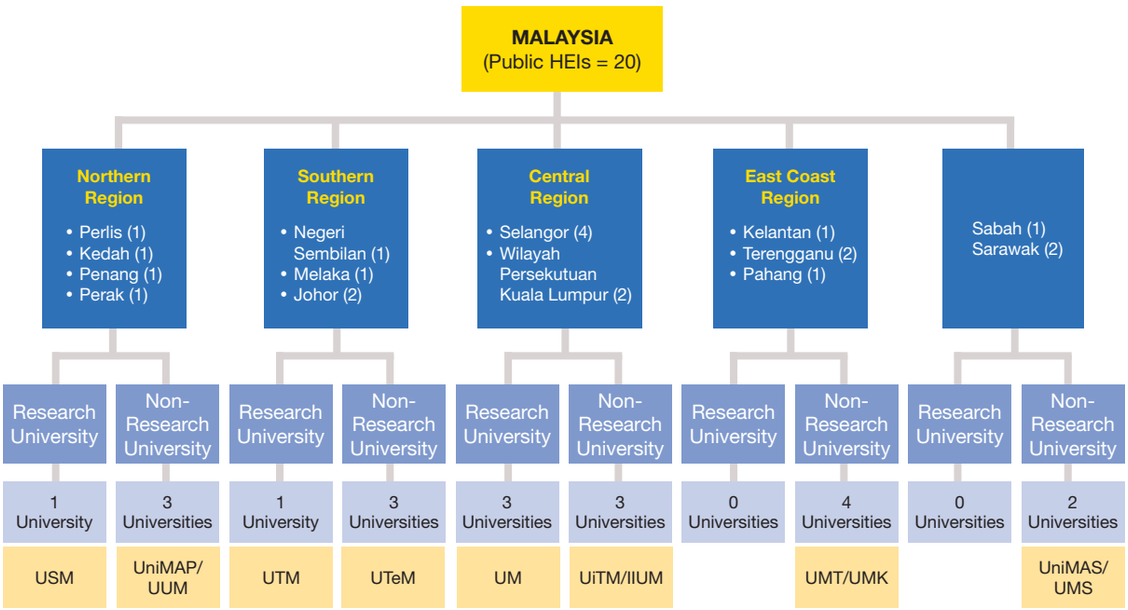
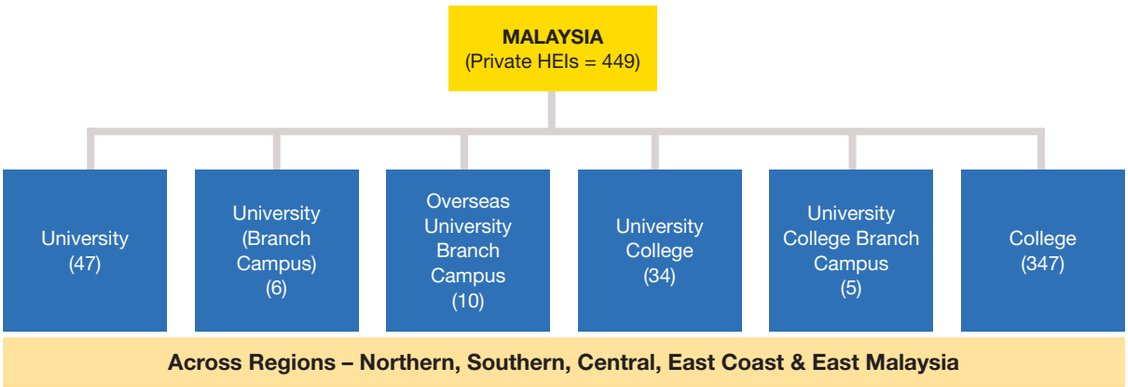


Figure 2.5 Sampling Criteria for Private HEIs



Sources:
List of Private HEIs: http://www2.mqa.gov.my/mqr/akrbyipts.cfm?StartRow=58
https://drive.google.com/drive/folders/1Jfr5dvczs58tEP3SsZck-nmC59ON-qnZ
Private HEIs' statistics: https://drive.google.com/drive/folders/18w0PWQnD7DV2W1Dspio3zHm5Up5-AC3l

2.11 The researchers used the Krejcie and Morgan table[13] to determine the appropriate sample size for each stakeholder group (**Appendix E**: Determining Sample Size from a Given Population) and had a questionnaire designed to capture the following information:

(a) Basic information about the respondent;
(b) Student mobility in the institution;
(c) Staff mobility in the institution;
(d) Academic programmes offered by the institution;
(e) Research and development activities in the institution;
(f) Governance and autonomy structures of the institution;
(g) The level of social integration and community engagement; and
(h) Respondent attitudes and satisfaction levels torwards policies and strategies put in place.

Note: Respondent confidentiality was protected throughout the study (see **Appendix F**: Information Sheet Given to Participants Prior to Survey).

Survey Design and Sampling Strategy

2.12 The team designed separate questionnaires for five (5) stakeholder groups: (i) local staff, (ii) local students, (iii) international staff, (iv) international students as well as (v) alumni and collected a total of **2,438 responses** (see **Table 2.3** and **Table 2.4** for detailed breakdown).

Table 2.3 Total Responses Collected as of 15 January 2020

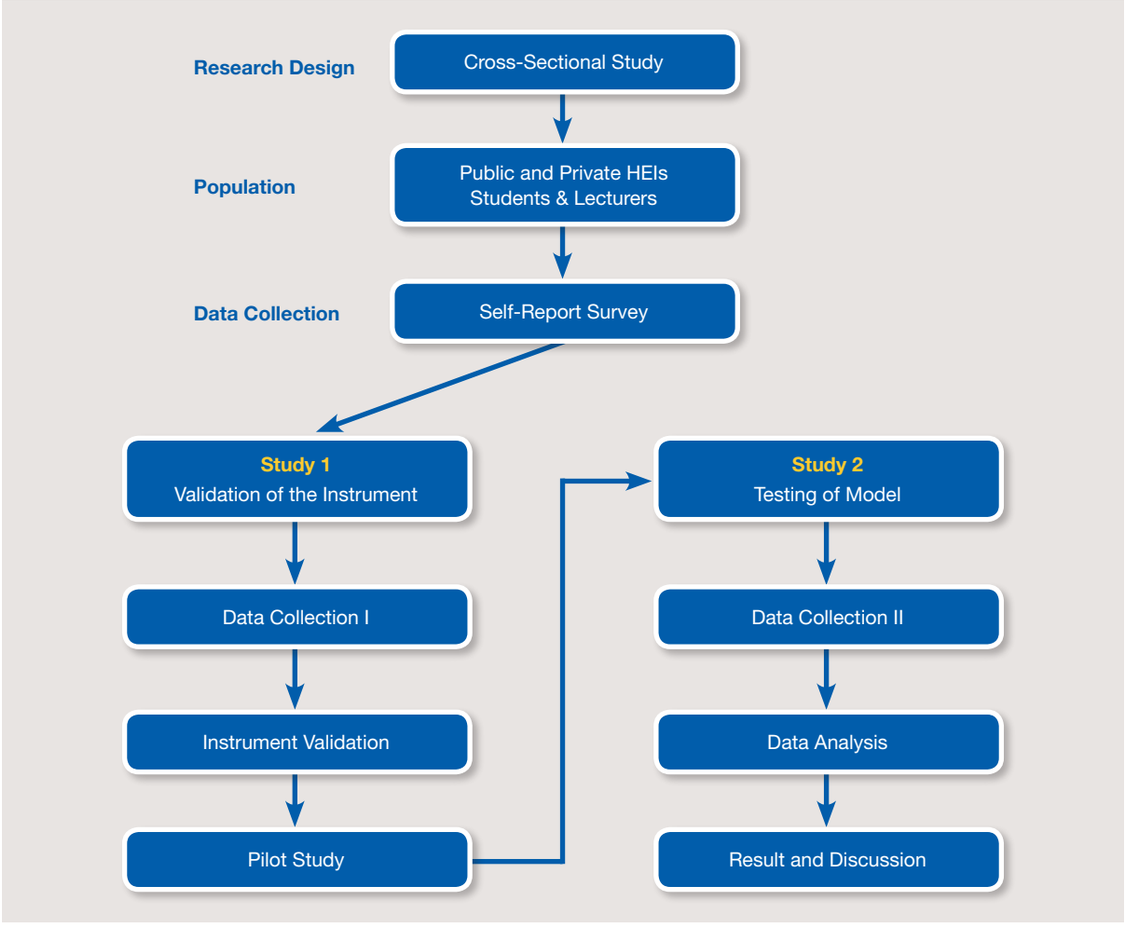
Questionnaire	Total
Local Staff	358
International Staff	33
International Students	738
Local Students	1,240
Alumni	69
Total	**2,438**

Table 2.4 Countries of Origin of International Students who Participated in the Survey

Country of Origin	Number of International Students
Indonesia	123
Nigeria	104
China	56
Pakistan	53
Yemen	52
Bangladesh	46
Egypt	27
India	23
Iraq	17
Afghanistan	16
South Korea	15
Sri Lanka	14
Palestine, Jordan, Somalia, Iran	11 each
Maldives, Japan	10 each
Tanzania	9
Philippines, Sudan	8 each
Ghana	7
United Kingdom	6 each
Libya, Canada, Syria, Brunei, Zambia, Vietnam	5 each
Saudi Arabia, Singapore, Kenya, Kazakhstan, France	4 each
USA, Ethiopia, Taiwan, Algeria, Oman	3 each
Thailand, Myanmar, Seychelles, Bahrain, Denmark, Albania, Uzbekistan, Senegal	2 each
Bhutan, Mauritania, South Africa, Kashmir, Sweden, Kyrgyzstan, Djibouti, Belgium, Swaziland	1 each
Total	**738**

2.13 Each questionnaire was pilot tested to ensure its reliability with translations in Bahasa Malaysia for local respondents (8 surveys in total). Following the pilot test, the research team made amendments to the survey instrument by removing items with a factor loading of less than 0.60.[14] For ease of use, each cluster included 10 – 12 items with one open-ended question (see **Figure 2.6** for the research process and procedure).

Figure 2.6 The Research Process and Procedures



2.14 The questionnaires were delivered through the internet and mobile devices through QR codes and Bit.Do links. (see **Figure 2.7**).

2.15 In order to reach the target number of respondents, student responses were recruited via social media channels (Facebook) as well as HEI student unions through personal contacts using the snowball sampling method. Research associates and enumerators also collected face-to-face responses in HEIs (see **Figures 2.8**, **Figure 2.9** and **Figure 2.10**). Participants received a RM10 book voucher, distributed through the student affairs office, student unions, and enumerators.

2.16 The study and survey were featured in the media via an article published in *The Star* newspaper on 20 October, 2019 (see **Figure 2.11**). It included an interview featuring an Afghan alumnus of a Malaysian HEI.

Figure 2.7 QR Codes for Ease of Online Access to the Links

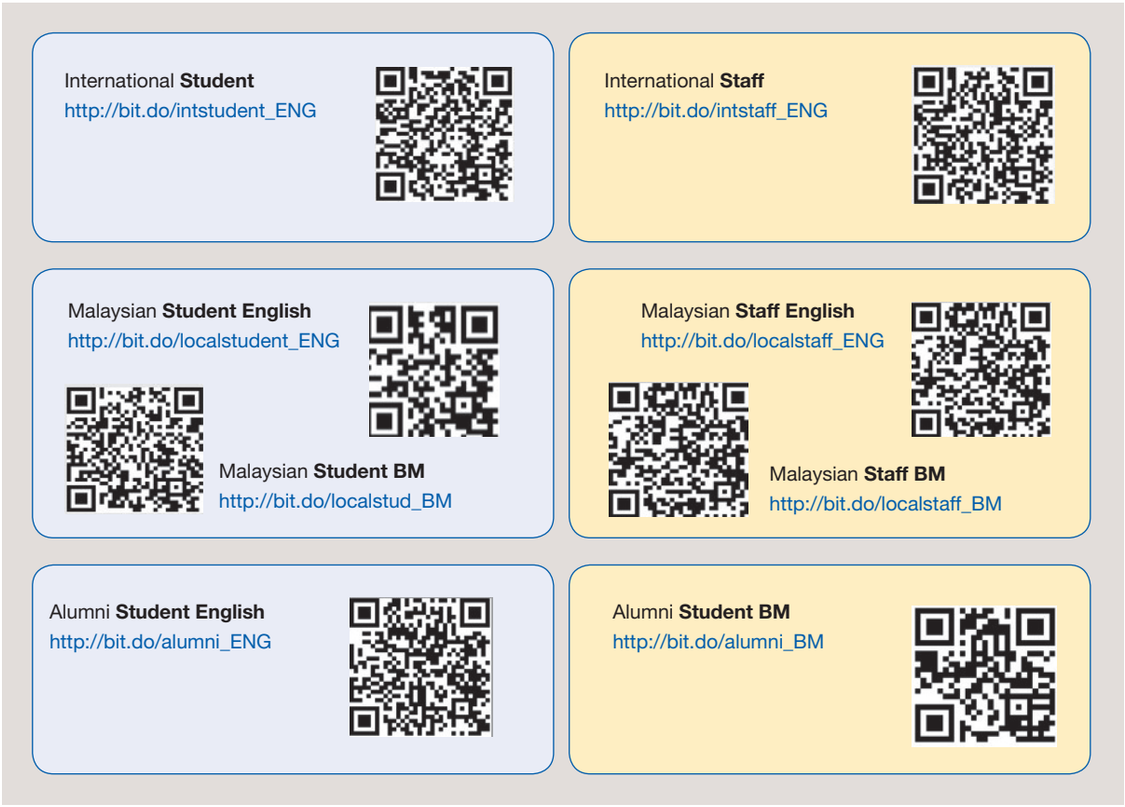


Figure 2.8 Facebook Post – Recruitment of Enumerators

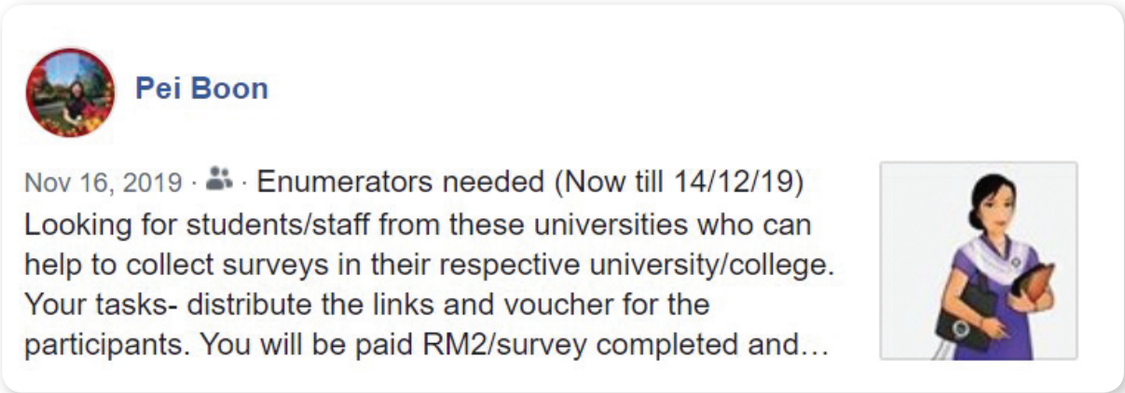
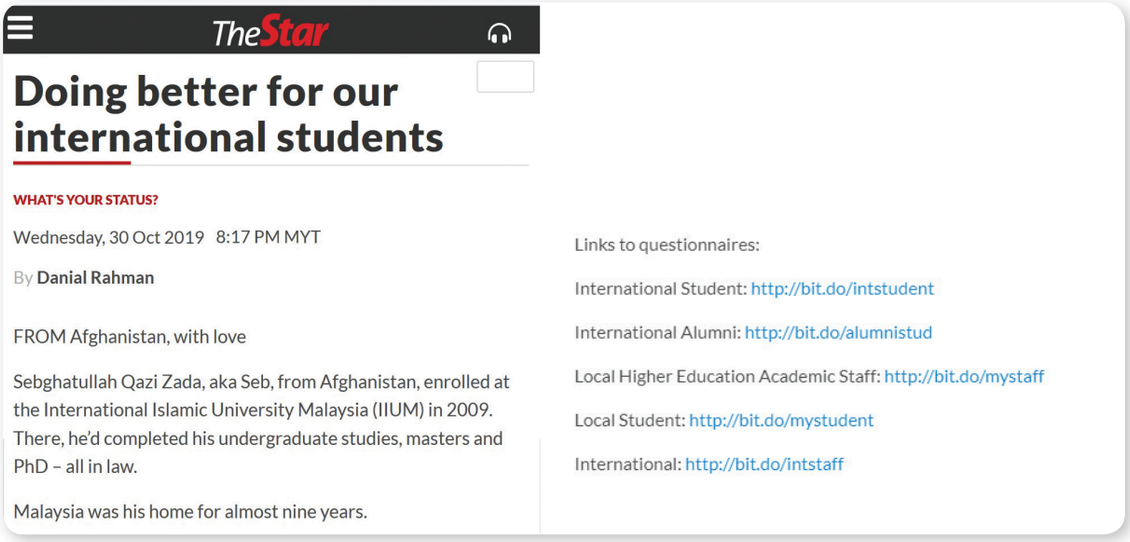


Figure 2.9 Facebook Post – Recruitment of Participants

Figure 2.10 Facebook Post – Recruitment of Participants with URLs

Figure 2.11 Article in *The Star* Newspaper Interviewing a Student and Publicising the Survey



TheStar

Doing better for our international students

WHAT'S YOUR STATUS?

Wednesday, 30 Oct 2019 8:17 PM MYT

By **Danial Rahman**

FROM Afghanistan, with love

Sebghatullah Qazi Zada, aka Seb, from Afghanistan, enrolled at the International Islamic University Malaysia (IIUM) in 2009. There, he'd completed his undergraduate studies, masters and PhD – all in law.

Malaysia was his home for almost nine years.

Links to questionnaires:

International Student: http://bit.do/intstudent

International Alumni: http://bit.do/alumnistud

Local Higher Education Academic Staff: http://bit.do/mystaff

Local Student: http://bit.do/mystudent

International: http://bit.do/intstaff

Data Analysis

2.17 The research team used SPSS Version 25 and SmartPLS Version 3 to analyse the data using a Partial Least Squares (PLS) model.[15] The first test was on the measurement model (validity and reliability of the measures), followed by an examination of the structural model (to test the hypothesised relationship).[16,17,18] Lastly, to test the significance of the path coefficients and the loadings, a bootstrapping method (resample of 500) was used.[19] Qualitative data (e.g. open-ended questions in the surveys) analysed using Atlas.ti. For the complete technical report on the Structural Modelling of each stakeholder, refer to **Appendix G**: Structural Modelling.

2.18 The mean scores of each of the sections were regrouped into bands, shown in **Table 2.5**.

Table 2.5 Mean Score Bands/Levels

Mean Score Range	Level
1.00 – 2.33	Low
2.34 – 3.67	Moderate
3.68 – 5.00	High

2.19. This study employs newer instruments to measure different aspects of internationalisation policies. As a result, the cut-off point for minimum reliability for these assessments is 0.6. As shown in **Table 2.6** all assessments cleared this threshold and can thus be considered reliable.

Table 2.6 Reliability of the Survey's Six Clusters of Internationalisation Policy

Clusters	Reliability	
	International Students	Local Students
Student Mobility	0.837	0.683
Staff Mobility	0.720	0.767
Academic Programmes	0.684	0.772
Research and Development	0.745	0.762
Governance and Autonomy	0.735	0.772
Social Integration and Community Engagement	0.808	0.868
	International Staff	Local Staff
Student Mobility	0.605	0.804
Staff Mobility	0.811	0.866
Academic Programmes	0.788	0.848
Research and Development	0.816	0.889
Governance and Autonomy	0.655	0.803
Social Integration and Community Engagement	0.673	0.874
	Alumni	
Student Mobility	0.772	
Staff Mobility	0.687	
Academic Programmes	0.628	
Research and Development	0.552	
Governance and Autonomy	0.733	
Social Integration and Community Engagement	0.733	

Policy Labs

Table 2.7 Details of Policy Labs Conducted

Venue	Date	No. of Participants	Agencies / HEIs
Universiti Malaya	14 November 2019	22	UM: International students (from Bangladesh, Pakistan, China, and Indonesia) and local students
Private Universities @ Sunway University	15 November 2019	17	Sunway University, APU, HELP, EMGS, MQA, IUMW, MMU, UniRazak, Kolej Alfa, Pemandu Associates, i-Graduate, British Council, AeU, and UCSI
South @ EduCity, Johor	18 November 2019	12	UTM, Iskandar Malaysia, EduCity, Sportswork, i-Graduate, NMIT, MDIS, NUMED, Raffles University, and UoRM
North @ USM	22 November 2019	15	USM, UUM, PSDC, TalentCorp, UTP, and Welnut Sdn Bhd.
Public Universities @ UM	10 December 2019	10	UPM, UKM, UITM, and MOHE; International students (from Brunei, Indonesia, Palestine, Germany and Egypt)
East Malaysia @ Sarawak Swinburne University	17 December 2019	17	Swinburne University: Local students and international students from Mauritius, Pakistan, Indonesia, Ghana and UAE
Universiti Malaysia Sarawak	18 December 2019	20	Universiti Malaysia Sarawak (UniMAS): Local students and international students from Brunei and Nigeria
East Malaysia @ Sabah Universiti Malaysia Sabah	19 December 2019	17	Universiti Malaysia Sabah (UMS) Support staff, and international students (from China and Bangladesh); Persatuan Institut Pendidikan Tinggi Swasta Sabah

2.20 As part of its qualitative approach to the study the team also conducted eight policy labs with 130 participants from several HEIs with representation from the following groups:

(a) Local and international students;
(b) Local and international faculty;
(c) Ministry of Higher Education officials;
(d) Immigration officials;
(e) Other relevant government officials;
(f) Industry representatives;
(g) NGOs; and
(h) Alumni.

2.21 The policy lab sessions were structured as follows:

(a) Defining the problem statements;
(b) Identifying issue areas and conducting root cause analysis;
(c) Determining prioritised areas or areas of greater importance; and
(d) Gathering recommendations and potential solutions.

2.22 During the lab, participants also individually answered reflection questions. The questions varied from lab to lab, ranging from general reflections on the state of internationalisation in Malaysian HEIs to more specific themes, for example, a reflection on the education hub activities at the Southern Region Policy Lab in EduCity.

Interviews

2.23 The research team also interviewed identified key stakeholders mainly through an in-person, semi-structured interview format. The interviews included individuals who were unable to participate in the policy labs as well as those who had difficulties travelling long distances.

2.24 When in-person interviews were not possible, e-mails were sent out instead. This approach includes Research Star Professors as well as some stakeholders within the education clusters.

Mini Focus Group Discussion Survey

2.25 The team included a separate mini focus group discussion survey to incorporate the perspectives of Malaysians who have studied abroad. The researchers were particularly interested in their views on (i) internationalisation efforts by foreign HEIs and (ii) social integration of international students studying in Malaysia. The mini survey was disseminated online through personal networks, which included several returning Chevening and Fulbright Scholars. Using the snowball sampling method, respondents were encouraged to recommend the survey to those with similar profiles.

Focus Groups

2.26. The research team also held follow-up focus group discussions with respondent groups that had similar profiles to gain in-depth qualitative data. Interested participants discussed their perspectives on internationalisation in Malaysia as well as recommendations for improvement. One focus group included Malaysians who have studied abroad.

Limitations

2.27 Data was collected using online and face-to-face methods. In total, 2,438 respondents participated in the survey comprising of 358 local staff, 33 international staff, 738 international students, 1,240 local students, and 69 alumni. Due to the limited numbers of participants in the international staff and alumni categories, data may not be generalisable. However, the researchers compensated for this limitation through the policy labs it conducted with 130 HEI members. This method of triangulation allowed for a more in-depth understanding of the issues beyond the survey responses.

2.28 Additionally, certain parts of the questionnaires were made specific to each stakeholder group. Hence, caution should be exercised in drawing cross-comparisons of data across each group.

2.29 The focus group and policy lab respondents and interviewees were chosen through a snowball sampling method and expert recommendation. As participants were asked to recall their personal experiences with internationalisation, there may be memory biases that affect the reporting and conclusions in this study. To the best of their abilities, the researchers conducted critical analyses to minimise such biases through in-depth discussion and debate before making final decisions. Great care was taken based on the principle that the recommendations in this study had the potential of becoming national policy. Thus, any proposal made must come from a rigorous examination of both the qualitative and quantitative data.

2.30 In the Structural Equation Model (SEM), one of the square roots of the diagonals is less than the corresponding rows in discriminant validity. Hence, there is a high correlation between satisfaction levels of internationalisation experiences and the two constructs measured (R&D and Social Integration). However, the overall reliability score, factor loadings, Average Variance Extract (AVE), and Composite Reliability (CR) fulfilled the requirements set by Hair et al. (2014). For future studies, items under these two constructs can be further defined and distinguished.

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PART 3

ASSESSING THE ACHIEVEMENTS OF PREVIOUS POLICY DOCUMENTS AND THE SIX POLICY AREAS

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3.1 Assessing the Achievements of the Previous Higher Education Policy Documents

Introduction

3.1.1 In the Inception Report, the Study Team looked at whether the goals of the 2011 Internationalisation Policy and Malaysia Education Blueprint 2015 – 2025 (Higher Education) were achieved as part of our preliminary findings. This section in the Inception Report was summarised as "*While some Measurables and Goals of the 2011 Internationalisation Policy and HE Blueprint have been achieved, there is still work to be done*".

3.1.2 As the study progressed, we are now in a position to provide an updated assessment. For ease of reference, the original table of the preliminary findings will be used and the most-recent findings added. In light of the overlap and more detailed findings located elsewhere in this report, only pertinent findings will be highlighted here.

The 2011 Internationalisation Policy

3.1.3 At a **high level**, the 2011 Internationalisation Policy aimed to attract 200,000 international students (including school children) by 2020. Meanwhile, the HEI target for 2020 was 160,000. According to a press statement by MOE, there were 113,752 international students in Malaysian HEIs in 2015, and as of June 2019, the number stood at 170,000 (probably including pre-tertiary students) according to a report in *The Star*. Overall, we do not appear close to achieving the target of 200,000 international students (in schools and HEIs) by 2020.[1,2]

3.1.4 **Table 3.1** provides an updated summary on the status of the three expected outcomes of the 2011 Internationalisation Policy.

Malaysia Education Blueprint 2015 – 2025 (Higher Education)

3.1.5 The goal was to increase the number of international students from 108,000 (in 2014) to 250,000 by 2025, encompassing both higher education and school students.

3.1.6 **Table 3.2** describes the various initiatives which were planned under the Malaysia Education Blueprint 2015 – 2025 (Higher Education) (MEB (HE)) and our findings on their status.

Table 3.1 Updated Status on Expected Outcomes of the 2011 Internationalisation Policy

Expected Outcome	Preliminary Findings	Report Findings
Increased growth of international students and staff in the country	As stated above, there has been an increase, targets not met and the trajectory appears to be negative (lower intake) as opposed to positive.	Consistent with the Preliminary Findings, we have analysed the potential reasons for this and provided a more granular breakdown. Additionally, we have updated the forecast projections for attracting international students.
Increased inbound and outbound international mobility among students and staff in the country	At the time of formulating Interim Report, data/ information not readily available. However, on 12/09/2019, a mobility book was launched by MOE. To be looked into.	Generally, there appears to be an increase in the prioritisation of local student and staff international mobility. Data for this however has not been accessible due to lack of granular data sets at central level. As such, the Study Team is unable to quantify whether this area has witnessed overall growth across all HEIs. As of Q4 2018, there were 5,650 international students categorised under inbound international mobility.[3] However, the study is unable to locate data for periods prior to 2018. MOE Educational Statistics books only highlight international student mobility numbers as a separate category beginning 2018.
Increased positive experience of international students in the country	Interestingly, no in-depth study has been done in this area by MOHE. There are private organisations (e.g. iGraduate) who have, but it has not been done on a wider, national scale by MOHE.	The Study Team conducted a survey on internationalisation experience. The survey findings found that for overall satisfaction, international students were moderately satisfied (M = 3.48, SD = 0.60). By contrast, local students were more highly satisfied (M = 3.78, SD = O.76).The comparison with i-Barometer was not possible as different constructs were used in this current study.

Legend: M = Mean; SD = Standard deviation

Table 3.2 Updated Status on Initiatives Planned under the Malaysia Education Blueprint 2015 – 2025 (Higher Education)

Initiative	Preliminary Findings	Report Findings
Initiative A1: Consolidating inter-agency data intelligence	Unclear on the level of effectiveness. Based on preliminary research, obtaining data is not convenient and media reports suggest lack of transparency.	Data collection, management, and accessibility is fragmented. MOHE to consider formulating data management process, including data collection, sharing, and open data. International Education Association of Australia (IEAA) conducted a 7-month research project on best data practices in Australia. While data access and management in Australia is generally of high quality, there were three recommendations given to be considered by the Australian Government encompassing (i) awareness and accessibility; (ii) expanding of data sets; and (iii) increased support for data interpretation.
Initiative A2: Reforming immigration procedures	Improvements recorded.[4] It now only takes 7 days to get visa approval as compared to the initial 19 days. From 3-6 weeks delivery, international students can now download their visas online.[5] EMGS has also set up a one-stop centre with Jabatan Imigresen Malaysia (JIM) officers.	The Study Team was informed by MOE that in November 2019, the Malaysian Cabinet approved 32 initiatives to improve international student intake across 5 cluster categories. This shows (i) recognition by the Government on the importance of improvement internationalisation policies related to international student management; and (ii) continued commitment by the Government to improve such processes. The Study Team recommends that time is given to enable the policies to be implemented, and that proper tracking, measurement, and review be done periodically.

Initiative	Preliminary Findings	Report Findings
Initiative A3: Remodelling Malaysia International Scholarship	The aim was to remodel the Malaysia International Scholarship (MIS) with other scholarship providers and create a *centralised platform* to make it easier for international students to find scholarships. No centralised platform seems to exist. However, a Google search indicates that the private sector has put together such lists. Instead of a centralised platform, MOHE can empower and support the private sector.	Presently, the scholarship still appears to be branded as MIS. According to MOE's website, the online application will be opened "early 2020".[6] It would appear that the scope is focused on ASEAN, Morocco, and Palestine. It is for postgraduate studies only.
Initiative A4: Improving HEIs' ability to host international students	Multiple-year student visas: Yes. International students are able to have visas that are valid throughout the entirety of their studies.[7]	The findings in A2 (above) were included in the 32 initiatives approved. Overall, the Study Team's findings suggest that HEIs need to improve their ability to host international students, from providing facilities to proper training for academics and staff to provide support. International students indicated lower satisfaction levels as compared to local students. On the other hand, Polytechnics need more resources and support in order to attract international students. Despite being allowed to enrol international students since 2014, only one international student has enrolled. However, potential is evident through having more than 100 Polytechnic students registered under international inbound mobility programmes.
Initiative A5: Facilitating clear academic and professional pathways	More research is required and the concept of 'best international scholars' needs to be defined.	There are currently no clear academic or professional pathways for international staff. There is, however, a four-track pathway, elaborated in Strengthening Academic Career Pathways and Leadership Development (University Transformation Programme, Orange Book) under the MEB (HE), which appears to be applicable to both local and international staff. More information on international staff mobility can be found in Section 3.3.

Initiative	Preliminary Findings	Report Findings
Initiative B1: Strengthening MyAlumni	Unclear. But EMGS appears to have a platform	There is no such platform currently in place. The Study Team recommends the initiation of an alumni engagement strategy. Please refer to Section 4.5.
Initiative B2: Supporting education-based international conventions	Varying degrees of success. MOE won the hosting rights to Going Global 2018 and hosts various international conferences. Exact Return on Investment needs to be looked into.	No additional comments on this.
Initiative C1: Diversifying quality and niche programme offerings	Need to check with the Ministry of Higher Education / HEIs for programme details and quality indicators (SETARA/ MyQuest etc.)	Emphasis on ensuring programmes are international in nature has been taking place within HEIs. Kindly refer to Section 3.4 for more information.
Initiative C2: Setting up prominent international research laboratories	Unclear. Need to check. Nothing seems to be present at national level but maybe present internally in HEIs.	Kindly refer to Section 3.6 for more information.

Conclusion

3.1.7 The goals set by the 2011 Internationalisation Policy and the MEB (HE) have been achieved in bits and parts. The high-level goal, namely international student numbers, does not appear to be achievable by 2020. The Study Team is of the opinion that MOHE needs to realign its strategies and goals. We have also forecasted where our current trajectory will lead us and proposed Key Takeaways which require action to be taken in order to achieve any new goals.

References for Part 3.1

1 MOE. (2015). Kenyataan Akhbar Memperkasakan Prosedur Pengambilan Pelajar Antarabangsa.

2 Chin, C. (2019). Getting back on track. *The Star*.

3 Ibid.

4 Education Malaysia Global Services (EMGS). (2018). Concerted Effort Between Multiple Ministries & Agencies Critical to Achieve 2018 Targets.

5 Study International. (2018). You can now get a visa to study in Malaysia within a week.

6 Ministry of Education. (2020). Malaysian International Scholarship.

7 Immigration Department Malaysia. (2020). Pas Pelajar.

3.2 Student Mobility

3.2.1 International student mobility refers to any form of transnational mobility – both inbound and outbound – that takes place within a student's programme of study in higher education.[1] The length ranges from a full-duration programme, such as pursuing a Bachelor's degree, to a short-term programme of not less than seven (7) days.[2] In addition to the undertaking of academic programmes at a foreign HEI, student mobility can also involve one of the following short-term mobility options, with a duration of one year or less: industrial training, semester-based academic exchange programmes, or experiential learning (such as overseas visits, and workshops).

3.2.2 Student mobility is one of the key areas in the internationalisation of Malaysian higher education. Globally, the ability to attract international students is often equated with internationalisation policy success, and it has been shown that international student mobility correlates with greater economic impact as well as other positive intangibles to a nation.[3] Global rankings are also increasingly taking into account international student enrolment ratios as a key indicator in determining an HEI's position.[4] For Malaysia, the goal of becoming a global education hub, attracting a certain number of international students, and generating economic and intangible value lies in its ability to attract international students.

Introduction

3.2.3 The 2011 Internationalisation Policy described international student mobility as "**the main indicator of the internationalisation of higher education**". It stated that international student mobility has significant economic and academic implications, is a way for governments to address skill shortages in key areas, and is expected to grow considerably during the coming years. It also described international student mobility as a key education export commodity.

3.2.4 In the MEB (HE), internationalisation of Malaysian higher education is found under Shift 8 on "Global Prominence".[5] It is mentioned that "higher education has one of the highest multipliers" in terms of its economic contribution as well as "exponential intangible impact". Consequently, success in this space is described as leading to "[capturing] the full benefits of education". It is worth pointing out that these outcomes also have an interconnected impact on the other five policy areas, including Staff Mobility, Research & Development, Governance and Autonomy, Academic Programmes, and Social Integration and Community Engagement.

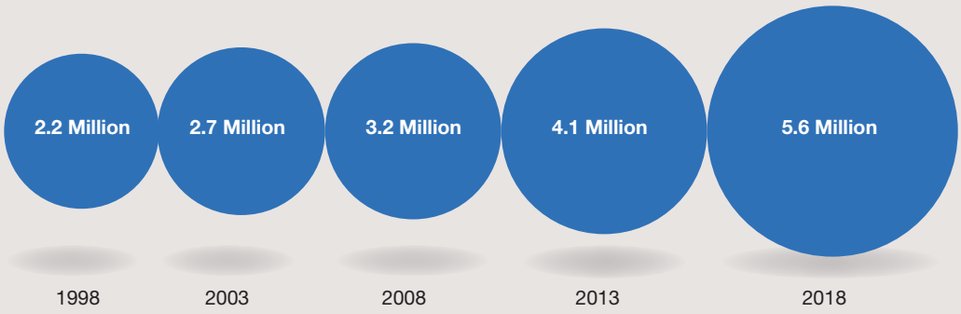
3.2.5 The MEB (HE) also set a target of attracting 200,000 international students to Malaysia by 2020 and 250,000 by 2025.[6] **This, however, includes secondary school students.** Setting secondary school students aside, the targets for HEIs were 160,000 by 2020 and 200,000 by 2025.[7] The 2011 Internationalisation Policy as well as MEB (HE) indicate that the targets were set based on a combination of (1) global trends in increasing student mobility, and (2) Malaysia's international student growth trends. In the MEB (HE), the 2025 target included a 53% projected level of tertiary enrolment of 2.5 million students.

Where Are We Now?

Inbound International Student Mobility to Malaysia

3.2.6 According to UNESCO, international student mobility has grown from 2.2 million in 1998 and reached 5.6 million as of 2018 (see **Figure 3.1** below). In this time, the average annual growth in total outbound international students was 4.8%.[8] From 2019 onwards, it is expected to slow down but still maintain a 1.7% growth rate.[9]

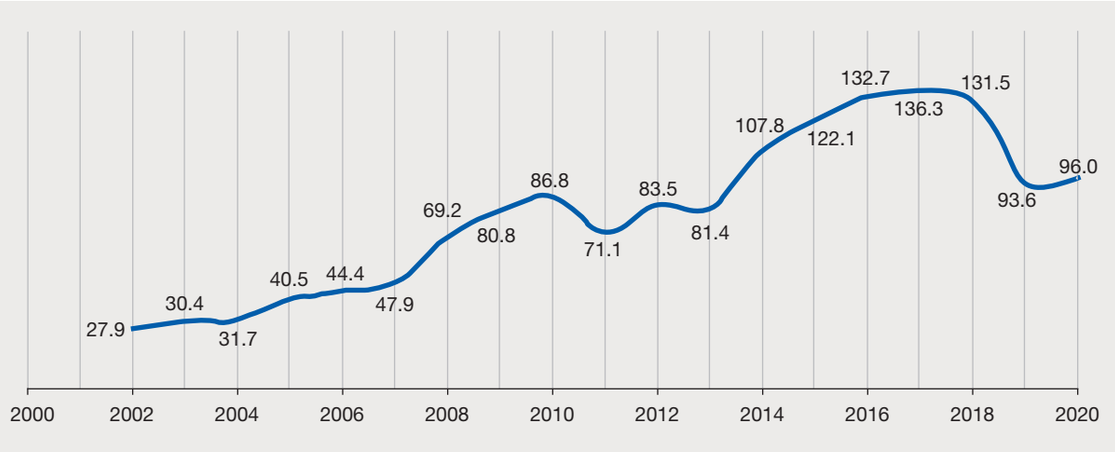
Figure 3.1 International Students Across the World (1998 – 2018)



Source: UNESCO (2020) in Mason (2021)

3.2.7 Malaysia's inbound international student enrolment also recorded significant growth between 2002 and 2020. In this period, international student mobility in Malaysia grew by 258% from 27,872 in December 2014 to 99,955 as of end-2020 as shown in **Figure 3.2**. The average annual growth rate has been 14%.[10] At one point, Malaysia was recognised as a top 10 international education destination.[11]

Figure 3.2 Annual International Student Enrolment (in Thousands) in Malaysian HEIs (2002 – 2020)[12]



3.2.8 In terms of source countries, Malaysia's inbound intake has been relatively consistent between 2014 and 2020 with the largest number of students coming from Bangladesh, China and Indonesia (see **Table 3.3**).[13]

Table 3.3 Malaysia's Top 10 Source Countries (2014, 2020)[14]

2014	
Country of Origin	**Enrolment**
Bangladesh	33,449
China	9,351
Nigeria	8,242
Indonesia	7,301
Yemen	4,160
Pakistan	1,798
Iran	3,700
Libya	3,237
Iraq	2,185
Kazakhstan	1,663

2020	
Country of Origin	**Total**
China	16,957
Indonesia	9,983
Bangladesh	8,338
Yemen	5,084
Pakistan	4,973
Nigeria	4,647
India	3,206
Egypt	2,653
Sri Lanka	2,627
Iraq	2,160

Table 3.4 Change in Inbound International Students (2017 – 2020)[15]

INBOUND STUDENTS IN SELECT COUNTRIES			
	2017 release	**2018 release**	**% change**
United States	1,078,822	1,094,792	1.5%
United Kingdom	501,045	506,480	1.1%
China	442,773	489,200	10.5%
Australia	327,606	371,885	13.5%
France	323,933	343,386	6.0%
Canada	312,100	370,710	18.8%
Russia	296,178	313,089	5.7%
Germany	251,542	265,484	5.5%
Japan	171,122	188,384	10.1%
Spain	94,962	109,522	15.3%
Netherlands	68,475	76,462	11.7%
New Zealand	62,570	61,402	–1.9%
Sweden	35,100	35,862	2.2%
Finland	31,120	30,807	–1.0%
Chile	3,243	3,198	–1.4%

INBOUND STUDENTS IN SELECT COUNTRIES			
	2019 release	**2020 release**	**% change**
United States	1,095,299	1,075,496	–1.8%
United Kingdom	524,250	551,495	5.2%
Canada	435,415	503,270	15.6%
China	492,185	*	*
Australia	420,501	463,643	10.3%
France	343,400	358,000	4.3%
Russia	334,497	353,331	5.6%
Germany	282,002	302,157	7.1%
Japan	208,901	228,403	9.3%
Spain	120.991	125,675	3.9%
Netherlands	85,955	94,236	9.6%
Poland	72,743	78,259	7.6%
New Zealand	61,240	52,995	–13.5%
Sweden	37,888	38,334	1.2%
Denmark	32,106	30,733	–4.3%
Norway	24,155	21,199	–12.8%

* Data not available

Source: *Project Atlas*, 2019 & 2020

3.2.9 Despite this, international student mobility to Malaysia has been plateauing since 2016. In 2018, there was a decrease in inbound international students for the first time since 2013, and this continued into 2020. This drop happened despite a general increase in international student numbers among the top nations around the world (see **Table 3.4**). Notwithstanding the overall decline, between 2018 – 2020, Malaysia's top 10 inbound countries has been relatively consistent (**Table 3.5**).

Table 3.5 Top 10 Source Countries Sending Students to Malaysia (2018 – 2020)[16]

2018		
No.	**Country of Origin**	**Total**
1	Bangladesh	22,158
2	China	16,361
3	Nigeria	11,105
4	Indonesia	10,783
5	Yemen	7,376
6	Pakistan	6,850
7	Iraq	3,645
8	Libya	3,309
9	India	3,272
10	Iran	3,185
11	Other countries	42,201
Grand Total		**130,245**

2019		
No.	**Country of Origin**	**Total**
1	China	13,448
2	Indonesia	9,340
3	Bangladesh	7,739
4	Yemen	6,001
5	Pakistan	5,146
6	Nigeria	4,822
7	India	3,073
8	Egypt	2,647
9	Saudi Arabia	2,249
10	Iraq	2,226
11	Other countries	36,879
Grand Total		**93,570**

2020		
No.	**Country of Origin**	**Total**
1	China	16,957
2	Indonesia	9,983
3	Bangladesh	8,338
4	Yemen	5,084
5	Pakistan	4,973
6	Nigeria	4,647
7	India	3,206
8	Egypt	2,653
9	Sri Lanka	2,627
10	Iraq	2,160
11	Other countries	35,327
Grand Total		**95,955**

Understanding the Decline

3.2.10 Based on available data, a decline in private college enrolment contributed the most to the overall decline in international student enrolment in Malaysian HEIs in 2018. (See **Figure 3.3** International Student Enrolment in Malaysian Private HEIs (2014-2018) by HEI Status). The available *Statistik Pendidikan Tinggi* data on international student enrolment in Malaysian HEIs for 2019 and 2020 are no longer broken down by private HEI status, so the Study Team was unable to extend the analysis below beyond 2018. Between 2016 and 2018, the number of international students in private colleges declined from 47,500 to 31,400 (–16,100). Also contributing to the decline were the private university-colleges; from an enrolment of 11,500 in 2014 to 4,500 in 2018.

Figure 3.3 International Student Enrolment in Malaysian Private HEIs (2014 – 2018) by HEI Status[17]

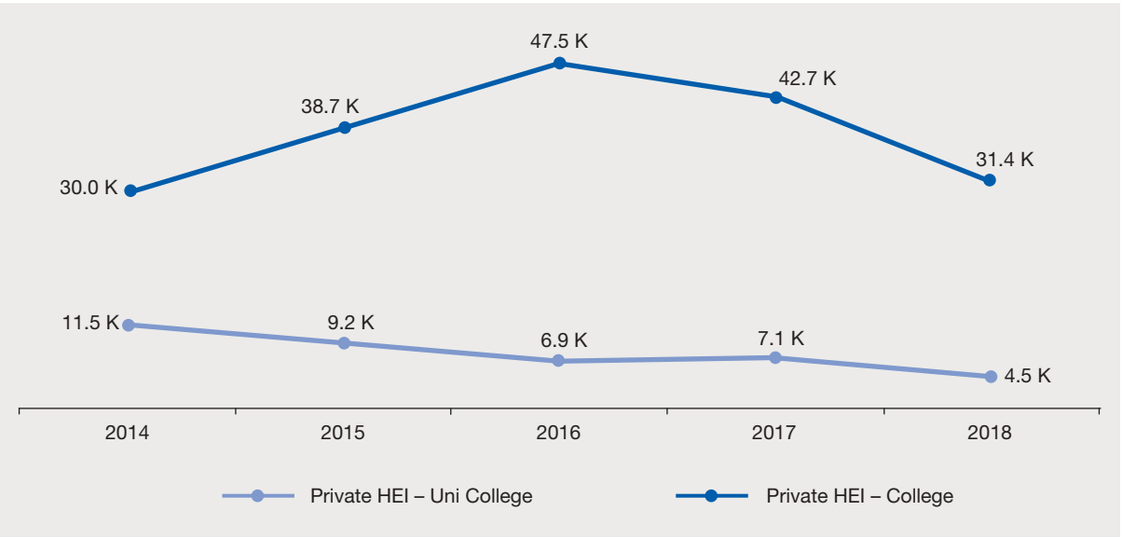
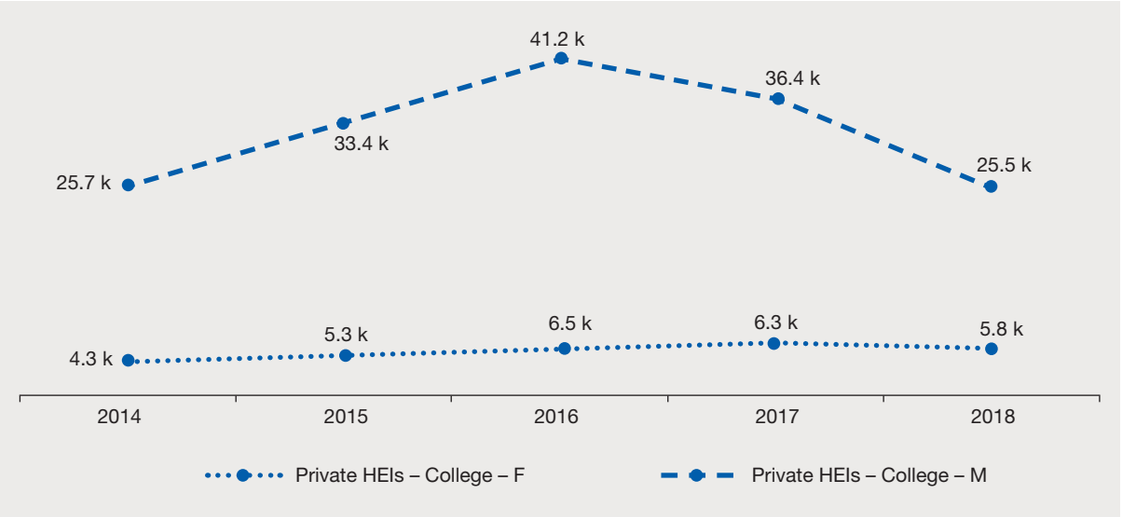
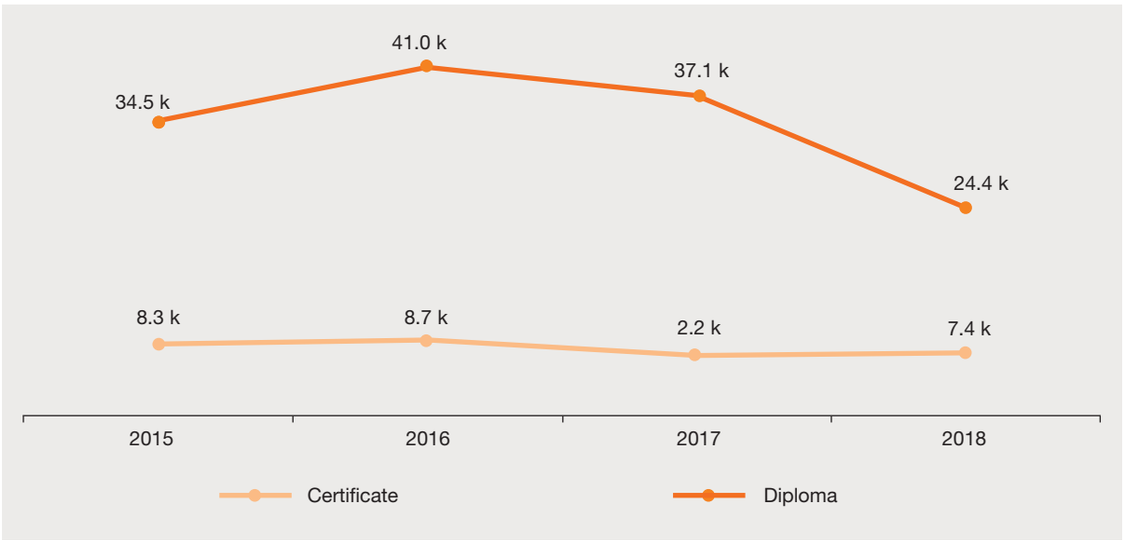


Figure 3.4 International Student Enrolment in Malaysian Private HEIs (2014 – 2018) by Gender[18]



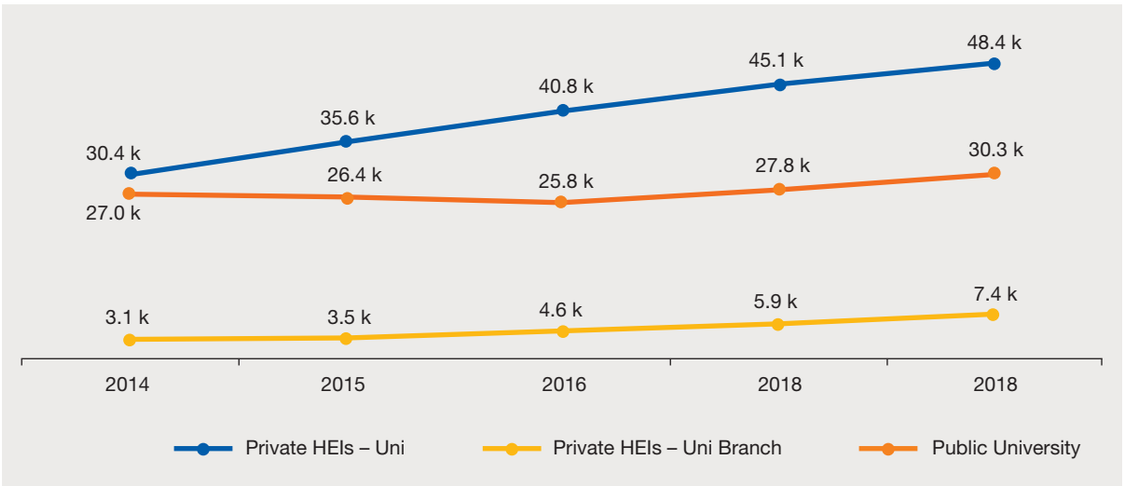
3.2.11. Breaking down the data further, the decline in private college enrolment was predominantly among male international students (from 41,200 in 2016 to 25,500 in 2018, representing a decline of 15,700) (**Figure 3.4** International Student Enrolment in Malaysian Private HEIs (2014 – 2018) by Gender). In terms of level of study, the biggest decline was in diploma programme enrolment (see **Figure 3.5**).

Figure 3.5 International Student Enrolment in Malaysian Private HEIs (2015 – 2018) by Level of Study[19]



3.2.12 Contrastingly, *public universities, private universities and private university branch campuses all saw increases in international student numbers between 2014 and 2018*, but this was not enough to compensate for the decline in college enrolment. See **Figure 3.6** International Student Enrolment in Malaysian HEI (2014 – 2018) by HEI Status below.

Figure 3.6 International Student Enrolment in Malaysian HEIs (2014 – 2018) by HEI Status[20]



3.2.13 Three caveats must be stated here: First, it is not known if the specific trends discussed above continue to hold in 2019 and 2020. Second, we do not have sufficiently granular data to understand the unfolding effects of the COVID-19 pandemic on the factors behind these trends. Third, it is unclear which countries the declining international students are from at the private college level. While earlier it was cited that Bangladesh, Nigeria, and Iran saw bigger declines than other international students between 2016 and 2018, the fact is due to lack of granular data, it would not be possible draw a definite conclusion, although some assumptions can be made.

3.2.14 *This raises the question: Why has this decline occurred?* Based on the policy labs and interviews conducted, among the explanations participants provided include:

(a) The setting up of Education Malaysia Global Services (EMGS) in 2012;[21]
(b) Restrictive bureaucracy;[22]
(c) The closing of colleges by the Ministry of Education;[23,24]
(d) Increased competition; and
(e) Lack of coherent branding and marketing.

3.2.15 In a 2017 news report, the then-Minister of Higher Education, stated that "a task force was launched to investigate colleges suspected of working with student traffickers" and that EMGS's systems detected irregularities in Bangladeshi students' intake.[25] Nine colleges were closed in 2016 and 2017, which led to the drop in Bangladeshi international students. While this is a direct indication of the decline in international students, it also suggests a more challenging reality: *Malaysia's international student numbers have been "artificially" high*. As such, the current decline could be a normalising of the landscape. On the other hand, this could be a sign of a steady decline in the times to come before Malaysia is truly able to reposition itself as an international education hub.

3.2.16 During the policy labs, EMGS was cited as contributing to delay in visa processing through rigid processes in documentation submission.[26] However, this could be slightly unfair as EMGS's role is often conflated with that of the Immigration Department. It cannot be conclusively said that EMGS has negatively contributed to the decrease in international student intake because EMGS played a key role in the closing of colleges suspected of being involved in student trafficking.

Strengths

Malaysia's Reputation: Moderate, Stable, and Diverse

3.2.17 One of Malaysia's key strengths is its reputation as a moderate, stable, and diverse nation. According to an international student in Malaysia on a Syrian scholarship, their scholarship providers are keen for them to come to Malaysia because of its reputation on the world stage as a peaceful nation – politically, economically, and socially. A policy lab participant at the University of Malaya cited "The safety atmosphere" [sic] and "far away from a war zone". Participants also cited Malaysia's reputation as a moderate Muslim nation as an attraction factor for students from Muslim nations. In terms of diversity, participants cited Malaysia's multi-racial, multi-religious society as a strength and an appealing factor. One international student said "the respectfulness of background and ethnicity" as one of our

strengths. A short-term mobility student from Germany said that Malaysia's strategic location in ASEAN is appealing as it enables students to explore the region with relative affordability and convenience.

Feedback from interviews and surveys

> *"I chose Malaysia because it is an Islamic country, centrally located in Southeast Asia, and is affordable!"*
>
> *Public HEI International Student*

> *"Malaysia is a food paradise. Access to get around is very easy."*
>
> *Public HEI International Student*

> *"I benefitted from learning from a diverse group of people here in Malaysia which broadened my way of thinking and made me less ethnocentric."*
>
> *Private HEI International Student Alumni*

Affordable, Quality Education, and Good Performance in Global Rankings

3.2.18 When asked to state their perceptions of key traits of Malaysia's education system, participants across all policy labs often stated "affordable quality education". Similarly, good performance in global rankings was a key factor in choosing Malaysia (as students would usually do a Google search to find out more about prospective universities). A participant from Egypt said that being educated in Malaysia would provide employment opportunities back in their home country, which indicates that a Malaysian education is recognised globally, and suggests positive maintenance of standards and accreditation. The ubiquitous use of English (in teaching and daily life among the community) was also seen as a positive.

3.2.19 The existence of international branch campuses (IBC) enables students to obtain international quality education at a fraction of the price. Similarly, transnational education (TNE) programmes mean that international students have many choices when deciding on a field of study. This plethora of options add to Malaysia's appeal.

Feedback from interviews and surveys

> *"High quality, good rankings, great ASEAN location, and confidence that a Malaysian degree will make me a favourable candidate in business or academic paths worldwide."*
>
> *Public HEI International Student*

> *"As for my degree which I also did at this University, I experienced very high quality of academic standards, facilities and international recognition and an amazing value for money. The cost of living in Malaysia is relatively affordable though it increased with time and I got to explore a lot of South East Asia during my studies."*
>
> *Private HEI International Student Alumni*

> *"Provide scholarship and reduce tuition fee for academic excellent international students during their studies, especially undergraduate who study at state-owned University."*
>
> *Public HEI International Student*

Overall International Student Satisfaction in HEIs

3.2.20 Overall, the feedback obtained by the Study Team (see **Table 3.6**) largely corroborates with a UNESCO report which identified five prominent factors as influencing students' choices to select Malaysia:[27]

(a) Cultural Comfort;
(b) Cost;
(c) Value for Money;
(d) Language of Instruction; and
(e) Quality of Life.

Table 3.6 Local and International Student Levels of Satisfaction with What Their HEIs Provide

I am satisfied with the following provided by my institution:	Local Students (N = 1,240)		International Students (N = 738)	
	Mean	Level	Mean	Level
Healthcare	3.70	High	3.46	Moderate
Counselling and welfare	3.65	Moderate	3.32	Moderate
Financial support services (e.g. paying school fees, opening accounts, receiving money from abroad, etc.)	3.60	Moderate	3.13	Moderate
Admission procedures	3.76	High	3.67	Moderate
Facilities and student amenities	3.77	High	3.46	Moderate
Housing	Not applicable		3.20	Moderate
Student visa and renewal	Not applicable		3.37	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Areas for Improvement

Visa Regime Rigid/Unclear

3.2.21 Stakeholders interviewed and policy lab participants frequently raised the issue of inconsistent implementation of visa policies as the top challenge they faced. Among the related concerns were long processing times (some students have reported having to go around without their passports for months), a lack of flexibility in the submission of documents (or repeat submissions despite explanations from the students), varying visa durations (with some lasting one year, while others last for four years). Some have described it as "too strict" – for instance, the inability of a spouse to convert their dependency visa to a study visa unless the applicant leaves Malaysia is seen as unwelcoming. Some also say that the visa is expensive.

3.2.22 This has led students on mobility programmes to become disinterested in exploring long-term study options; while for long-term students, this is a cause for alarm as to whether they will recommend Malaysia to students from their home countries (i.e. not passionate as alumni). EMGS has indicated that the visa process now takes less than seven days (assuming all documents are in place), but the incoherence of procedures between EMGS and the Immigration Department leave the students trapped in between and has led to a strong negative perception.

Survey feedback

> *"To facilitate for dependent and make it affordable. The prices of EMGS is very high vs. the Immigration and institution. It is like extra we pay for work which can be done by the institution."*
>
> *Public HEI International Student*

> *"By changing the local laws regarding international students and offer them good opportunities so they can work there after education. Also relax the visa policy by reducing lengthy process of visa renewal."*
>
> *Public HEI International Student*

> *"Immigration needs to provide more respectful / humane visa regulations and processes. It's ridiculous a student has to wait so long for a visa after they have been accepted into their university programme. Students with dependents (including parents and younger siblings) should be able to apply for dependent visa simultaneously with student visa. Everyone should be able to go to counter to get visa sticker in their passport instead of relinquishing passport to immigration for weeks to get visa – what if there is an emergency and they need to return their country? Authorities need to accept immigration international student ID as accepted identity document instead of insisting on passport – difficult for students to carry around passport. Students from conflict regions should have compassionate fee waiver and visa extension as well as allowed to work."*
>
> *Public HEI Local Staff*

"The government should review EMGS processes for student visa as this is the major issue to recruit international students."

Private HEI Local Staff

Work: Difficult to Get Approval for Part-time Work or Internships and No Post-graduation Work Opportunities

3.2.23 According to policy lab participants and interviewees, many international students in Malaysia are from developing countries, and they look forward to having the opportunity to work not only to supplement their income but also participate in other activities (volunteerism, community engagement etc.). Similarly, they highly value the opportunity to do internships and gain work experience for long-term benefits.

3.2.24 However, based on feedback from stakeholders, it is very difficult and tedious for students to get permission to work part-time, and permission is restricted to term breaks. This is a huge demotivating factor for them. Some interviewees had the perception that it is illegal to work part-time or do internships.

3.2.25 At the same time, the lack of post-graduation work opportunities renders Malaysia less attractive compared to other emerging education destinations. The international students have expressed that they feel their talent is "wasted". It is also difficult to go elsewhere (aside from their own home country) as the knowledge they gained in Malaysia can be applied quickly and more practically in Malaysia.

3.2.26 On the other hand, some expressed that the current strict policy is better, as we should prioritise locals, especially when many are unemployed.

3.2.27 Overall, as many other nations such as the UK, Canada, and China, are relaxing their during- and post- study work opportunities, Malaysia stands to lose out on a huge competitive element with the current regulatory framework as students prefer to invest elsewhere.

Survey feedback from international students

"If the universities offer part-time jobs for the students, especially those who study on their own they will be more able to participate in different activities. For my case, I usually don't participate because I couldn't afford or forsake other priorities."

Public HEI International Student

"Government should allow international student to work part time job which will give student practical knowledge like how first world countries are giving."

Public HEI International Student

"Allow international students to work part time but not limited to a cafe or petrol station."

Private HEI International Student

Survey feedback from local students and staff

> *"Yes. We need to ease up on student visa process without leaving out proper check on background etc. Allowing international student graduates to work in Malaysia in niche sector which has no or limited local talent are also appropriate to further improve our industry especially in applied science and technology."*
>
> *Public HEI Local Student*

> *"Please have our own top talent society as well. Focus on the Malaysian citizen first. We don't get enough funding to give to our fellow intelligent and top talent researchers. Why want to waste money to invite others. We can create our own, then the "top talent" won't feel used. #malaysiaboleh"*
>
> *Public HEI Local Staff*

> *"No point attracting them to study and then they go back to their home country. We owe a duty to develop Malaysians first and strengthen our economy and change the existing mindsets. Better to focus on attracting foreign investment and entrepreneurs who will create job opportunities for Malaysians. We should attract top talent to set up businesses to create jobs, NOT compete with Malaysians for jobs."*
>
> *Private HEI Local Staff*

Discrimination/Not Welcoming

3.2.28 Stakeholders expressed that while Malaysians are generally friendly, they tend to feel lonely or isolated despite efforts made to integrate. This could be due to cultural differences and the lack of platforms or opportunities to bridge the gap. Some locals also stereotype international students as instigators of social problems or manual labourers. This is addressed in more detail in the discussion on Social Integration and Community Engagement.

Survey feedback

> *"I wish there was someone who check upon us sometimes about how we are doing – physically and mentally. Because it would be nice to know that there is someone caring for you and not just asking because it's their duty to ask"*
>
> *Private HEI International Student*

> *"Better customer service by the university staff. They tend to be extremely rude to students, particularly international students for no apparent reason other than the fact that they struggle with our national language."*
>
> *Public HEI Local Student*

> *"As an international student, I expect that I am not taken as a business goal only with no facilities for my family at all. No scholarships, no financial support, everything is for Malaysians only."*
>
> *Private HEI International Student*

> *"Reduce disparity between local and international students in terms of education opportunities and work placement."*
>
> *Public HEI Local Student*

Lack of Recognition for Short-term Mobility Programmes

3.2.29 Students who come to Malaysia on short-term mobility often do not get credit for it. Those who are here are keen on the experience and do not mind as such, but this reduces Malaysia's appeal as a destination for short-term mobility programmes (which are often expensive due to their short duration). There is a need to reexamine the framework of the accreditation, especially for international mobility (both inbound and outbound).

3.2.30 In an interview with a former EMGS director, it was stated that an American parent wanted to send his Muslim daughter to Malaysia to study medicine.[28] However, he did not do so because of incongruous accreditation systems, which meant that the medical degree would not have been recognised in the US. This is one example of a potentially new market (American Muslims) who may find Malaysia an appealing education destination but do not come because of accreditation issues.

The Way Forward

Making Malaysia a Preferred Higher Education Destination for International Students

3.2.31 A number of suggestions were presented (during the policy lab sessions that were convened as part of this study) as possible solutions to address the deficiencies/challenges discussed earlier. These are described next.

Improve Visa Processes

3.2.32 Given the prominence of this issue, it is vital for the authorities to continuously look into improving the situation – from issuance efficiency to the policies and communication surrounding it.

3.2.33 Further, the Study Team takes cognisance of the fact that the Malaysian Cabinet in November 2019 had approved 32 Proposed Improvements on International Student Management, across five main clusters, namely:

(a) Cluster 1 – Master Policy on Internationalisation;
(b) Cluster 2 – Special Pathways for International Student Intake;
(c) Cluster 3 – Digitalisation of International Student Management;
(d) Cluster 4 – Facilitating International Student Entry Processes; and
(e) Cluster 5 – Enhance the Capacity of HEIs in Protecting the Welfare and Experience of the International Student

3.2.34 The Study Team is of the view that these 32 Proposed Improvements will be able to address most of the challenges associated with international student management. We are encouraged by Cluster 5, which closely relates to our findings on the policy area concerning "Social Integration and Community Engagement". *However, it is noted that there is no explicit mention of during- or post-study work opportunities, and this is something that needs to be looked into.*

3.2.35 Our recommendation is that implementation of the 32 Proposed Improvements must proceed, with a proper tracking, monitoring, and review system put in place. That aside, it is too early to make any additional observations on this.

Facilitate During-study and Post-study Work Opportunities

3.2.36 In light of growing global competition, during- and post-study work opportunities will be a key factor in internationalisation. For this, MOHE/the Government must liberalise and facilitate during- and post-study work opportunities.

Scale-Up Inbound Mobility Programmes

3.2.37 Short-term inbound mobility programmes are a potential area for growth in terms of attracting international students and for opening new markets. According to MOHE, the top ten countries for inbound mobility programmes in 2018 were China (1435), Thailand (769), Japan (661), Indonesia (608), South Korea (476), United Kingdom (270), Germany (198), France (182), India (117), and Brunei Darussalam (90). Only three of these countries overlap with the top ten for full-time international students. Moreover, out of a total of 5,650 international inbound mobility students, the top ten sending nations accounted for 4,806 or 85% of students. This suggests that international inbound mobility programmes have the potential to continue to grow and to attract students from developed nations who do not typically come to Malaysia to study full-time.

Launch an Alumni Engagement Strategy

3.2.38 Given that many international students learn about Malaysia from word of mouth (WoM) and fellow alumni from their country, it is time for us to take alumni engagement more seriously. We need to consider the various benefits it brings about, from fundraising to knowledge diplomacy and even the improvement of the global perception of Malaysia.

Enhance Student Resource Management, as well as Branding and Marketing

3.2.39 Having taken into account emerging source countries, demographics, and student profile, it is vital to adopt a more diverse, data-driven, and robust approach to targeting. MOHE also needs to identify the entity responsible for the promotion, branding, and marketing of the Education Malaysia brand.

Introduce Pastoral (Student Care) Guidelines and Continuous Intercultural Competency Training

3.2.40 This will help address challenges faced by students, enable MOHE to hold public and private HEIs to a higher standard of international care, as well as ensure that issues of discrimination, isolation and victimisation do not occur. This will have the greater impact of reducing attrition rates, improve the international student experience in Malaysia as well as create a welcoming and empowered society.

Targeting and Profiling International Students More Strategically using Data

3.2.41 Malaysia needs to adopt a more strategic and data-driven approach to international student recruitment. According to the policy lab participants, among the factors to consider are:

(a) Type of institution (public or private, IBCs);
(b) Reputation and ranking;
(c) History (relations with alumni);
(d) Relationship with agents;
(e) Type of programme (full-time or mobility);
(f) Culture and religion; and
(g) Technology (digital marketing, online platforms).

3.2.42 Malaysia's main areas of appeal were said to be:

(a) Affordability;
(b) Quality; and
(c) Its image as moderate Muslim nation.

3.2.43 We must also be mindful of future projections. According to the Institute of International Education, emerging factors include:[29]

(a) **Regional initiatives:** ERASMUS, ASEAN, APEC, etc. For instance, China's BRI (Belt & Road Initiative) is attributed to making it the second most preferred destination for African students (after France);

(b) **Branch campuses:** "[Branch campuses reflect] a country's plan and priority to serve and be recognised as a center of education expertise, excellence, and economic activity in the region and beyond";

(c) **Political climate:** Rising nationalism, Brexit, and surge in refugees and forced migration (especially in the Middle East); and

(d) **Future projections:** the role of birthrates, ageing societies, workforce requirements, etc. necessitates econometric and demographic modeling. For example, Africa has the world's largest population of under-18s who will be looking for higher education opportunities.

3.2.44 In the MEB (HE), ASEAN is cited as an example destination for recruitment "given Malaysia's strategic interests" and so are countries in the South-South Cooperation.[31,32] "Non-traditional" source countries such as Australia and the US were also cited as potential for mobility programmes or niche area programmes.

3.2.45 ICEF Monitor states that Asia is a key growth region.[33] It also published the following table on competitive positions of selected Asian nations (see **Table 3.7**), and *describes Malaysia as "attractive to Muslim students"*.

Table 3.7 Established and Emerging Study Destinations within Asia[34]

Country	International Student Target	2018 Enrolment	Top Sending Markets	Cost of Study	Foreign Student Facts
China	500,000 by 2020	492,185	South Korea, Thailand, Pakistan, India, US	US$1,700–3,100 per year for most programmes	Nearly 60% are from Asia
Japan	300,000 by 2020	298,980	China, Vietnam, Nepal, South Korea, Taiwan	US$7,460–8,500 per year for public universities	94% are from Asia
Malaysia	250,000 by 2025	172,900 (2016)	China, Bangladesh, Indonesia, Nigeria, Yemen	Costs vary by type of programme and institution	Attractive to Muslim students
South Korea	200,000 by 2023	142,205	China, Vietnam, Mongolia, Japan, US	US$8,750–13,000 per year for undergraduates	Just under half are Chinese
Taiwan	150,000 by 2020	127,000	China, Malaysia, Vietnam, Indonesia, Japan	US3,365–5,250 per year for most programmes	40% are from South and Southeast Asia

3.2.46 Notwithstanding the strategic interests that ASEAN brings, the Study Team's benchmarking findings indicate that *other ASEAN nations – aside from Indonesia – might not be easy targets for Malaysia*.[35] Despite Thailand and Vietnam being top outbound mobility ASEAN nations, Malaysia is only the fifth most preferred destination in Thailand and is not even ranked in the top ten in Vietnam.[36,37,38] Various factors contribute to this, including preference to go to English-speaking developed countries, culture, and specific scholarships for Vietnamese students from nations such as New Zealand, Hungary, Russia, and Cambodia.[39,40] Singaporean students, on the other hand, prefer to go to developed countries due to perceived quality of qualification and certification.[41] Other ASEAN nations are still nascent in their higher education trajectory, and while they do send students abroad, they appear to be focusing more on building internal capacity.[42,43,44]

3.2.47 *We must be more data-driven.* The British Council, in forecasting international student mobility trends up to 2027, has identified the top ten growth markets (**Table 3.8**) and the top ten shrinking markets (**Table 3.9**).[45]

Table 3.8 Top Ten Growth Markets: Outbound Students

Country	2015 (000s)	2027 (000s)	Increase in Outbound Students (000s)
China	801	1,046	245
India	254	439	185
Pakistan	47	79	32
Nigeria	76	106	30
Bangladesh	33	60	27
Saudi Arabia	86	110	24
France	81	101	20
Nepal	39	59	20
Indonesia	42	60	18
Kenya	13	29	16

Source: UNESCO, Oxford Economics, British Council

Table 3.9 Top Ten Shrinking Markets: Outbound Students

Country	2015 (000s)	2027 (000s)	Increase in Outbound Students (000s)
Germany	116	114	–3
Belarus	29	26	–3
Brazil	41	38	–3
Romania	33	30	–3
Ukraine	60	56	–4
Singapore	24	20	–4
Hong Kong	35	29	–5
Venezuela	17	9	–8
Malaysia	64	55	–10
South Korea	108	73	–35

Source: UNESCO, Oxford Economics, British Council

3.2.48 Of the top ten growth markets in **Table 3.8**, six are within Malaysia's current top 10 source countries, suggesting that Malaysia is in a good position to increase the international student numbers from these nations. It is vital to note that India, along with four out of six OIC (Organisation for Islamic Cooperation) members have sizeable Muslim populations. As for the remaining countries, Malaysia and Saudi Arabia have traditionally had strong relations while Nepal and Kenya are in proximity to Malaysia's inbound international student orbit. Other promising markets to consider include Ghana, Kuwait, and Egypt.[46]

Attract Students from Developed Nations

3.2.49 Our interviews and benchmarking exercises also indicate Malaysia's ability to attract students from developed countries. These fall into two categories.

3.2.50 Firstly, there is a **growing Muslim population within developed countries** seeking education with religious and cultural relevance. According to two interview respondents, the former Education Malaysia Washington Director and Education Malaysia Sydney Director, this is a gap that Malaysia can fill.[47,48] Australia, for example, has 600,000 Muslims who want Islamic education at the tertiary level, while American parents enquired EM Washington about sending their children to Malaysia (but did not send them due to non-recognition of Malaysia's medical programmes by the American medical system).[49]

Table 3.10 International Students Attending Malaysian Inbound Mobility Programmes (2018)

Country	Public HEIs	Private HEIs	Polytechnics	Total
China	389	1,030	16	1,435
Thailand	–	629	140	769
Japan	155	475	31	661
Indonesia	37	478	93	608
South Korea	37	329	110	476
United Kingdom	226	44	–	270
Germany	44	154	–	198
France	119	63	–	182
India	20	97	–	117
Brunei	1	89	–	90
			Top 10 Total	**4,806**
			Other Nations Total	785
			Overall Total	**5,591**

3.2.51 Secondly, international students from developed countries looking for **inbound mobility programmes**. UiTM and UTM, for example, shared that mobility programmes were not only able to attract international students from developed countries, but were good for generating revenue.[50,51] In 2018, out of 5,591 international students on inbound mobility programmes, 3,574 were from five developed nations (see **Table 3.10**). Japan led with 661 international students, but there is more potential – out of 105,000 Japanese outbound international students, less than 2,000 opt for long-term programmes, while the remainder chose mobility programmes which are 12 months or shorter.[52]

Conclusion

3.2.52 Malaysia has many advantages when it comes to its ability to attract international students. From a stable political climate to solid economic fundamentals, diverse education offerings, and an acknowledgement of the importance of internationalisation, there is no shortage of energy, passion, and drive. Although there are some challenges, ranging from immigration issues to student welfare, they are not unique to Malaysia. Nations across the globe are in search of solutions to improve student mobility. Improvement is a continuous process; therefore, the nations most committed to it will emerge as beneficiaries of this growing student mobility landscape, specifically; and internationalisation landscape, generally.

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3.3 Staff Mobility

Introduction

3.3.1 Staff Mobility is one of the fundamental areas of internationalisation of higher education. Long before other aspects discussed in this study fostered internationalisation, there was the wandering scholar, venturing far beyond his homeland in search of new knowledge and students.[1] In this increasingly borderless world, staff mobility contributes significantly to the internationalisation of higher education. Highly qualified and experienced faculty is indeed a valuable asset for any university competing for students; talented students in particular. Thus, for internationalisation strategies to work, universities must pay equal, if not more, attention to encouraging staff mobility vis-à-vis student mobility. However, the policy discourse on staff mobility enjoys much less academic and political interest compared to the movement of students across borders.[2]

3.3.2 Instead of leading and encouraging student mobility, staff mobility lags behind student mobility.[3] Additionally, statistical data on international staff mobility is limited.[4] Increasingly, though, academics view mobility as part and parcel of their jobs, and although virtual global connections can be made in academia, the importance of physical presence cannot be diminished when forming concrete networking and cooperation between international colleagues.[5] Therefore, it is vital that staff mobility not only increases but moves into the spotlight as one of the central agendas of increasing internationalisation.[6]

3.3.3 Staff mobility can be seen on two axes: incoming or outgoing and short-term or long-term. On the incoming vs. outgoing spectrum, staff mobility is viewed as either capacity-building or revenue-generating.[7] Most countries are either net exporters or importers of academic staff on staff mobility programmes with highly developed countries tending to export academics to less developed countries.[8] Malaysia, though, has been identified as an intermediate nation in this spectrum, where both incoming and outgoing mobility is equally important.[9]

3.3.4 Explicit policy for staff mobility is uncommon for a country, and although several European countries have national policy goals that explicitly promote staff mobility, less than half of them actively measure the outcomes of these goals. Instead of having clear, quantitative targets, it is usually implicit in nature, with policy documents using broad and vague terms like "encouraged" in their policy goals. To ensure internationalisation occurs in all HEIs within a country, instead of setting an absolute number as the staff mobility goal, the target should be a percentage of total staff.[10]

Where Are We Now?

3.3.5 In Malaysia, the mobility policy was clearly stated in the 2011 Internationalisation Policy where attempts were made to increase inbound and outbound international mobility among students and staff (including faculty) in the country. And the MEB (HE) went further by including an initiative to facilitate clear academic and professional pathways to achieve this. These pathways include international exposure and experience in teaching and learning as well as publications, research, and development. Despite the 2011 Internationalisation

Policy's target of increasing international staff numbers by 15%, the reality is that international staff declined by 4.5% by end-2020.

3.3.6 Among the international offices that were approached in this study, the variation of execution of this policy was very large. Some indicated that they went to great lengths to set goals and track and reward staff mobility, whereas others had a more *laissez-faire* approach, where the office encouraged mobility, but staff were left to their own devices to pursue it. As such, it is vital to map staff mobility among HEIs and develop best practices into policy positions. To that end, a mobility book was launched by the Ministry of Education in September 2019. For example, in Universiti Teknologi Malaysia, staff are required to have global exposure, at least for a short-term programme, and this metric is closely monitored by the international office.[11,12]

3.3.7 In any venture toward increasing staff mobility, and therefore levels of internationalisation more broadly, the commitment of staff is of utmost importance. Academic staff in HEIs tend to unanimously agree with the importance of internationalisation but have been shown to have ambivalent opinions about staff mobility itself.[13] Although there are clear gains through transcultural learning, increased employability, and improved intercultural sensitivities for the mobile staff, it comes at the expense of possible isolation and exclusion at the host institution and country.[14] The lack of support from institutions and further inadequate recognition of successful staff mobility outcomes are one of the main challenges in increasing staff mobility.[15] Other obstacles include language barriers, funding availability, and personal circumstances.[16] On a transnational level, the inconsistent legislation and academic standards between countries hinder the smooth flow of academic staff across borders.[17]

3.3.8 Studies in staff mobility have found some further differences between staff who have international exposure and staff who do not. Staff who are internationally mobile are more likely to be male, young, and more focused on the research rather than the teaching aspect of their job.[18] Also, there are sizable differences between the amounts of international exposure depending on the area of study. Therefore, these disparities should be addressed in efforts to increase staff mobility. Oftentimes though, the staff considered to not have international exposure do not completely lack international experience but rather are working autonomously, outside the HEIs infrastructure, when reaching out to their professional network overseas.[19]

3.3.9 Although it might be tempting to focus on short-term schemes that increase staff mobility, ultimately, these activities will not lead to the sustained increase in knowledge flows that marks successful internationalisation.[20] To truly increase staff mobility in a meaningful way, HEIs need to address internal issues that prevent incoming international staff. When their reputation has been established, their efforts will facilitate the outbound mobility of their local staff.[21] Therefore, the establishing of a network of overseas partners is a prerequisite for increased staff mobility.[22]

3.3.10 In the surveys carried out, the Staff Mobility cluster ($\beta = 0.381$, t-value (2.046) > 1.96, p-value = 0.04) was seen to be the strongest factor contributing to the satisfaction on internationalisation experience among international staff. It also ranked among the top three areas that contributed to satisfaction of local staff ($\beta = 0.3261$, t-value (5.735) > 1.96, p-value = 0.00). These results shows the importance of staff mobility in the landscape of

internationalisation, even though it is sometimes sidelined both in research and practice, especially in comparison with student mobility.

Strengths

3.3.11 Our findings suggest that Malaysian HEIs have done reasonably well in this area. **Table 3.11** and **Table 3.12** show that among both local and international staff, there is, overall, a moderate-to-high level of satisfaction with various elements of staff mobility in their HEIs.

Table 3.11 Local and International Staff Levels of Satisfaction with Facets of Staff Mobility in Their HEIs

Questions	Local Staff (N = 358)		International Staff (N = 33)	
	Mean	Level	Mean	Level
I am satisfied with how my international colleagues engage with me.	3.89	High	3.97	High
I am satisfied with the international viewpoints and mindsets of my local colleagues.	3.81	High	3.61	Moderate
Financial support services (e.g. paying school fees, opening accounts, receiving money from abroad, etc.)	3.54	Moderate	Not applicable	

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Table 3.12 International Staff Levels of Satisfaction with What They Have Been Provided

I am satisfied with the following provided by international staff:	International Staff (N = 33)	
	Mean	Level
1. Healthcare	3.39	Moderate
2. Welfare	3.00	Moderate
3. Housing	3.15	Moderate
4. Protection of my legal and civil rights	3.30	Moderate
5. Visa and renewal	3.55	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

3.3.12 Findings at the policy labs and interviews echoed the sentiment that there were indeed some strengths in the adoption of staff mobility programmes throughout the HEIs. The strengths highlighted are discussed below.

Institutionalisation of Mobility Programmes

3.3.13 Academics in most public HEIs in Malaysia enjoy the benefit of institutional support for participation in both short- and long-term mobility programmes. The short-term programmes include participation in conferences, workshops, site visits, etc. Longer term programmes include visiting fellowships, sabbaticals, and post-graduate/doctoral degree programmes as part of the institutions' capacity building efforts. For example, UTM highly encourages staff mobility and actively supports staff pursuing exposure abroad.[23] However, there was a disparity found, where the staff in private HEIs do not enjoy as much of such benefits. The exception was within the IBCs in Malaysia, where was often increased opportunities for staff mobility, both for short- and long-term programmes.[24]

Funding Commitment to Academic and Research Mobility Programmes

3.3.14 Most public HEIs, particularly the RUs, have dedicated financial allocations to fund or support the various staff mobility programmes. A separate funding mechanism is provided to support research collaborations in approved projects. Participants in the policy labs discussed the availability of international funding such as the Erasmus scheme where they could obtain funding for their staff mobility programmes.[25]

Openness to Recruitment of International Faculty

3.3.15 HEIs in Malaysia are all open to recruitment of international staff. The 2011 Internationalisation Policy mentioned a target of 15% international staff recruitment as set by the National Higher Education Strategic Plan (2007 – 2020), although this may vary across HEIs and disciplines. This openness towards international faculty is shared by all parties; local and international students, as well as local staff, agreed that the presence of international faculty adds an important dimension to their experience in Malaysia.

Survey feedback

> *"Yes. We should have more international teaching staff. With the diverse multicultural university, students should be exposed with industrial/cultural experiences from the different background."*
>
> *Private HEI Local Staff*

Recognition of Mobility Programme Participation in Staff Appraisals

3.3.16 Most HEIs accord recognition to staff who participate or engage in mobility/research programmes with other partner institutions from abroad in their annual appraisal exercise. Such recognition will help promote such collaborations and benefit the institution. Overall, there were clear strengths within the staff mobility area and this was apparent through consistently high satisfaction scores.

Areas for Improvement

3.3.17 Although there was generally a high level of satisfaction among stakeholders with regards to staff mobility, there were issues highlighted in the interviews, surveys, and policy labs on the current limitations of staff mobility programmes among our HEIs.

Lack of Strategic Direction in Academic Mobility Programmes

3.3.18 Most institutions conduct mobility programmes on an ad hoc basis. They generally do not have a strategic direction for how these programmes will contribute to the instution's overall internationalisation or competency development goals. This absence (of strategic direction) can be attributed to a lack of priority placed on this area of internationalisation, but this study has shown that it is an important predictor of satisfaction among staff.

Limited or Unstable Funding Support

3.3.19 Since they are sometimes viewed as additional benefits to staff, academic mobility programmes will be the first to be curtailed or axed altogether when HEIs experience budgetary cutbacks. Support from the private university for its academics to gain international exposure is limited. Often, academics apply for international mobility funding individually, receiving little support from their HEIs during the process.

Problems Related to Visas and Immigration

3.3.20 Cumbersome and inefficient visa procedures can undermine academic mobility programmes. This issue was constantly raised in the various policy lab sessions and open-ended comments from the survey. The issues around visas and immigration extended to the family of international staff coming to Malaysia, who sometimes faced difficulty bringing their families here.[26]

Survey feedback

> *"We hope to get few years visa in order to reduce our paper work to immigration and to get working endorsement. We only could get working endorsement for one year because the visa duration is for 1 year. However, when we are expected to get 2 years or 5 years visa duration, government has changed rule we could not get 2 or 3 years anymore we might get one year or half a year. So every time when we renew our visa, we are frustrated of the changing rule and duration of given visa."*
>
> *International Staff*

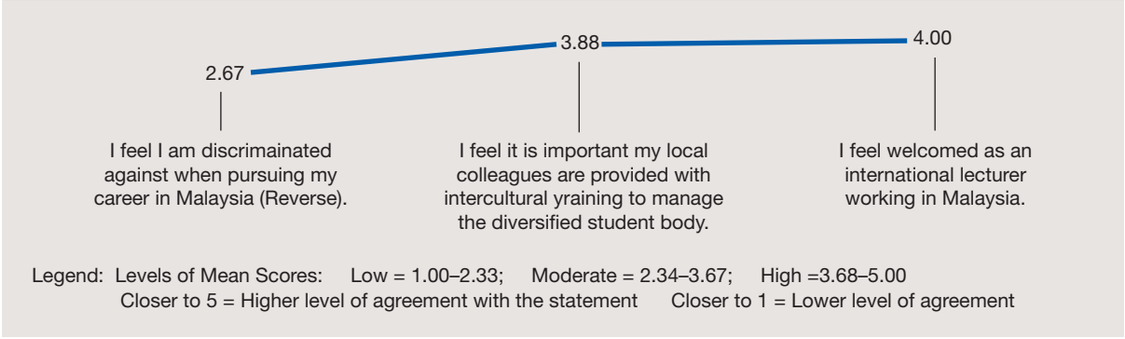
> *"We understand the government does not want a spouse visa become a platform for foreigner to take benefits either to stay or to work. However, not everyone has the same purpose. Some of us are just want to have family, settle down and stay with our beloved Malaysian spouse in this country. The visa application should be revised case by case."*
>
> *International Staff*

Academic Contracts

3.3.21 Many expatriate faculty members have expressed unhappiness over insecure contractual terms pertaining to their appointments. These shifting terms of renewal do not inspire many of them to renew their contracts to remain in the country. Furthermore, some international staff feel the disparity with their local colleagues when they are not given permanent contracts.[27] The survey feedback revealed that relatively few staff felt discriminated against when pursuing their careers in Malaysia (**Figure 3.7**). However, the ones who did had strong feelings about specific, substantive forms of discrimination.

3.3.22 For instance, the open-ended survey comments revealed that some international staff felt discriminated against when pursuing their careers in Malaysia. In particular, we received feedback from both local and international staff recommending that the status of principal investigator be awarded to deserving international staff as well. (They are currently not afforded this opportunity; see Section 3.6 on R & D).

Figure 3.7 Mean Scores for Staff Mobility (Attitude) Among International Staff



Survey feedback

> *"Local staff are permanent. Foreigners are employed on temporary contracts."*
>
> *International Staff*

Lack of Research Funding Support for International Staff

3.3.23 This was another common theme that emerged from the policy labs as well as surveys. Participants of the policy labs, some of which were part of staff mobility programmes, indicated that international staff were sometimes not allowed to apply as the principal researcher on certain projects.

Survey feedback

> *"There is a widespread perception international staff is discriminated when it comes to research funding. In Europe for example, it doesn't matter what your nationality is. In Malaysia, you must be a Malaysian citizen to get funding. For international staff, this means being awarded funding for research is unlikely and can negatively impact your career."*
>
> *International Staff*

3.3.24 The barriers faced when trying to improve staff mobility among HEIs in Malaysia, as discussed above, can be divided into two distinct types: facilitation of outward staff mobility for Malaysian staff and challenges faced by incoming international staff, and both types of barriers need to be addressed in order to truly increase the quality of staff mobility in Malaysian HEIs.

The Way Forward

3.3.25 The recent International Association of Universities (IAU) report suggests that American universities, for example, pursue the internationalisation agenda mainly to produce globally connected students.[28] To produce global innovative thinkers, the academics need to be empowered.

3.3.26 For HEIs in Malaysia, short-term programmes not only provide Malaysia with an excellent platform to promote the country as a study destination; it also acts as an economic multiplier that causes spill-over effects, especially in tourism. As this study has shown, word-of-mouth (WoM) plays a large role in a student's decision to choose a study destination.

3.3.27 International Staff has been a key priority area in Asia Pacific and the US, but less so in Latin America and the Caribbean. In Malaysia, there were both proponents and opponents for hiring international staff. International experience, on the other hand, has never been a priority for HEIs in the US, but is extremely valued in the Middle East, Asia Pacific, and Europe (see Erasmus programmes).[29] However, this study supports internationalisation of HEIs that includes international talent and experience for a rich and diverse student and staff experience. Internationalisation at home and an international curriculum provides an inclusive education for all.

Local Staff

(a) Create and execute **comprehensive intercultural training** for staff to better prepare them to deal with increased staff mobility.
(b) **Build strategic networks** between local HEIs (public and private) and international HEIs – Academics must continuously search for bright, new research ideas that could impact society in a positive and productive manner. Strategic links between universities at local, regional, and international levels could pave the way for insightful and meaningful contribution of new knowledge to society.
(c) For this to take place, it is imperative that MOHE provides **sample funding** to qualified academicians to have short-term stints abroad. These stints may prove useful in providing short- and long-term innovative solutions in addressing common global challenges.
(d) **Mobility performance tracking** should be made one of the key indicators for faculty promotion.
(e) **Encourage teaching mobility** (**local**, **regional**, and **global**). Sharing of expert resource persons is key to further cooperation in research and publications.
(f) **Incentives for international cooperation** in research should be carefully constructed for impactful socio-economic development at the local, national, regional, and international levels.

(g) For example, **conference participation is key** to finding experts in research areas, identifying partners in research, and also co-authoring international peer-reviewed publications. At these conferences, young scholars in particular could start building their strategic linkages for career growth in their areas of expertise.

(h) **Close monitoring of Memorandums of Agreement (MoAs) and Memorandums of Understanding (MoUs)** with international institutions. The relevant units in HEIs must target best partners that provide relevant opportunities for talent building, research innovation, and employability opportunities.

International Staff

(a) A more rigorous international faculty recruitment process should be instituted.

(b) New contract terms for international faculty with good performance. HEIs should reward international faculty with a longer term work contracts and ample research grants to enable them to plan for their teaching, research, and publication activities.

Conclusion

3.3.28 It is hoped that with the adoption of the above recommendations, the benefits of staff mobility programmes can truly be realised. In addition to the new knowledge, skills, and experiences that can benefit HEIs, short-term incoming mobility programmes can also be revenue-generating.

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3.4 Academic Programmes

Introduction

3.4.1 Academic programmes refer to a set of modules that are structured for a specified duration and learning volume to achieve the stated learning outcomes which usually leads to an award of a qualification.[1] It is the backbone and core business of any HEI. Academic programmes are also designed to address and capture the local and international community needs. Some academic programmes are labelled as prestigious programmes (e.g. Medicinae Baccalaureus Baccalaureus Chirurgiae, MBBS – Bachelor of Medicine) which do not bring in high returns on investment but increase the reputation of an HEI. Some academic programmes are designed to capture the international markets (e.g. Bachelor of International Business; Bachelor of International Tourism).

3.4.2 The flexibility and composition of an academic programme also play a part in the decision making of the potential students in HEIs. Furthermore, the availability of a plethora of academic programmes in an HEI was identified as main factor – in addition to mode of delivery and areas of specialisation – of why an HEI is selected as the destination of tertiary education.[2,3] However, a recent study on 200 students from a university in northern Malaysia revealed that the academic programme was not a significant factor in students' (both local or international) decision in choosing an HEI in Malaysia.[4]

3.4.3 The purpose of an academic programme is to:

(a) Increase students' knowledge and understanding in a field of study or discipline;
(b) Qualify students for employment in an occupation or range of occupations; and/or
(c) Prepare students for advanced study.

3.4.4 The academic programmes offered must:

(a) Comply with academic programme policies, procedures and guidelines;
(b) Be internally consistent with purposes, objectives, and learning outcomes aligned; and
(c) Stand alone without requiring completion of other awards except for programmes designed for transfer and admission to graduate programmes.

Where Are We Now?

Overall Satisfaction with Academic Programmes in HEIs

3.4.5 Our findings from the survey align with findings from earlier studies.[5] Overall, satisfaction was high for both local and international staff, except on the issue of funding, where both sets of stakeholders were only moderately satisfied.

Table 3.13 Local and International Staff Levels of Satisfaction with the Internationalisation of Academic Programmes in Their HEIs

Questions	Local Staff (N = 358)		International Staff (N = 33)	
	Mean	Level	Mean	Level
I am satisfied that my institution tries to ensure all course materials and assessments are available in English.	4.25	High	4.64	High
I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc.).	3.89	High	4.12	High
I am satisfied with the funding allocated from my institution for internalisation activities.	3.46	Moderate	3.48	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Strengths and Areas for Improvement

3.4.6 Upholding the standards of any academic programme is important. Periodic, systematic reviews of the processes and systems will ensure this is achieved. Additionally, it is imperative to identify how teaching and curriculum could be improved in order to compete with top international institutions. The survey questions were designed to answer the above questions, and through the policy labs and survey findings, we analysed the feedback to address these questions.

Analysing the Achievements of Existing Internationalisation of Academic Programmes and Implemented Initiatives in HEIs

3.4.7 As HEIs are governed by MOHE, compliance and adherence to the guidelines and policies are fulfilled with reference to MQA's Code of Practice for Programme Accreditation (COPPA) and MQA Guidelines to Good Practice.[6] In addition, there are existing policies and centres which oversee the implementation of internationalisation initiatives of higher education and are focused on quality assurance of academic programmes at various HEIs.

3.4.8 To ensure quality assurance compliance amidst economic pressures, some researchers have called for innovative responses within a programme as well as maintaining competitiveness in HEIs to attract both international and local students.[7] Besides benchmarking with the global best practices, HEIs need to look for enhancements within the system and tailor them to Malaysia's national identity (e.g. Bahasa Malaysia being offered an elective subject, available to international students and staff).

3.4.9 Additionally, HEIs also have rigorous processes to ensure that their programmes are implemented according to quality assurance protocols. However, the Study Team's observations from several campuses during the policy lab sessions reveal that many of the policies and initiatives of the HEI are not widely disseminated or publicised. Our interviews also indicated that these policies and initiatives are not well-cascaded or disseminated to the junior staff. Non-management level staff are unaware of these policies and initiatives.

Survey feedback

> *"I was not aware of the functions of the Unit. Are they supposed to advise us on the academic requirements and benchmarks?"*
>
> *Public HEI International Staff*

> *"Maybe my boss knows about this… He sat in Senate. But I am not aware of any initiative on this area."*
>
> *Private HEI Local Staff*

HEI Commitment and Efforts to Encourage Internationalisation of Academic Programmes

3.4.10 In the survey, we asked the following questions to examine how local and international staff viewed the efforts and commitment of their academic programmes to encourage internationalisation (see **Figures 3.8** and **Figure 3.9**). The quantitative data suggests both local and international staff show high levels of agreement that their HEIs make an effort and show commitment towards the internationalisation of their academic programmes, with mean agreement scores of 3.96 and above out of 5.00.

Figure 3.8 Mean Scores for Academic Programmes (Variable) Among International Staff

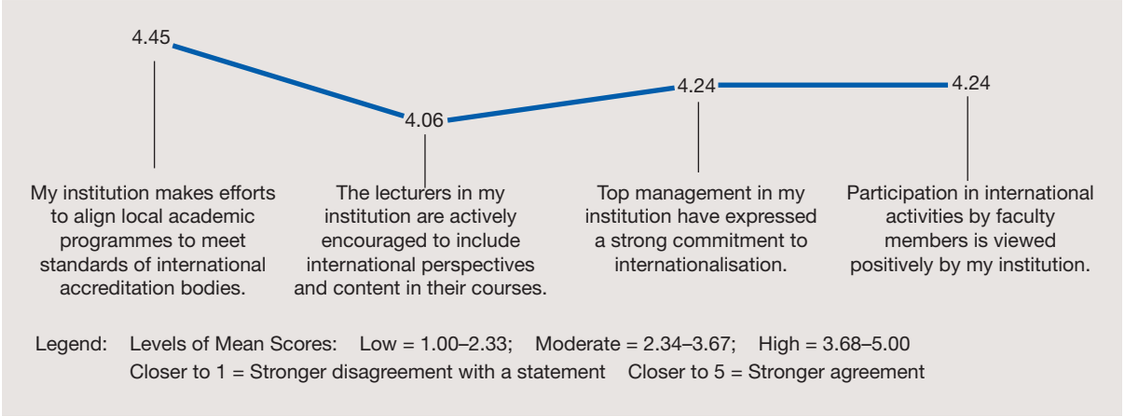

Figure 3.9 Mean Scores for Academic Programmes (Variable) Among Local Staff

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = Stronger disagreement with a statement Closer to 5 = Stronger agreement

Evaluating the Effectiveness of Existing Internationalisation of Academic Programmes in HEIs in Malaysia

3.4.11 Feedback gathered from the policy labs and survey findings on the effectiveness of existing internationalisation of academic programmes was mixed. The international staff from HEIs are of the opinion that improving academic programmes is not just about updating/improving the curriculum/syllabus; lecturers and HEIs also play an important role to ensure Malaysian HEIs are able to compete with top international institutions. Lecturers need to be more involved and hands-on with their teaching methods, thus helping to develop students who are able to think critically.

3.4.12 A small number of participants are of the opinion that the current academic programmes in the HEIs are adequate and have incorporated internationalisation.

Survey feedback

> *"Most of our resources and syllabus are international based, I don't think we need more of international perspective into academic program."*
>
> *Public HEI Local Staff*

3.4.13 However, the participants stated that HEIs should consider the following:

- Implement English as the medium for teaching and correspondences.
- Ensure staff is proficient in English by setting minimum proficiency levels.

3.4.14 During our data analysis of an open-ended question "**How can the teaching and curriculum be improved in order to compete with top international institutions?**", international students were very concerned about the quality of teaching and learning in their institutions. They called for more practical components, particularly in laboratory work and obtaining international internships. Additionally, local Public HEI students were especially concerned about the limited worldviews of their lecturers. During the interviews, some shared their expectations of what they hoped to see in the academic staff as well as the academic programmes.

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Table 3.14 Facets of Academic Programming that Various Stakeholders Feel Ought to be Improved to Compete with Top International HEIs

	Areas of Concern								
Stakeholders	**Teaching and Learning Methods**	**Quality of Academic Staff**	**Internationalisation of Curriculum**	**English as Medium of Communication**	**Funding**	**Autonomy**	**Student Quality and Standards**	**Professional Development and Training for Staff**	**Internatonal Mindset**
International Students	✓	✓	✓	✓					
Local Students		✓	✓					✓	
International Staff			✓	✓	✓	✓	✓	✓	
Local Staff	✓		✓			✓		✓	✓

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Survey feedback

> *"Observe how teaching and curriculum is done internationally, try to adapt or follow what they are doing. Provide more hands-on approach, critical thinking contents. Ensure academicians are passionate about teaching and able to deliver content in an engaging manner. Incorporate active learning and be able to facilitate such learning method. Encourage student-led sessions. Avoid lecture-based teaching as much. Provide opportunity for scenarios to match teaching content."*
>
> *Private HEI Local Staff*

3.4.15 Participants also questioned the hiring process of academic staff.

> *"Hire qualified people instead of going for "Malay-Centric" hiring. My university couldn't keep some very good academicians who actually knew their subjects well and replaced them with sub-par or even under qualified Malay academicians."*
>
> *Public HEI International Student*

The Way Forward

3.4.16 Based on feedback gathered from the policy labs and survey findings, the following suggestions are put forward.

Inculcating International Mindsets

3.4.17 Some local Public HEI staff felt that there was a lack of academic professionalism and ethics among some segments of academic staff in HEIs. As such, they called for training in these areas which will also cultivate a sense of appreciation of internationalisation and adherence to established international academic standards. Broadening narrow mindsets meant to some of them a widening of academic freedom, the ability to critique ideas, and an establishing of practices for the sake of improving a country's economy or its practices.

Survey and policy lab feedback

> *"Using case studies is a good start but more must be done in terms of comparative studies and research. Otherwise, students graduate with a very limited or narrow mindset. My faculty tries to provide international perspectives through different seminars and workshops but this is not enough. Together with this perspective, we MUST also be ENABLED and ALLOWED to critique Malaysia and its systems. We cannot compare with the intention to highlight only what is good in Malaysia. We MUST acknowledge weaknesses and glaring flaws like a lack of academic professionalism and ethics amongst university staff."*
>
> *Public HEI Local Staff*

3.4.18 Intercultural training was singled out as particularly important for lecturers and administrative staff. Furthermore, there were calls to engage more international students as post-doctoral assistants and teaching assistants. It was important to engage such students and international staff in academic and cultural matters to seek their views and the views of local students as well.

> *"Be honest in making Malaysia embrace globalisation as a priority; free from the clusters of inequalities."*
>
> *Private HEI Local Staff*

> *"Mentality needs to change. Worldview needs to expand. In [my university] specifically there is still an "us versus them" mentality and a rejection of "Western" education to quite a large extent. I think this hostility is regressive and not forward thinking at all."*
>
> *Public HEI International Student*

Internationalisation of the Curriculum

3.4.19 Students called for an emulation of top international standards and regular reviews of the curriculum. Students also enjoyed the teaching and learning when they felt that their institution was very international, where the staff come from many different backgrounds and have taught at various institutions. The following suggestions were made during the policy labs:

(a) Benchmark with top institutions to learn best practices;
(b) Review and update curriculum and resources yearly;
(c) Have more student exchanges with international institutions;
(d) Have international accreditation of top programmes;
(e) Widen scope of curriculum – present state is too narrow;
(f) Use English in class more effectively, use English in the curriculum; and
(g) Engage industry and professional associations in designing the curriculum.

3.4.20 Most recommendations centred on benchmarking with internationally renowned institutions, working on research and teaching collaborations with international universities, and incorporating international case studies into the curriculum. During the UM-focused policy lab, the suggestion was to focus on bilateral tripartite partnerships to create win-win situation.

Policy lab feedback

> *"By achieving international accreditation like AACSB for business schools and ABET for other schools. Exchanging faculty with world class institutions like Harvard, Cambridge and MIT and other Ivy League institutions."*
>
> *Public HEI International Student*

3.4.21 There were also calls to organise public lectures given by internationally renowned speakers and experts. From the interviews, policy labs, and walking around the campus, some HEIs have been very actively organising international events but it may be limited to just certain groups of audience due to insufficient funding.

3.4.22 Ideas such as making the internationalisation effort as part of the classroom assignments and daily routine would be enough to promote the international mindset in the community.

Survey feedback

> *"Invite experts, including academics, industry experts, NGOs and institutions of value to contribute a varied and globalized perspective in the creation of new programmes. Most syllabi tend to be very focused on the country of origin so making sure that cases studied are more international helps."*
>
> *Private HEI Local Staff*

3.4.23 Besides the curriculum, some Public HEI staff recommended the hiring of more international students as post-doctoral and teaching assistants to broaden local perspectives in academia and research. Others recommended hosting more international experts such as visiting professors and scholars, and increasing the number of international staff at the universities. Complicated and unclear visa processes and the current policy on international students to work part-time only during semester breaks posed serious concerns to international students. Many of them (international students) are unsure whether current immigration rules permit them to work part-time and in what capacity. There were also recommendations to allow international students to extend their visa period post-study as well as to allow them to become full-time staff following their academic internship stints.

> *"We need help to find a job past internship. Why can(t) our internship be converted into full time employment?"*
>
> *Private HEI International Student*

3.4.24 Suggestions were also given to adopt the standards abroad locally. An innovation in academic programmes takes into consideration the below:[8]

(a) Changing the definition of learning and teaching according to best practices;
(b) Defining how best teaching practices align with institutional vision and missions;
(c) Preparing graduates with the skillset required by industry and supporting national policy development;[9] and
(d) Revamping curriculum development to focus on global needs and marketability while maintaining educational values.

Survey feedback

> *"Probably we can (adopt) the standard of Programme with the university abroad. Example in Malaysia we followed MQF, maybe, we can (adapt) the MQF with the university abroad framework as well."*
>
> *Private HEI Local Staff*

Staff Training

3.4.25 Local Public HEI staff recommended sending staff for staff exchange programmes and sabbaticals abroad. English proficiency for academics and administrative staff was emphasised. On the quality of their lecturers, some students thought that some of their lecturers were sub-par. International Public HEI students felt more strongly than Private HEI students to call for hiring of international professors and better training their local lecturers in English as well as expanding their worldviews.

3.4.26 UTM Global Johor has demonstrated its commitment by sending not just their academic staff, but also their support administrative staff abroad for staff exchange programmes.

Survey feedback

> *"Make sure that academic staff are regularly sent abroad for training in state-of-the-art pedagogy as well as research exchanges in international laboratories."*
>
> *Private HEI Local Staff*

Autonomy

3.4.27 Some local Public and Private HEI staff called for more academic autonomy. MQA was singled out as an entity that restricts their autonomy in designing a more global-oriented curriculum.

> *"The permission to go overseas comes from the secretary general (KSU) which is ridiculous. The authority should be given to the vice chancellor who knows more on the value of the interaction."*
>
> *Public HEI Local Staff*

Inclusion on Campus

3.4.28 Participants called for more inclusion on campus. They would like to see the usage of English in daily life such as in noticeboards. Participants felt that internationalisation could be embedded into their daily lives and not limited to just academic programmes.

> *"Instructions and naming of houses, offices and venues in my school is written in local language. It makes it difficult for international students to understand. Instructions and naming should be written on the walls or sign boards in both English and local language."*
>
> *Public HEI International Student*

Conclusion

3.4.29 The integration of internationalisation in HEIs require an innovative and committed approach. The HEIs would need to creatively develop and venture into new innovative programmes that are within the quality assurance standards and are marketable and recognised by the industry without compromising educational values. Together with all the stakeholders, HEIs need to conduct a comprehensive exercise to identify the fundamental challenges (e.g. staff training, English proficiency, and openness to internationalisation) of internationalisation in their academic programmes and establish a continuous self-monitoring system to enhance accountability.

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3.5 Governance and Autonomy

Introduction

3.5.1 Malaysia's internationalisation strategies and policies for higher education are connected to the broader national goal of transitioning from a developing country to a developed country (originally, by 2020). Our approach towards internationalisation has usually been a top-down formulation, with the Government making the policies in consultation with selected key personnel of universities, then filtering them down to the HEIs and relevant stakeholders for implementation. As such, in order to move forward, it is vital that we examine Malaysia's approaches to governance and the degree to which it allows relevant stakeholders to have autonomy.

3.5.2 This critical review uses the definition of "*governance*" at a national level to refer to "the interaction between the Government (whose principal elements include the constitution, legislature, executive and judiciary) and the HEIs that influence and enact policies and decisions concerning institutional development of the HEIs".[1] Governance at an institutional level refers to the interaction between institutional leadership, institutional stakeholders, and the framework of policies developed and implemented to drive internationalisation efforts in individual HEIs.

3.5.3 Autonomy in this review refers to the freedom and decision-making ability that HEIs in Malaysia are accorded by the Government to develop the appropriate organisational structures with systems (formal and informal) for communication, liaison, and coordination of internationalisation initiatives.[2]

Where Are We Now?

3.5.4 Two main strategic documents drive the internationalisation impetus of higher education: 2011 Internationalisation Policy for Higher Education Malaysia[3] and Malaysia Education Blueprint 2015 – 2025 (Higher Education).[4] The 2011 Internationalisation Policy document developed the operational strategy aimed at achieving the goal of attracting 150,000 international students to Malaysia by 2020.[5] The MEB (HE) espouses key aspects of internationalisation such as in areas of student and staff mobility, international student recruitment, the improvement of teaching, learning and research in universities and the consolidation of Malaysia as an internationally recognised education hub.[6]

3.5.5 In this all-encompassing emphasis on internationalisation, Malaysia therefore has a "comprehensive internationalisation strategy, as well as a student mobility strategy, with an inbound mobility focus."[7] In this review, we examine how effective Malaysia's governance structure has been in the implementation of this comprehensive internationalisation strategy.

Strengths

University Rankings and Reputation

3.5.6 The agendas of institutional leaders and national governments are motivated by global, regional, and national university rankings, and this is evident in Malaysia where considerable effort and funding have been put into the development of some of the best public universities to be world-class in terms of university rankings and academic excellence. In this respect, Malaysia has done considerably well with many of its top public and private universities moving rapidly up in the rankings between 2011 and 2020.

Table 3.15 QS Ranking of Malaysian Universities (2011 – 2020)[8]

HEI	2011	2018	2019	2020
Universiti Malaya	207	114	87	70
Universiti Putra Malaysia	319	229	202	159
Universiti Kebangsaan Malaysia	263	230	184	160
Universiti Sains Malaysia	309	264	207	165
Universiti Teknologi Malaysia	265	253	228	217
UCSI University	–	–	481	442
Universiti Teknologi PETRONAS	–	601–650	521–530	482
Taylor's University	–	–	601–650	511–520
Management & Science University	–	–	–	541–550

3.5.7 From **Table 3.15** above, it can be seen that Universiti Malaya (70) is now ranked in the top 100 world universities in 2020, with three other universities, Universiti Putra Malaysia (159), Universiti Kebangsaan Malaysia (160) and Universiti Sains Malaysia (165) in the top 200 universities in the Quacquarelli Symonds (QS) ranking.[9]

3.5.8 Malaysia's private universities are also swiftly moving up the rankings from previously unranked positions in 2011 to the top 500 universities in 2020: UCSI (442) and Universiti Teknologi PETRONAS (482).

3.5.9 While some critics of university rankings may complain about the negative implications of such a pursuit of excellence (or what said critics might call "chasing after rankings") by the universities, their staff, and students; there is also no denying that such academic rankings are proxy indicators of academic performance and achievements for the massive injection of funds and effort put into higher education.

3.5.10 In its implementation of the 2011 Internationalisation Policy, endeavours made by Malaysian higher education stakeholders to attract international students are also showing results, thus contributing to impact on its rankings. Eighteen of Malaysia's ranked universities have improved their score in QS 2020 for Inbound Exchange, which measures the size of an institution's inbound exchange programme.[10]

2011 Internationalisation Policy Measurables and Their Outcomes

3.5.11 Presidents, Vice-Chancellors, Deputy Vice-Chancellors, Directors of Internationalisation, and Heads of Department attended the six policy labs and were interviewed.[11] Leadership was abundant and evident in these labs and interviews. One participant mentioned that it was more important to ensure that the meaning and value of education were imparted correctly rather than focusing on internationalisation directly. If we focus on the right things, then the right outcomes would occur.

3.5.12 Most concurred that internationlisation policy is quite well-implemented. International student recruitment has gone up. There is respect given and acceptance of internationalisation. Diversity appeared to be welcomed among the HEIs.

Enabling all Internationalisation Activities in HEIs through a Coordinating Unit

3.5.13 With reference to the setting up of an operational office or unit at the HEI level, for example an Office of International Affairs, for the management and administration of internationalisation initiatives; out of 1,240 local students surveyed, their mean score was 4.07 out of 5.00 in response to the statement: "*My institution has an operational office which facilitates the admission process of international students.*" This indicates a high level of agreement. The mean score of the 738 international students surveyed was 3.81, which was still in the High category of agreement. Thus, out of the 61 institutions surveyed, it is very likely that such offices of international affairs have been set up in most HEIs to serve the functions prescribed.

The Use of English as a Common Medium of Communication with International Students

3.5.14 The English language has been used as the medium of instruction in private HEIs and for most postgraduate degrees in public HEIs. In the survey, 47.6% of local students strongly agreed, and 33.2% of international students agreed to the statement: "*My institution uses English as a form of communication to its students and staff (e.g.: emails, announcements, etc.).*" 35.8% of local students and 30.5% of international students strongly agreed and agreed, respectively, to the use of English as a medium of communication. The survey findings would suggest that the implementation of English in Malaysian HEIs is well underway and that this represents one of Malaysia's strengths.

3.5.15 However, the policy labs, interviews, focus groups, and open-ended comments in surveys yielded a mixed picture on the use of English in HEIs. While some local staff and local students were supportive of the use of English in the classroom and in the universities, many international students and international staff reported that English had not been used consistently due to the use of the national language in most events in public universities

(without designated translators). They also reported the unavailability of signs in English in some universities to direct them to designated places on campus. Low proficiency of English among local lecturers, administrative staff, and local students pose a barrier to communication and interaction with international students and international staff, and vice versa for the internationals as seen in the quotations below.

Survey feedback

> *"Not really because some Malaysian isolates international students due to communication (Lack of English proficiency)."*
>
> *Private HEI Local Student*

> *"No. From my experience here in my institution there are treated rather poorly and unfairly. Most of the administrative events are conducted in Bahasa Malaysia and there are no translators to assist them."*
>
> *Public HEI International Student*

Areas for Improvement

Level of Institutional Support for Internationalisation

3.5.16 The various stakeholders: local students, local staff, international students and international staff were surveyed on their satisfaction with governmental and institutional support for internationalisation (see **Table 3.16**).

Table 3.16 Local and International Student Levels of Satisfaction with Institutional Support for Internationalisation

Questions	Local Student (N = 1,240)		International Student (N = 738)	
	Mean	Level	Mean	Level
I am satisfied with the support my institution provides to the students participating in international projects or networking.	3.83	High	3.50	Moderate
I am satisfied with the support the Ministry of Education provides to International Students.	3.65	Moderate	3.42	Moderate
I am satisfied that my international friends and I are well taken care of by my institution.	Not applicable		3.53	Moderate
I am satisfied that my international friends are well taken care of by my institution.	3.80	High	Not applicable	

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

3.5.17 The mean scores of all three items show that the satisfaction rate was only moderate for international students. In the open-ended comments, many international and some local students felt that international students were not given adequate opportunities for international research, mobility projects, and international networking.

3.5.18 Similarly, local and international staff were asked if they were satisfied with HEI policies in general and the support they received from their institutions in particular. The satisfaction level was only moderate for international staff, with only a 3.15 mean score out of 5.00. The satisfaction level of local staff, like those of local students, was high for two of the three questions asked in **Table 3.17** below. It would appear that local staff and students have a rosier picture of the institutional support for their international counterparts than the international staff and students themselves.

Table 3.17 Local and International Staff Levels of Satisfaction with Institutional Support for Internationalisation

Questions	Local Staff (N = 358)		International Staff (N = 33)	
	Mean	Level	Mean	Level
I am satisfied with the support my institution provides to participating students in international projects or networking.	3.81	High	3.64	Moderate
I am satisfied with the support the Ministry of Education provides participating students in international research, projects or networking.	3.58	Moderate	3.15	Moderate
I am satisfied that my international friends are well taken care of by my institution.	3.82	High	3.45	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

3.5.19 International staff had similar views as that of local students. They commented in policy labs and surveys that they did not have the same opportunities in getting research grants, sabbaticals, and study tours abroad as local staff. The short durations given to their contracts and the tedious processes for contract renewals and visas extensions were particular pain points.

3.5.20 The survey found that the Governance and Autonomy cluster acted as a significant factor for local staff only in predicting the satisfaction of their internationalisation experience (see **Appendix G**: Structural Modelling).

Immigration and Visa Issues

3.5.21 A constant and repeated piece of feedback from all stakeholders – particularly from international students, international staff, and local staff in charge of international students – had to do with immigration and visa issues.[12] From the focus groups, interviews, policy labs and survey comments, the two issues that kept emerging were those of the long period taken for visa processing and renewal as well as the inconsistent implementation of immigration and visa procedures. From the quotations below, it can be seen that many international students feel their treatment by Immigration authorities and the police is sometimes disrespectful and demeaning.

Survey feedback

> *"1. The processing is lengthy and long-winded.*
> *2. The visa renewal is not user friendly.*
> *3. The system is not frequently updated.*
> *4. EMGS functions at the behest of Immigration. Blame game must stop.*
> *5. Little Napoleons are still making self guided rules to frustrate the process.*
> *6. Malaysian missions overseas does not have SOP on processing SEV once the VAL is issued.*
> *7. Arrival process at airport and immigration reception is similar to a foreign worker. No special rooms for students to identify the difference.*
> *8. Requiring to stand in the same line with workers in the queue is demeaning."*
>
> *Private HEI International Student*

> *"Most of the times when I go to government sector to do some documents they treated me well and nicely for example I have Malaysian driving license and Malaysian motor vehicle. But, sometimes I suffer from the police people when they just stop me to find any problem with my paper to bribe them I know this is very hard to control. But in general I am satisfied while some people they are very nice and respect me and treated me like family member. By inviting me to their weddings or funerals."*
>
> *Public HEI International Student*

3.5.22 Another sore point was that although immigration policies are standard, they are interpreted differently in each state. Hence, international students are subjected to different immigration rules as they move from one university to another.

Lack of Inter-Governmental and Inter-Agency Cooperation

3.5.23 There is inadequate inter-governmental and inter-agency cooperation among the different ministries and government departments even within MOHE. EMGS is the regularly cited for slow processing and restrictions on visas (e.g. requiring international students to process their visa only when they are in Malaysia). There were repeated recommendations for EMGS to work more effectively and collaboratively with Immigration and Home Affairs.

3.5.24 Communication or the lack thereof was cited quite often in the inter-governmental and inter-agency processes and procedures which led to delays in immigration processing and student arrivals. All these impediments have created a picture of inefficiency for international students and staff.

3.5.25 There are not enough incentives and encouragement for postgraduate students who wish to bring their families to Malaysia. We also received feedback that news of the fake international students trafficked into Malaysia affects the global reputation of bona fide HEIs in Malaysia.

Administrative Policies at HEI and National Level

3.5.26 Some international students had issues with administrative policies regarding housing/accommodation, medical insurance, banking, and facilities. Housing appears to be a problem as there are often only a few on-campus accommodation provided for international students. In finding off-campus accommodation, on the other hand, international students face bias and discrimination from local people. It is interesting to note that some local students however, believed that international students had access to housing and preferential treatment in this area.

3.5.27 Some international students cited receiving threats by university or college administration. Another issue that was repeatedly mentioned was the closure of bank accounts for some international students without prior communication or consultation with these students.

3.5.28 Some international students requested to be able to work part-time during their studies and to be able to work in Malaysia after graduation.

Survey feedback

> *"No. There are discrimination in educational activities, poor welfare and accommodation, visa processing requirements and fees, threat from management when we make complaints, shortchanging (not using current USD rate) of students by bursary for students whose tuition fees are paid directly by their sponsor into Univ account, Indiscriminate and selective closure of account without genuine reasons, foreign students are forced to take or participate in research with grants but are never given any stipends despite clearly stated in the conditions of research grant, our insurance is too restricted to hospitalization, not medical consultancy."*
>
> *Public HEI International Student*

Autonomy (or the Lack Thereof) in Private HEIs

3.5.29. One important finding was that as private HEIs pointed out, the playing field is not level for them. They are governed by Act 555 which restricts their autonomy. For example, top public universities are allowed to welcome their students from different immigration embarkation points. All private HEIs, regardless of their SETARA ranking, can only meet their students at the Kuala Lumpur International Airport (KLIA) embarkation point.

3.5.30 For the Education cluster in Educity, Johor, this restriction disadvantages them when Singapore and Batam embarkation points are closer to them than KLIA. UTM, in contrast, can use both Singapore and Batam embarkation and disembarkation gateways.

3.5.31 Another autonomy issue that arose was the lack of autonomy that many leaders and staff of private HEIs felt regarding Malaysian Qualification Agency accreditation issues. Feedback was given at the policy labs and interviews regarding the frustration felt and how this impeded their drive for academic excellence and further internationalisation of the curriculum. Private HEIs in some cases, have called for the removal of Mata Pelajaran Umum (MPU) subjects and a widening of international focus and content in their curriculum.

3.5.32 From the interviews and policy labs, this lack of access and unequal playing field did not enable top to middle level private HEIs to move faster to secure research funding, international collaborations, and access to international networks. After all, if private HEIs are to be encouraged to move up the global and regional rankings of universities, then they should be supported and nurtured in the same manner as the public HEIs.

Lack of Monitoring and Evaluation of HEI Internationalisation Programmes

3.5.33 Previously, internationalisation strategies and outcomes were tracked under the National Key Economic Area (NKEA) Steering Committee, chaired by the former Prime Minister. Organisationally, it meant that there was an apex within the tracking and decision-making process which ensured that all entities of government (including education, immigration, police and diplomatic official) adhered to the decisions made and implemented them accordingly.

3.5.34 Currently, there seems to be no apex decision-making and coordinating body that ensures all government agencies work collaboratively to enhance and improve internationalisation efforts in Malaysia. Thus, there seems to be a compelling need for an Inter-Ministerial Committee on Internationalisation of Higher Education chaired jointly by MOHE and MHA to ensure committed leadership and strong policy.

The Way Forward

3.5.35 These are some of the recommendations made in interviews, surveys, and policy labs for the betterment of our national policies and implementation of a more efficient governance framework.

(a) Establish an Inter-Ministerial Committee on Internationalisation of Higher Education chaired jointly by MOHE and MHA to ensure committed leadership and strong policy.
(b) Establish a clear concept of internationalisation for the related government agencies which shows how this concept will add to revenue and the economy.
(c) Grant private HEIs more access to research funding, and support their efforts to establish more international collaborations and mobility projects.
(d) Review Act 555 and grant private HEIs more autonomy in the running of their administrations (including MQA).

(e) Design integrated policies for Ministries and set KPIs for the related government agencies with regard to internationalisation.
(f) Conduct regular open dialogues with government agencies dealing with international students and HEIs.
(g) Hold dialogues with HEIs based on faculties and disciplines and not according to public and private HEIs. For example, hold a session on international recruitment of medical students.
(h) Have an EMGS staff attached to the HEIs, so that they can better understand the needs of the HEIs.
(i) Run annual satisfaction surveys of key agencies dealing with international staff and students such as EMGS, Immigration, and the police; and have these survey results made public.
(j) Allow international students to work part-time during their studies and allow those who wish to work after graduation to do so.

Conclusion

3.5.36 In general, Malaysian HEIs appear to be doing well in their trajectory of growth with regards to internationalisation. As discussed earlier, the Malaysian Government has one of the most comprehensive internationalisation strategies with well-established student mobility focuses in the world. This is to be admired and is a cause for celebration. However, the critical reviews have shown areas of patchy implementation, weak structures, and weak cooperation among inter-governmental and inter-agency bodies. Therefore, there is a compelling need to make changes, reorient some directions, and improve the efficiency of certain agencies such as EMGS and the Immigration Department. The implementation of the above recommendations should set Malaysia down this path.

References for Part 3.5

1 Ministry of Higher Education Malaysia. (2011). The Internationalisation Policy for Higher Education 2011.

2 Ibid.

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7 de Wit, H., Rumbley, L., Craciun, D., Mihut, G., & Woldegiyorgis, A. (2019). International Mapping of National Tertiary Education Internationalisation Strategies and Plans (NTEISPs).

8 Ibid.

9 Top Universities (2020) Regional Rankings.

10 Sani, R. (2019, November 27). UM now 13th in QS Asia university ranking. New Straits Times.

11 15 Nov 2019: Policy Lab 2 – Sunway University; 18 Nov 2019: Policy Lab 3 - University of Reading Malaysia ; 22 Nov 2019: Policy Lab 4 – Universiti Sains Malaysia; 22 Nov 2019: Interview with Cik Nor Asmahan Othman, TalentCorp; 25 Nov 2019: Interview with Mr Nicholas Goh, Chief Operating Officer, Quest International University; 22 Nov 2019: Interview with Dr Azrai Abdullah, Registrar, Universiti Teknologi Petronas; 23 Dec 2019: Prof Dato' Ansary Ahmed, President & CEO, AEU University.

12 Ibid.

3.6 Research and Development (R&D)

Introduction

3.6.1 The internationalisation of research and development (R&D) has assumed great importance in recent years given the increasing attention accorded to international university rankings as well as its significance in a nation's innovation ecosystem. This section will provide an overview of the internationalisation of R&D in Malaysia's higher education sector and as a summary of our strengths and challenges. It will then make some recommendations to take things forward.

3.6.2 In this report, R&D refers to creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture, and society – and to devise new applications of available knowledge.[1]

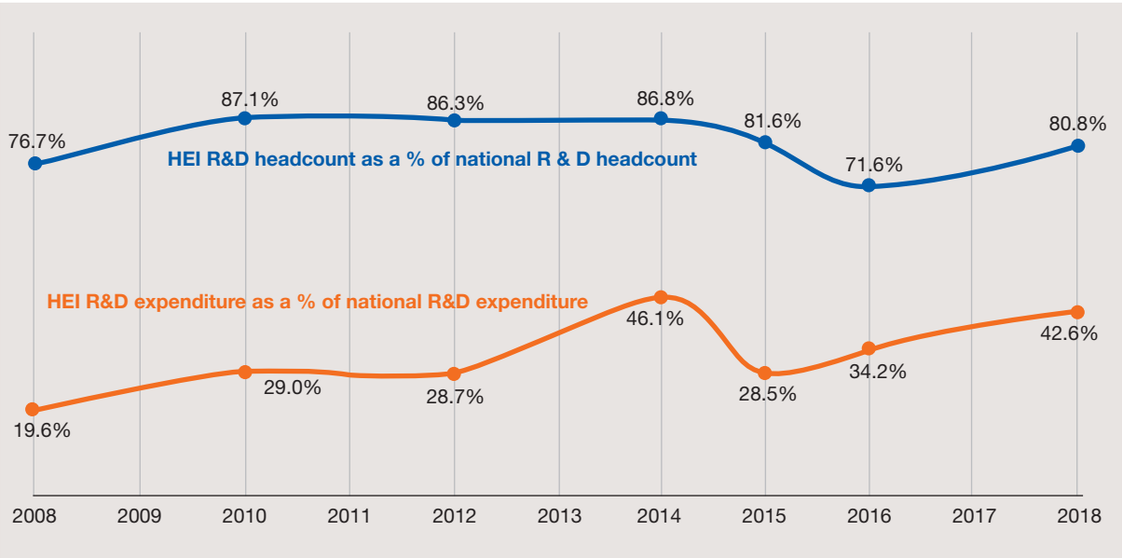
Where Are We Now?

R&D in HEIs

3.6.3 Numerous grant schemes to support basic and applied research activities among researchers in both public and private HEIs have been introduced. These include, among others, Fundamental Research Grant Scheme (FRGS), Exploratory Research Grant Scheme (ERGS), Long Term Research Grant Scheme (LRGS), Prototype Research Grant Scheme (PRGS) and specific research funding for Higher Institution Centre of Excellence (HICoE). Additionally, the Government established the Research Universities (RUs) with the objective of promoting research excellence in the designated public HEIs as well as reforming the organisation of research (into clusters) in these universities.

3.6.4 These concerted efforts have produced a sharp increase in the expenditure as well as in the number of researchers engaged in R&D in our HEIs, as given in **Figure 3.10**. HEIs witnessed a five-fold increase in R&D expenditure between 2008 and 2018. Similarly, there was a three-fold increase in the number of researchers – from 24,131 in 2008 to 72,806 in 2018. Presently, HEIs account for about 81% of the nation's researchers and almost 43% of the total national expenditure on R&D.[2]

Figure 3.10 Key Indicators of R&D in Malaysian HEIs (2008 – 2018)[3]



3.6.5 Although the Government has always been the main source of R&D funding for HEIs, the preponderance of Government funding has gradually declined from 91.4% in 2008 to 24.2% in 2018. This decline reflects the Government's initiative to make HEIs more self-sufficient. Funding from industry has increased from only 1.58% in 2008 to 6.5% in 2018 in HEIs. HEIs have also been receiving significant funding from other sources such as foreign funds, although their proportion of total HEI R&D funding is small.[4]

3.6.6 The results of increasing funding support for R&D are evident in the dramatic increase in the number of publications as well as overall rise in the rankings of the universities particularly the research universities. The number of papers published by researchers in the country reached 15,089 papers in 2019 – more than double the total achieved in 2010 (see **Figure 3.11**). Beyond the increase in the quantity of publications, there has been a growing upturn in the quality of papers published by Malaysian researchers with 39% of papers published in 2017 being categorised in the top 25% of journals ranked by Journal Impact Factor – an increase from the 35% recorded in 2013.[5] However, impact of our publications remain slightly below the global average and suggests that there is room for further improvement in our research performance (**Table 3.18**).

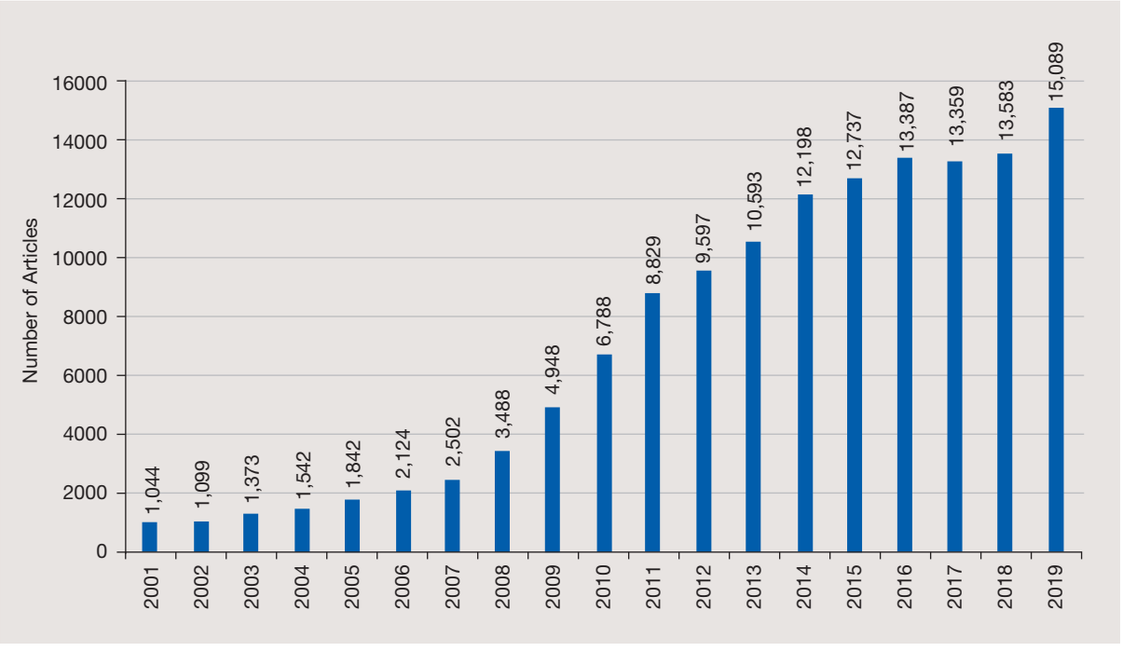
3.6.7 Given their research orientation, the five research universities (RUs) contributed almost 78%[6] of the total HEI publication output for the period 2001 – 2019 as well as 77%[7] of the total highly cited papers for the period 2013 – 2017. Collaborations (in terms of publications) between RUs and private HEIs are growing but pale when compared to collaborations between RUs (**Figure 3.12**).

Table 3.18 Overall Research Performance of HEIs (2013 – 2017)

Research Organisation	Research Performance Indicator					
	No. of Web Science Documents	% Documents in Q1Journals	Category Normalised Citation Impact	% Documents in Top 10%	No. of Highly Cited Papers	Derwent World Patents Index (DWPI) Families
All Research Organisations (2013–2017)	118,312	37.2%	0.95	8.1	718	5,453
Research Universities (2013–2017)	71,852	36.8%	0.95	8.5	552	789

Source: MOE and Clarivate Analytics (2018)

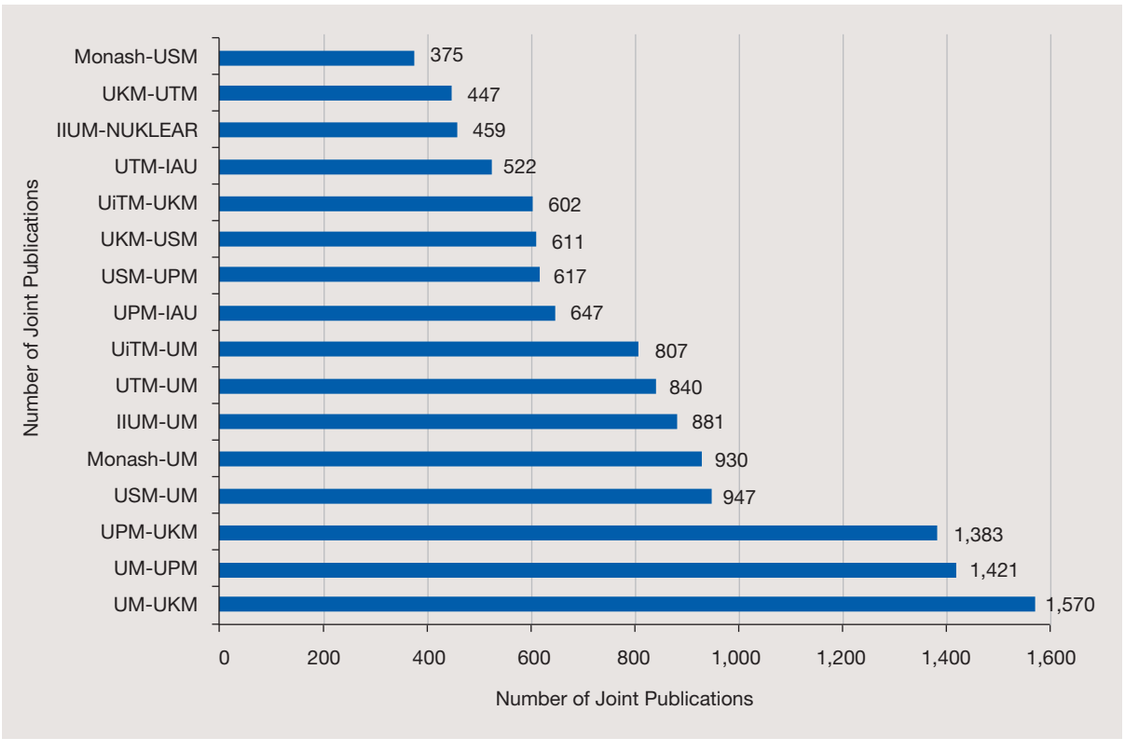
Figure 3.11 Total Number of Articles (2001 – 2019)



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

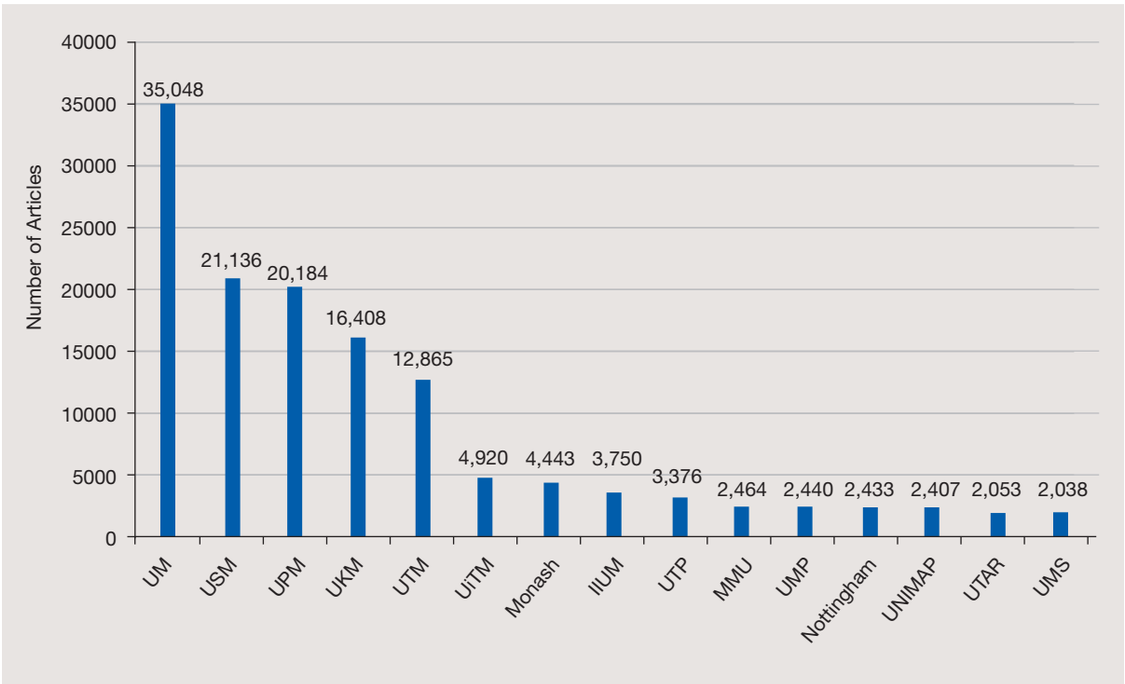
3.6.8 **Figure 3.13** shows the top 15 higher education institutions by publication counts. UM is the leading institution producing 13,912 (about 66%) more articles than the next highest institution – USM. The top five research universities – UM, USM, UPM, UKM and UTM – produced a total of 105,641 articles from 2001 to 2019.[8] This total accounted for 78% of the total articles in Malaysia. Private universities such as Monash, Nottingham, Multimedia University (MMU) and UTAR are among the top listed institutions. Their publication footprints are considerably evident in the scientific publishing landscape of Malaysia.

Figure 3.12 Top 16 Collaborating National Institutions



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

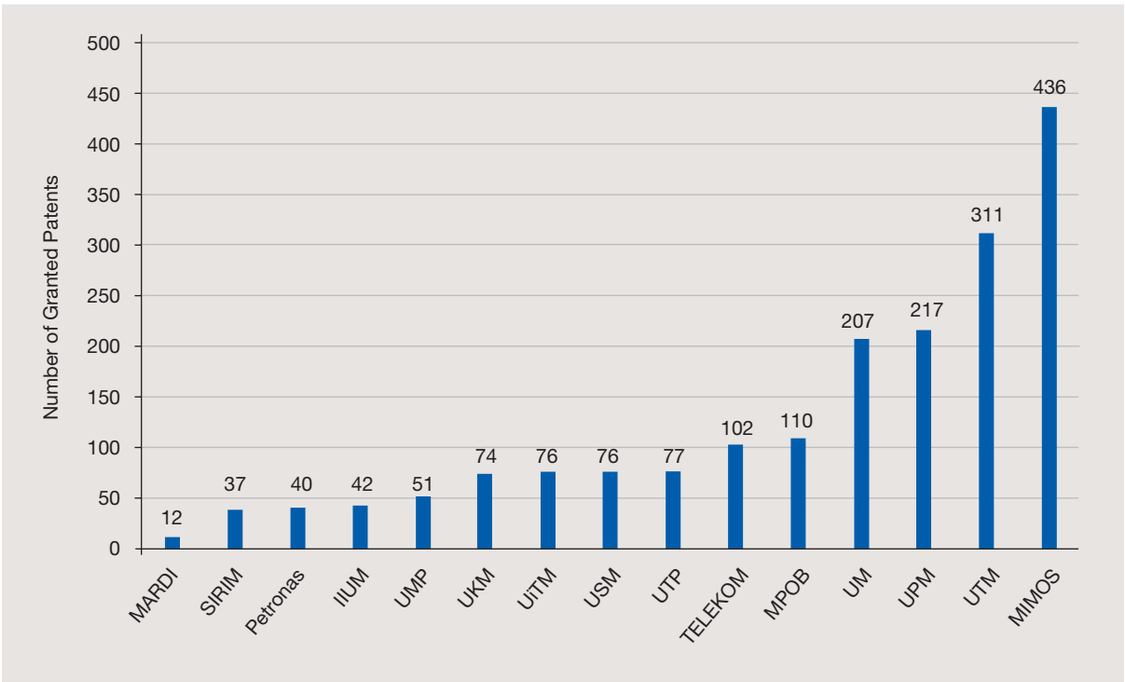
Figure 3.13 Articles by Top Institutions (2001 – 2019)



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

3.6.9 Patenting activity has also shown increasing trajectory in recent years. The majority of patented inventions have been by leading government research institutions and RUs, with some contributions by leading Malaysian corporations as well (see **Figure 3.14**). Commercial returns from our increasing investments in R&D have not been stellar although it is acknowledged that it takes time for results to materialise. This less than satisfactory level can be attributed to the lack of relevance of several of HEIs' intellectual property to industry and the weak communication between the two sectors.[9]

Figure 3.14 Top Local Assignees by Domestic Granted Patent Counts (2010 – 2019)



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

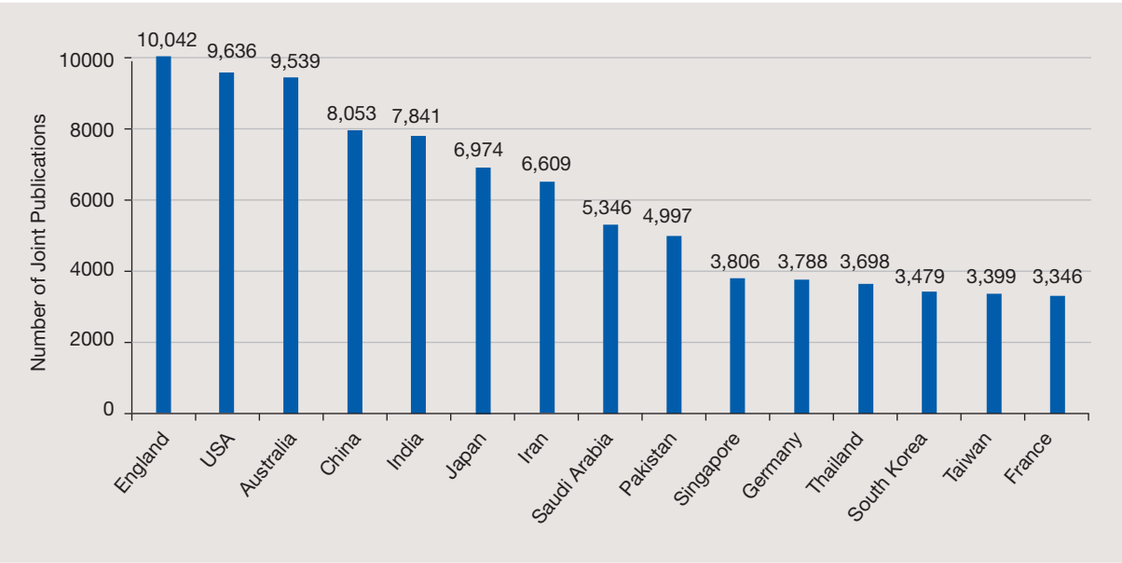
Current Status of International Collaboration in R&D in HEIs

3.6.10 This section will examine how sucessfully our researchers are collaborating as well as international funding of R&D in our HEIs.

International Collaborations in Publications

3.6.11 Malaysian researchers have collaborated and published joint publications with their counterparts abroad. Between 2001 and 2019, researchers from Malaysia collaborated most productively with researchers from a wide spread of countries including England, Australia, the United States of America, Iran, India, and Japan (see **Figure 3.15**).[10] Co-publication with ASEAN institutions has not been significant. An area of concern is the slight decrease (in percentage terms) in international co-authorship in recent years despite the dramatic increase in publications.

Figure 3.15 Joint Publications with Collaborating Countries (2001 – 2019)



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

3.6.12 **Figure 3.16** shows top collaborating institutions with partners abroad in terms of joint publications. It is observed that UM has successfully connected with a number of research clusters in the advanced countries. They include the Helmholtz Institute of Germany, The University of California System of the US and Paris Saclay and National Centre for Scientific Research (CNRS) of France.[11] It is common that research activities in advanced countries are generally undertaken through clustered programmes (a joint effort of few universities/ research institutions). While UM has actively engaged with the big research clusters abroad, the other public universities are found to pursue collaboration through joint publications on an individual basis. A recent report on Malaysia's Research and Innovation performance has underscored the importance of research collaborations in raising the profile of the published documents.[12]

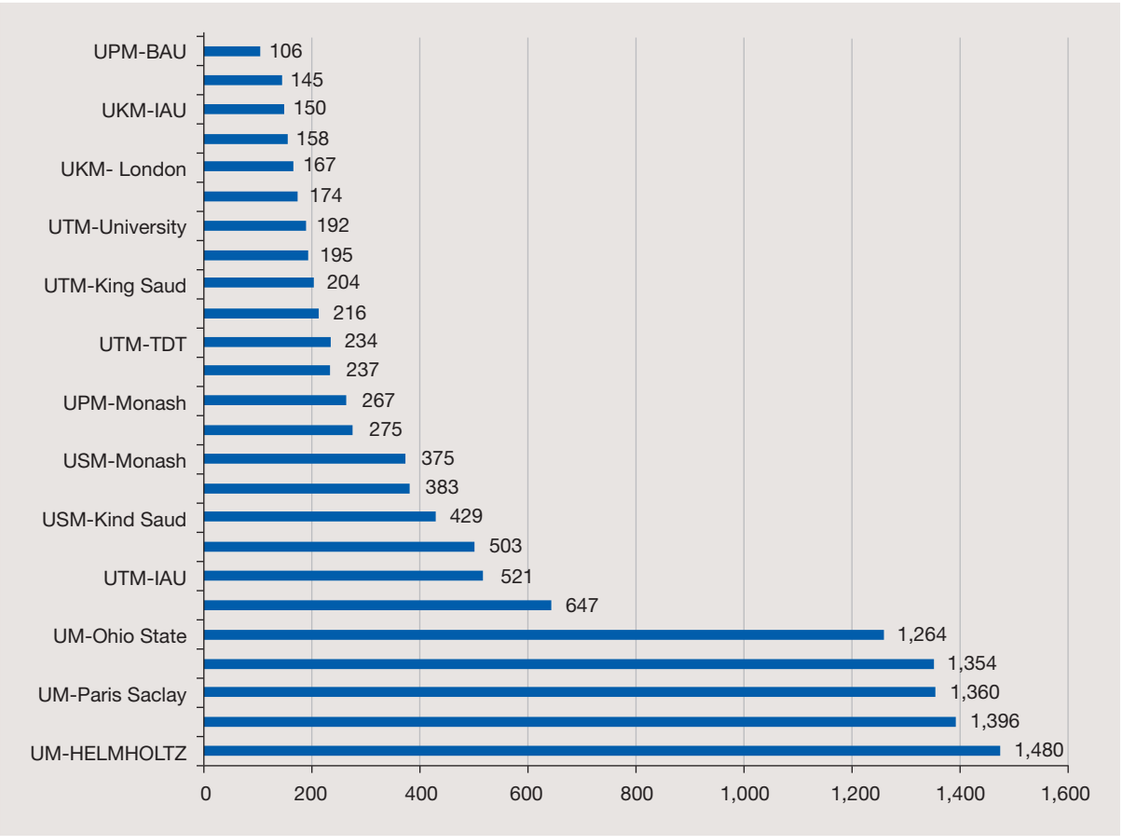
International Funding

3.6.13 Funding from international sources is estimated to be less than 7% of our HEIs' R&D expenditure.[13] The HEIs receiving the most foreign funds in 2016 are shown in **Table 3.19**. More international funding could be secured if institutional efforts within the universities are enhanced to support applications by researchers as well as promoting greater inter-university (as well as university-industry) applications for such grants.

Commissioned Research

3.6.14 Commissioned R&D is an increasingly popular source of funding from industry. Local universities to some extent are beginning to progress in this area. For example, the Institute of Bioscience of Universiti Putra Malaysia (UPM) recently received a research grant of RM2 million from Olympus Corporation, Japan to develop research on an advanced Live Cell Imaging Suite. The two-year collaboration also includes equipment maintenance and an allocated full-time expert.[14]

Figure 3.16 Top Collaborating Institutions Abroad (2001 – 2019)



Source: MASTIC (forthcoming), Malaysian Science, Technology and Innovation Indicators Report 2020

Table 3.19 Malaysian HEIs which Received the Most International Funding (2016)

Institution	Foreign Funds Received (RM)	Foreign Funds as % of Total R&D Budget
Universiti Putra Malaysia	9.13 billion	5.6%
University of Malaya	4.38 billion	0.9%
Universiti PETRONAS Malaysia	2.82 billion	2.5%
Universiti Teknologi Malaysia	2.41 billion	1.0%
Monash University Malaysia	2.21 billion	2.0%

Source: MASTIC, National Survey of R&D in Malaysia 2017

Box 3.1 Collaborations in Green Technology involving Malaysia (2013 – 2017)[15]

Malaysia has produced 6,245 papers in areas related to green technology. As many as 63% of these papers were published in top quartile journals, showing an overall category normalised citation impact of 1.34, significantly higher than the Malaysian and global averages. Also, 41% of the papers were produced jointly with researchers from other countries. All research projects with international collaborators were of high quality, exceeding the world average, and have produced at least three highly cited papers.

Sub-theme	Web of Science Documents	% Documents in Q1 Journals	Category Normalised Citation Impact	% Documents in Top 10%	Highly Cited Papers	% International Collaborations	% Industry Collaborations	DWPI Patent Families
Malaysia	**6,245**	**65.2**	**1.34**	**14.3**	**202**	**41.0**	**0.3**	**701**

Country	Web of Science Documents	% Documents in Q1 Journals	Category Normalised Citation Impact	% Documents in Top 10%	Highly Cited Papers	% Highly Cited Papers
Australia	242	70.0	1.67	19.0	16	6.6
Saudi Arabia	234	59.7	1.52	17.1	13	5.6
Iran	230	71.6	1.75	21.7	15	6.5
Pakistan	214	58.9	1.21	10.7	11	5.1
Japan	205	61.3	1.43	16.1	3	1.5
United Kingdom	203	73.2	1.68	19.2	8	3.9
Indonesia	182	65.3	1.25	17.6	8	4.4
USA	155	72.6	1.49	18.7	8	5.2
India	143	56.0	1.79	18.2	13	9.1
China	123	65.1	1.44	11.4	5	4.1

Innovation Networks

3.6.15 Innovation networks is a more recent trend in international funding where global firms are accelerating research through a worldwide network of universities and research centres. For example, the Airbus Group signed an agreement with Aerospace Malaysia Innovation Centre (AMIC) and a number of local universities to develop an environmentally friendly jet fuel from marine macroalgae.[16] Malaysian universities need to actively engage in such global networks in order to keep abreast of external knowledge developments.

Joint Research Investments

3.6.16 Joint research investment is a more advanced mechanism in international research funding that may involve joint investments from multiple partners to set-up research projects and research centres. The establishment of UTM's Malaysia-Japan International Institute of Technology (MJIIT) is an example of long term-joint bilateral investment and government agreement between Malaysia and Japan in setting up a Japanese-style engineering university in Malaysia with focus on academic and research excellence in electronics, precision, environmental and green engineering and management of technology (see **Box 3.2**). UM's Nanotechnology and Catalysis Research Centre's (NANOCAT) is driven by university-industry partnership between UM's NANOCAT and Oleon in the area of nanotechnology, specifically for developing new generation of extreme pressure additives for metal working fluids.[17]

Summary

3.6.17 The discussion in this section has revealed that although much progress has been achieved in terms of collaboration in publications, much more remains to be done in securing greater research funding from external sources. A more strategic approach is imperative if we are to entice greater international funding of our HEIs' R&D.

Box 3.2 UTM's MJIIT – A Driving Force for the Look East Policy (LEP) 2.0[18]

The establishment of UTM's Malaysia-Japan International Institute of Technology (MJIIT) is an example of long term-joint bilateral investment and government agreement between Malaysia and Japan in setting up a Japanese-style engineering university in Malaysia. MJIIT's research mission is to build academic and research excellence in electronics, precision, environmental and green engineering and management of technology. MJIIT was launched in September 2011 with the support of some 29 Japanese universities. Under the first phase of the JICA Technical Cooperation Project, 18 research centres, 70 research laboratories, development of a comprehensive Japanese engineering curriculum, joint supervision programme with professors in Japan, double degrees with various Japanese universities, practical training and exchange of students and academics to Japan, as well as various Japanese industry initiatives in Malaysia were undertaken.

Following MJIIT's achievements, the second phase of the Technical Cooperation Project was launched in July 2018 with the purpose of reinforcing and re-strategising on the Japanese-style oriented education and research in MJIIT, along with the collaboration with other universities and Japanese industrial partners. Some of the missions in this phase are the establishment of special research funds, reinforcing the i-Kohza system (a research centre that is based on the "senpai-kohai" concept), the launch of the "Sangaku-Renkei" centre, which will drive the relationship between Japan-Malaysia academics and industries, strengthening all academic programmes and developing new ones which will contribute to the 4th Industrial Revolution, as well as strengthening laboratory services and research collaborations with the industries.

Aligned with the launch of the second phase of the JICA Technical Cooperation Project, MJIIT is now steering towards a more contributive role to the LEP 2.0, which is relevant to today's international dynamics. MJIIT operations is seeing continuous improvements, in line with its 'kaizen' concept and openness, while also promoting a holistic and persistent work culture through existing talents in UTM and its Japanese counterparts to meet the global needs.

Strengths

3.6.18 The Study Team sought the views of participants from various backgrounds (HEIs, industry players, NGOs, government agencies, and others via interviews, policy labs, surveys, etc.) on Malaysia's strengths in the internationalisation of R&D in HEIs.

Funding Support for Research Collaboration

3.6.19 Availability of funds at the institutional level as well as support from MOHE and MOSTI has facilitated the realisation of collaborative projects. MOHE has launched an initiative – Malaysia Partnerships and Alliances in Research (MyPAIR) – with the objective of strengthening Malaysia's research through joint industry and international research collaboration. A sum of RM 30 million was allocated for this purpose in MOHE's 2019 budget. Similarly, MOSTI has recently launched the International Collaboration Fund (ICF) to support international joint R&D projects between researchers from Malaysia and other countries.

Openness toward External Funding

3.6.20 Our HEIs generally do not exhibit an appetite for external funding of their research activities given the generous funding made available to them by the Government. However, in recent years, institutional funding support has experienced reductions and have placed pressures on HEIs to seek external funding. Given this uncertainty in funding many researchers have now ventured to explore external funding opportunities.

Governance

3.6.21 Several HEIs – both public and private – have introduced the requirement of securing at least one external grant as a criterion for promotion to senior academic positions by their academic staff.

Table 3.20 International and Local Staff Levels of Satisfaction with R&D Policies in Their HEIs

Questions	Local Staff (N = 358)		International Staff (N = 33)	
	Mean	Level	Mean	Level
I am satisfied with the international networks and support in funding from multinational companies to support research projects in my institution.	3.59	Moderate	3.21	Moderate
I am satisfied with the international networks and support in funding from the government to support research projects in my institution.	3.52	Moderate	2.94	Moderate
I am satisfied with the progress made in research and development.	3.64	Moderate	3.39	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Overall Satisfaction with R&D in HEIs

3.6.22 Feedback from the surveys revealed that among the six policy clusters examined, Research and Development cluster was identified as a consistent predictor among the four groups of stakeholders (namely, local staff, local students, international students, and alumni) in predicting satisfaction on internationalisation experience, being strongest among the local staff (see **Table 3.20**). This suggests that while this factor is perceived positively, policy makers and university administrators must ensure that it is adequately addressed in the future.

Areas for Improvement

3.6.23 The Study Team also sought the views of the same participants (mentioned in the previous section) on where Malaysia needs to improve in internationalising R&D in HEIs.

Weak Management of R&D Including Poor Research Culture

3.6.24. A recurrent theme from the policy labs is the weak management of R&D as well as poor research culture, particularly among HEIs that are focused on teaching and learning. The deficiencies highlighted included the following:

(a) Research still undertaken in silos;
(b) Hierarchical relations still prevalent;
(c) Research viewed individually rather than as a team approach;
(d) Laborious administrative processes governing administration of research;
(e) Weak engagement with external parties;
(f) Poor quality of research staff; and
(g) Visa problems for international staff.

Survey feedback

> *"A change in research culture is required for this step: less bureaucracy and hierarchy issues, and more funding for fundamental research."*
>
> *Public HEI Local Staff*

> *"Recommended that Malaysia looks to improving the research quality of staff by working with internationally renowned institutions or being guided or mentored by international experts."*
>
> *Public HEI Local Staff*

> *"Revamp the tedious visa process for international staff to come over to conduct research in Malaysia."*
>
> *Private HEI Local Staff*

Declining Funding for R&D

3.6.25 HEIs have in recent years experienced cutbacks to their research funding. Such reductions can undermine the ability of HEIs to engage in internationalisation activities. Both Public and Private HEI students have revealed from their feedback to the surveys that they would like to see an increase in the research budget to support more research activities including research grants for international students.

Inadequate Marketing

3.6.26 It has been asserted that HEIs are poor in marketing themselves. They do not showcase their success stories. Their websites are generally not informative and they are poor at promoting their star academics and students. These deficiencies, if left unattended, can weaken HEIs' ability to reach out to external collaborators.

Poor Dissemination and Support Services

3.6.27 Many researchers are unaware of the numerous international grants available as they are not informed of their existence by their respective management offices. Additionally, researchers are unfamiliar with the requirements or emphasis demanded by international grants. Indonesia has engaged specific grant writers for EU grant applications to enhance the likelihood of success by their researchers. These specialised writers are conversant with the requirements and expectations of these grants.

Survey feedback

> *"A lot of collaboration relies on the lecturers to make the decisions and then the institution benefits from that. True support for collaboration is for the institution to actively make bridges for staff to participate – not just the selected few as is happening now. Often, staff only hear of such networking events or collaborations AFTER the meeting took place and ONLY selected staff were invited to participate. Other staff are interested but they are not invited or welcomed." (emphasis added)*
>
> *Public HEI Local Staff*

Limited ASEAN Collaboration in Research

3.6.28 International research collaborations involving ASEAN member countries have been limited. ASEAN member countries can benefit if resources are jointly shared in addressing common problems.

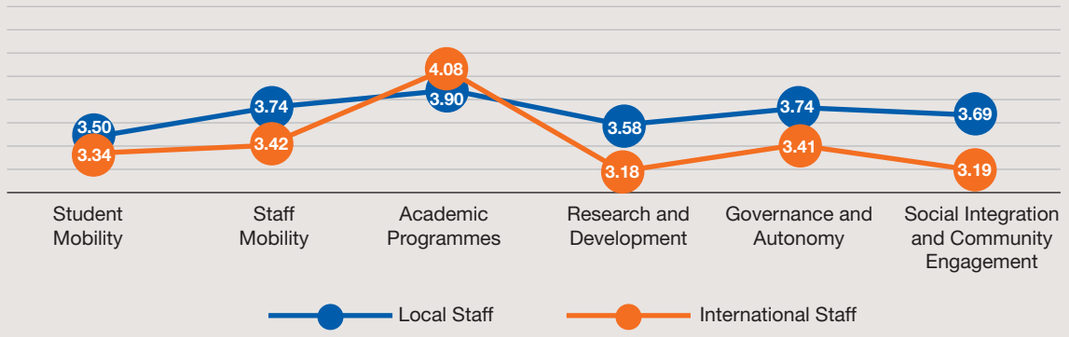
Survey feedback

> *"Like the EU, perhaps Malaysia can encourage international networking within ASEAN countries first by bringing researchers into Malaysia and vice versa. Also, look at regional interests."*
>
> *Private HEI Local Staff*

Restrictive Regulations Governing the Participation of Foreign Staff in Publicly Funded Projects

3.6.29 Presently, foreign staff members of HEIs are not allowed to be principal investigators of research projects funded publicly. However, they can participate as team members of the project. This arrangement has not gone down well with the foreign staff, particularly those whose research proposals were selected for funding. The survey findings (as indicated in **Figure 3.17**) have revealed the lower level of satisfaction by international staff (both in public and private HEIs) towards R&D policies.

Figure 3.17 Average Score and Comparison of Satisfaction Levels



Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Survey feedback

> *"Malaysia could first empower the current international staff by making them eligible for funding, competitions."*
>
> *Private HEI International Staff*

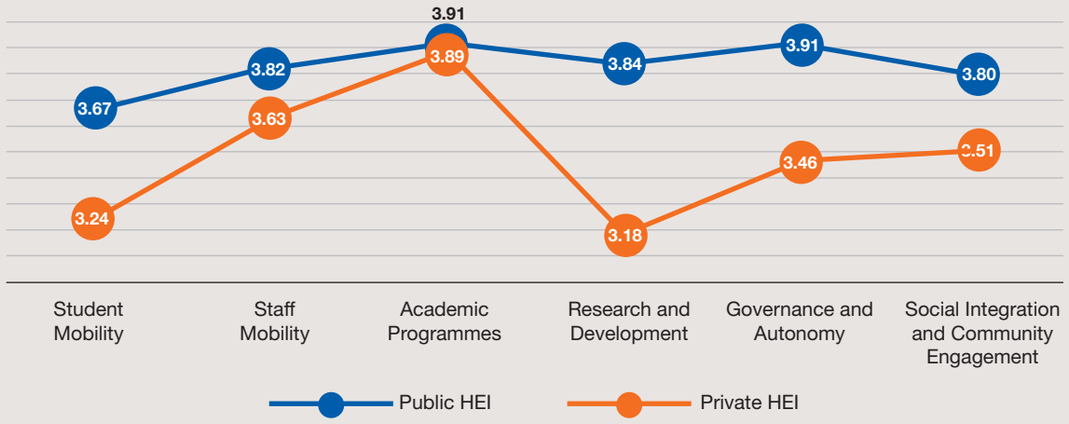
Uneven Research Funding Opportunities between Public and Private HEIs

3.6.30 Most Private HEIs are focused on teaching and learning as they lack funding resources to engage in research. Private HEI staff members (both local and international) have expressed unhappiness that they are not accorded similar opportunities unlike their Public HEI counterparts in accessing public R&D grants. Their grievances are also reflected in the survey feedback as shown in **Figure 3.18** and **Figure 3.19**. The country will benefit if research funding is made contestable so that the best proposals are selected.

Survey feedback

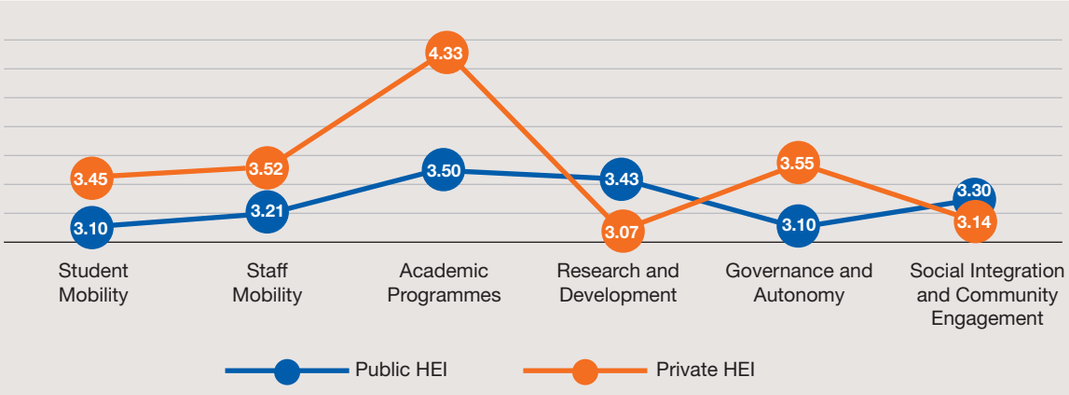
> *"Private HEI staff appeared more concerned that private higher educational institutions have limited access to research funding and this impedes their quest to improve their research capacity. As they have usually sought industry funding or international grants, their calls for more government support were more muted and limited in nature."*
>
> *Private HEI Local Staff*

Figure 3.18 Satisfaction Levels of Local Staff of Public and Private HEIs



Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Figure 3.19 Satisfaction Levels of International Staff of Public and Private HEIs



Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Lack of Research Funding Support for Foreign Postgraduate Students

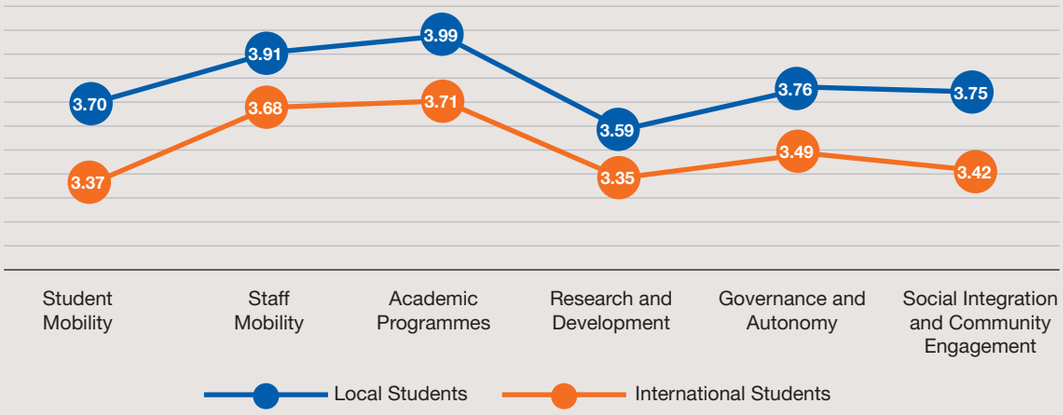
3.6.31 Many foreign postgraduate students have expressed disappointment that they are not allowed to access local research funding support.

Survey feedback

> *"Funding. This is seriously lacking. Better grants, and seriousness by professors to apply for the same. Maybe the overall budget by the Govt. must be increased for R&D. But this is a big cause of concern for international students pursuing PhD. We desperately needs funds, be it in the form of scholarships or projects grants."*
>
> *Public HEI International Student*

3.6.32 Their unhappiness is also reflected in the fact that they have a lower average score than local students do in how satisfied they are with the current R&D situation in Malaysian HEIs (see **Figure 3.20**).

Figure 3.20 Comparison of Satisfaction Levels of Local and International Students across the Six Policy Areas



Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

The Way Forward

3.6.33 A number of suggestions were presented during the policy lab sessions that were convened as part of this study as possible solutions to address the deficiencies and challenges discussed earlier. These are described next.

Adopt a Strategic Approach: Redesign MyPAIR

3.6.34 Given limited resources, selectivity in forging partnerships assumes importance. The scope of the MyPAIR programme can be expanded to include the following items:

(a) Strategise international collaboration, including ASEAN STI – Identify core areas where Malaysia has comparative advantage and attract international funding to co-invest in cutting edge research;

(b) Incentivise MNCs in collaboration with HEIs to establish research hubs, research networks, and joint research in Malaysia; and

(c) Promote mobility (inbound and outbound) of researchers including post-docs, sabbaticals, staff exchanges, and international industrial attachments in areas of strategic interest to Malaysia and in leading edge institutions.

Enhance and Expand Support Services Including Management, Marketing and Grant-facilitation by Research Management Centres

3.6.35 A constant theme emerging from the policy labs is the weak management of R&D in the HEIs, weak marketing of the HEIs' successes, and lack of support for international grant applications. These deficiencies need to be addressed urgently in order to avoid frustrations among researchers.

Revise Governance Framework to Promote Internationalisation of R&D

3.6.36 This revision will take cognizance of the feedback from the policy labs as follows:

(a) Expand the concept of internationalisation to also embrace linkages with MNCs operating within a country in addition to the normal meaning of the term;

(b) Review participation of foreign research staff members as Principal Investigators in projects supported by public funding; and

(c) Provide research funding support for outstanding research proposals from private HEIs as well as foreign postgraduate students in selected HEIs.

Conclusion

3.6.37 Despite impressive achievements, Malaysia's public R&D system continues to exhibit weak funding support from external sources. Our collaborative efforts with ASEAN are less than satisfactory and we are not tapping into the expertise of global talents in our HEIs. There is a clear need to strengthen the management of R&D in HEIs to promote more effective internationalisation. It is hoped that the recommendations the Study Team has gathered from our discussion with various stakeholders will be implemented in a concerted manner to propel Malaysia's R&D forward to new heights.

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4 Malaysia Science and Technology Information Centre (forthcoming) Malaysian Science, Technology and Innovation Indicators Report 2020 Putrajaya: Ministry of Science, Technology and Innovation

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6 See Malaysia Science and Technology Information Centre (forthcoming), op.cit

7 DOHE, op.cit.

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3.7 Social Integration and Community Engagement

Introduction

3.7.1 The internationalisation of higher education forms an essential component in achieving the UN 2030 Agenda for Sustainable Development. Apart from promoting quality education and lifelong learning (SDG 4), internationalisation of HEIs could, in a broader context, contribute to international relations and help overcome borderless global issues.

3.7.2 Knowledge diplomacy, a term coined by Knight, refers to "the role international higher education, research and innovation, or IHERI, can play in the building and strengthening of relations between and among countries".[1] For knowledge diplomacy to work, HEIs must not rely on the government alone but instead on the various non-state actors within and outside the universities.

3.7.3 Policymakers need the support of HEIs to make informed decisions based on real evidence from research and innovation activities. Thus, priority should be given to the creation of a culturally responsive environment for these non-state actors, including local and international students and staff (faculty included) as well as the public at large.[2]

Where Are We Now?

University and Public Preparedness

3.7.4 Internationalisation is increasingly viewed as a marketing strategy among HEIs.[3] With the much reduced public funding to universities, internationalisation is becoming synonymous with revenue generation, and sometimes the creation of a culturally responsive environment for students and staff is not given due attention.[4] A socially integrated environment that encourages cultural engagement between the local and international students and faculty will, in turn, promote research and innovation, a critical factor in achieving the goals and objectives of HEIs.

3.7.5 For this integration to happen, the preparedness and the readiness of university communities and the public is key to receiving international guests. However, there are still apparent gaps between the stated ways that international students will be treated within the policy and the "global experience" of students.[5] Often, the level of academic support, as well as the likelihood of immigration opportunities that are promised to international students, do not match the reality once they have arrived.[6]

Language

3.7.6 As international students and staff attempt to assimilate with the local culture, some might not have adequate language mastery to integrate well into the community.[7] At the academic level, they also might suffer due to gaps in educational standards between their home and host countries.[8] Furthermore, the different rules on visa, employability, right to remain, and differences in fees structures in effect cause international students to be 'othered' compared to their local peers.[9]

Discrimination

3.7.7 The majority of international students are bona fide students who genuinely have come abroad to pursue their education. However, the experiences of all of them suffer due to the abuses of the system and the negative actions of a few of their peers.[10] Social issues like stereotyping and immigration fuel this growing hostility and international students often find themselves caught within this tension, where they are simultaneously seen as a benefit and a threat to their host country.[11]

Neo-racism

3.7.8 Neo-racism needs to be addressed at a systemic level within the management of the HEIs instead of just viewing them as a product of individual bias.[12] It is the responsibility of the HEI's administration to create cultural exchange and acceptance within the university community foremost through the holistic internationalisation of their departments.[13] Any effort of a university to promote social integration and community engagement between their international and local stakeholders requires a policy for internationalisation at home, to provide a global mindset for their community as a whole.[14]

Support Services

3.7.9 Student support activities are critical initiatives for HEIs to create this social integration and community engagement.[15] These services include accommodation, academic advising, as well as support for physical, mental and emotional health, which needs to be suitable to the local culture.[16] Although the HEI is the best place to start this movement towards a cultural exchange, the broader community around campus too needs to understand the impact and importance of this cultural engagement.[17]

3.7.10 The current situation of social integration and community engagement among international students and staff varied greatly from institution to institution. Although all of the HEIs approached claimed to have some sort of support for social integration and community engagement, a lack of clear guidelines on what is an acceptable level of support caused a wide rift between services offered at different HEIs.

3.7.11 Some HEIs provided only basic visa support over and above the support offered to all staff and students. Others make conscious efforts to build opportunities for international students and staff to integrate, not only with the campus community, but also the larger community around the institution.

3.7.12 For example, Universiti Putra Malaysia (UPM) has an initiative where they organise weekly outings for international students as well as sessions where international students can air their views directly to top management.[18] Multimedia University (MMU) in turn, helps international students make friends among locals through their buddy system.[19] UiTM through a number of their international summer programmes for incoming international students (short-term student mobility) empowers their domestic students by appointing them as facilitators for the programmes.[20]

3.7.13 These enrichment programmes highlight Malaysia's competitive advantages in higher education with topics ranging from Malay cuisine to indigenous people and environmental conservation. Therefore it can be seen that some HEIs go even further in considering it their responsibility to make the local students and staff more prepared to welcome international students and staff by initiatives that build cross-cultural sensitivities as well as a global mindset among the locals. Another example is that University Teknologi Malaysia (UTM) requires local staff to undergo cross-cultural training and encourages all their local students to participate in a global exposure programme.[21]

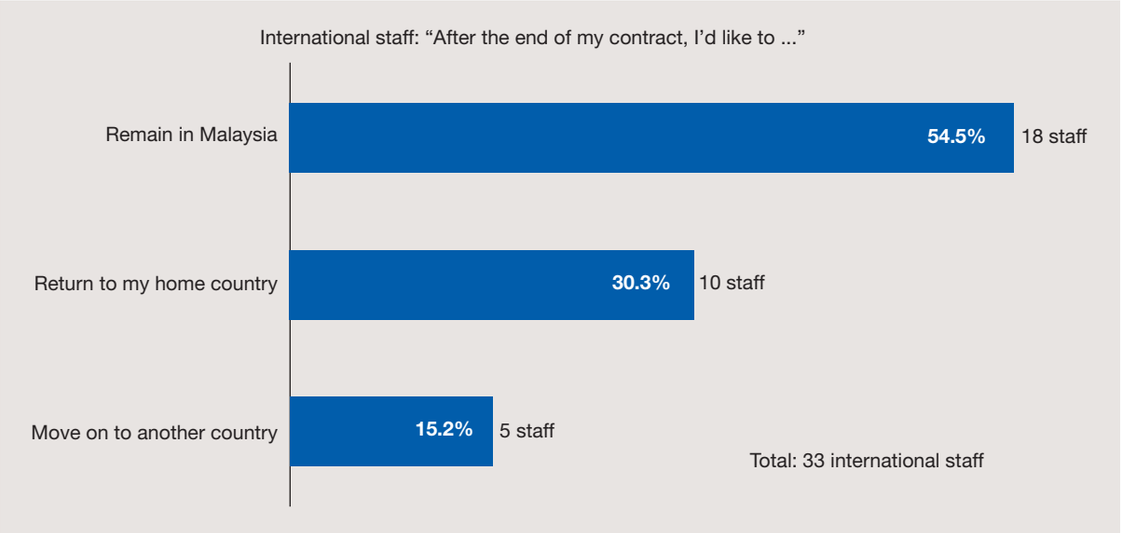
3.7.14 Within the six areas of internationalisation, social integration and community engagement appeared to be consistently identified and ranked among the top three factors in predicting satisfaction on internationalisation experience among the four groups of stakeholders (local and international staff and students). It came in as the most important among local students, second among international students and local staff (including faculty), and third for international faculty. Therefore, this area, although arguably the most difficult to quantify requires careful attention.

Strengths

Importance of International Students and Staff Well Accepted

3.7.15 International students bring revenue, knowledge, skills, diversity, and intellectual capital that contributes to a robust global environment. The importance of having international students and staff (mainly faculty) was discussed at length in the first policy lab at Universiti Malaya, where participants felt that they were "important to shape experiences" with the "exchange of thought [and] culture".[22] Participants felt that having the presence of international students and the staff was "good for [the] university, local [students] and for international students as well", thus highlighting the benefits that were shared among all parties involved and not just a one-sided interest.[23]

Figure 3.21 Future Plans of International Staff



Malaysia Considered a Welcoming Destination Overall

3.7.16 Overall, the international students described Malaysian students as "welcoming".[24] The surveys conducted showed that overall, satisfaction levels for social integration and community engagement was high and international students as a whole found Malaysians as hospitable, welcoming and willing to go the extra mile to help them integrate. This was echoed by international staff, where more than half of them would like to stay in Malaysia after completing their current employment contract (**Figure 3.21**).

Initiatives for Supporting International Staff and Students Present

3.7.17 As a whole, participants in both the policy labs and surveys identified Malaysia as doing well by having international offices at universities, for example, USM-International (USMi).[25] Most HEIs do have an orientation programme specifically to welcome international students. Additionally, initiatives such as global village initiatives, cultural festivals, as well as foster family programmes, also contribute to social integration and community engagement.[26] The surveys found that HEIs play an important role to facilitate the social integration by having programmes such as 'Anak Angkat', compulsory community service, and student exchanges that enhance better relationships between international and local students and staff. In the focus group, the idea of short-term host family experiences being made available to international students was discussed at length. The respondents believed that providing the opportunity to make such connections with the local community is vital.

Malaysia a Choice Destination for the Global Muslim

3.7.18 In terms of integration, Malaysia shines as a Muslim nation. This is one of Malaysia's Unique Selling Points (USP) that MOHE should work on to bring in international students. For some Muslim students from abroad, it's easier to fit in because of the similar religious faith. In Swinburne University, some of the Muslim students are children of expatriates who lived in UAE or Qatar, for example. Referring to Knight's knowledge diplomacy, this is one practical example of how the Malaysian HEIs could play a role in enhancing bilateral ties between Malaysia and other Muslim nations.

Survey feedback

> *"If a person comes from an Islamic country, then that would be a plus point as Malaysia is a Muslim country as well as it is a multicultural society. They may find people from their own background and communicate and get together and not feel alone."*
>
> *Private HEI International Student*

Areas for Improvement

Gap between Satisfaction Levels of Locals and Internationals

3.7.19 Although the combined survey results showed there was high satisfaction in the social integration and community engagement among international and local students and staff, if the data is examined separately, it becomes apparent that there is a gap between the

experiences of internationals as compared to the locals. It is noted that for both international students and staff, their experiences (variable construct) and satisfaction levels were below their local counterparts (see **Table 3.21** and **Table 3.22**).

Table 3.21 Local and International Staff Levels of Satisfaction with Social Integration and Community Engagement in Their HEIs

Questions	Local Staff (N = 358)		International Staff (N = 33)	
	Mean	Level	Mean	Level
I am satisfied with social integration and community engagement programmes between local and international students organised by institution.	3.72	High	3.39	Moderate
I am satisfied with social integration and community engagement programmes between local and international staff organised by institution.	3.66	Moderate	3.03	Moderate
I am satisfied with how foreign students and lecturers in Malaysia are well-integrated to Malaysian society.	3.68	Moderate	3.15	Moderate

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

Table 3.22 Local and International Student Levels of Satisfaction with Social Integration and Community Engagement in Their HEIs

Questions	Local Students (N = 1,240)		International Students (N = 738)	
	Mean	Level	Mean	Level
I am satisfied with social integration and community engagement programmes between local and international students organised by my institution.	3.76	High	3.38	Moderate
I am satisfied with how international students have been well-integrated into Malaysian society.	3.75	High	3.40	Moderate
I am satisfied with how Malaysians understand my culture and religion.	Not applicable		3.48	Moderate
I am satisfied with how Malaysians understand international students' culture and religion.	3.75	High	Not applicable	

Legend: Levels of Mean Scores: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00
Closer to 1 = More dissatisfied Closer to 5 = More satisfied

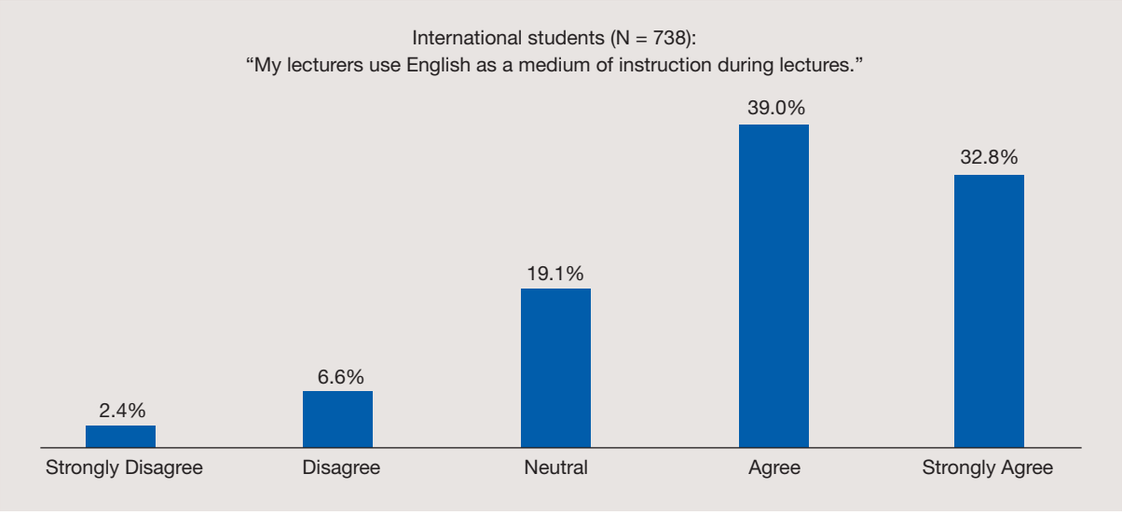
Friendships at Surface Levels

3.7.20 Some participants in the policy lab described their friendships as "formal classmates only, not having [a] close friendship".[27] Both in the policy labs and focus groups, it was seen that the international students who had formed the most profound bonds of friendship managed to make friends through additional avenues like clubs, societies, volunteering, or even working part-time. The HEIs must play a greater role in encouraging social integration, and the survey suggests that it is more a problem for Public HEIs compared with Private HEIs..

Language Barriers

3.7.21 Similar to the policy labs' recommendations, international students indicated that local academicians should be empowered in terms of English and cultural competencies. In the surveys as well as the policy labs, many alluded to the fact that Malaysian students, and sometimes even academic staff, lack the required English proficiency to ensure seamless communication with their international counterparts. Even if there might be the required level of competency, there is language discrimination, where the local students and staff might speak a language other than English around the international students for their own convenience, without considering the fact that it is excluding the international students. Overall, as shown in **Figure 3.22**, about 10% of international students do not agree that their lecturers use English as a medium of instruction. International students faced language discrimination when other languages were used in the classroom with one participant commenting that universities should "ensure the usage of English at all times" to be fair to international students.[28]

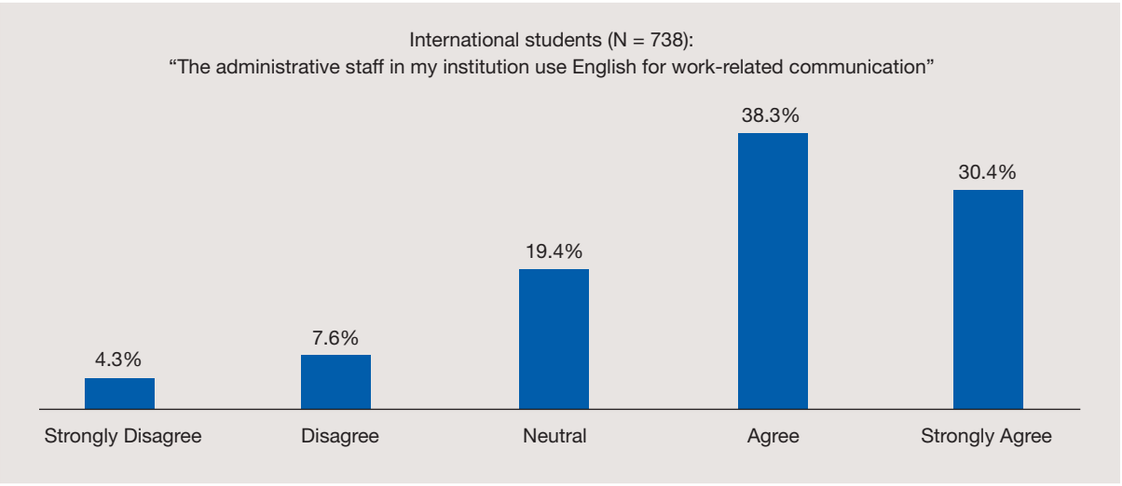
Figure 3.22 Usage of English Among Lecturers in the HEIs



Note: Percentages may not add up to exactly 100% due to rounding error.

3.7.22 When it came to the usage of English in administrative instances in the HEIs, the surveys of international students showed that about 12% of respondents felt that the administrative staff did not use English for work-related communication, as can be seen in **Figure 3.23**.

Figure 3.23 Usage of English in Administration in the HEIs



Note: Percentages may not add up to exactly 100% due to rounding error.

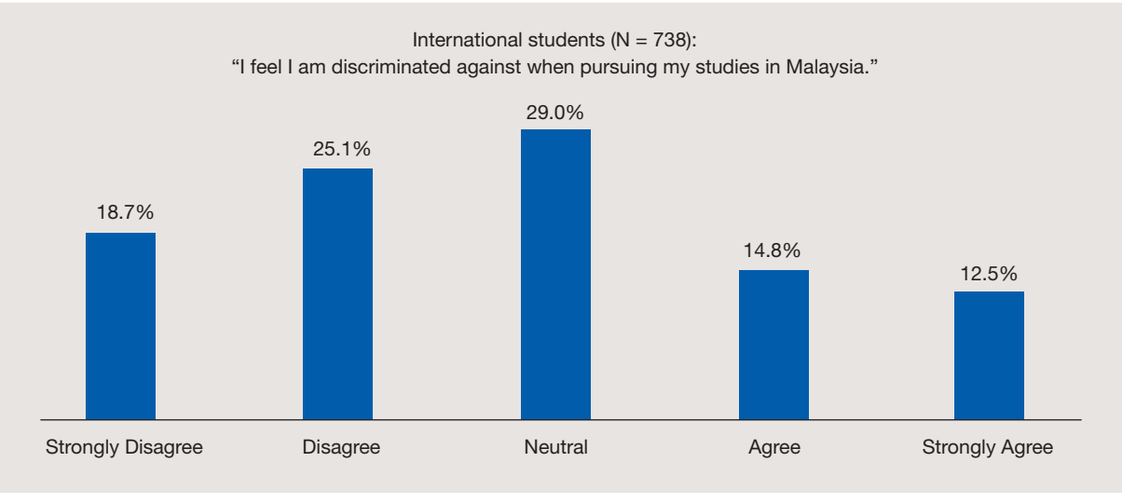
3.7.23 Having said that, there are cases where the English language proficiency of the international student is also lacking. There was also a minority of survey respondents that felt that the onus should be on the international students to learn Bahasa Malaysia instead. While learning English is a must for local students, the teaching of Bahasa Malaysia to international students must be taken more seriously for knowledge diplomacy to impact on providing solutions to problems affecting bilateral or multilateral relations. However, most international students do not take the requirement of learning some Bahasa Malaysia very seriously.

Discrimination

3.7.24 Across the board, judgmental discrimination which includes stereotyping was the most common issue highlighted. Some participants felt that the problems stemmed from an inherent "culture and values differences between foreign students and local communities"[29] whereas others felt that some of the issues stemmed from the lack of awareness within the community where the "public [is] unable to distinguish between students and foreign labourers".[30] Depending on the different nationalities, a whole host of incidences were cited. Participants shared how they "always feel excluded by faculty, [and face] discrimination in getting marks or getting proper attention from lecturers".[31] Outside the campus, the participants shared they faced discrimination doing daily shopping and accomodation rental.[32]

3.7.25 These mixed reactions to discrimination were present in the survey findings, too (see **Figure 3.24**). There is a wide spread of experiences, but the total percentage of more than 27% of international students either agreeing, or strongly agreeing that they face discrimination is worrying, and needs to be addressed immediately.

Figure 3.24 Reactions to Discrimination



Note: Percentages may not add up to exactly 100% due to rounding error.

3.7.26 There were more frequent mentions of discrimination in public HEIs as compared to private HEIs. Students from regions like Africa, the Middle East and to some extent, Bangladesh experienced higher instances of discrimination, perhaps due to preconceived notions within our communities. International students from the West were better received by local students; therefore, there is a need to create public awareness on the importance of making all international students feel welcomed.

Survey feedback

> *"If the students/staff are Westerners, they are generally more widely accepted. However, if they are from other countries like Africa, Middle East they are treated with more caution."*
>
> *Private HEI Local Student*

> *"When I went to rent a house with my family, the owner said we don't rent to black skin like you. Another example at medical insurance, and also when open bank account, even when they know we are legal high-level student."*
>
> *Private HEI International Student*

3.7.27 As for international staff, the survey findings show that their experience of discrimination is more specific towards the workplace, where some respondents highlighted unequal job opportunities such as different KPIs, benefits, promotions provided to international and local staff.

> *"There is a widespread perception international staff is discriminated when it comes to research funding. In Europe for example, it doesn't matter what your nationality is. In Malaysia, you must be a Malaysian citizen to get funding. For international staff, this means being awarded funding for research is unlikely and can negatively impact your career."*
>
> *Public HEI International Staff*

3.7.28 International students hope to see every level of administration to be supportive and encouraging in providing the many different services. To them, lecturers should be sensitive to their presence; fellow students should engage them during and after classes. There are many complaints against local academics who discriminate international students. There are also complaints against academician's overall competency in teaching and supervising. The following quote sums up the feelings of most international students:

> *"Provide scholarship, an environment that is healthy and conducive for international students. Simplify application process; especially with regards to visa application and student pass renewal. Provide a safe and healthy environment without discrimination and affordable housing and room rentals."*
>
> *Private HEI International Student*

Summary of Strengths and Challenges

3.7.29 Despite the challenges, the international students and staff throughout the policy labs did not regret their choice to come to Malaysia.[33,34,35,36] Participants cited reasons like they were able to get out of their comfort zones and found the whole experience priceless considering that the diversity helped to mature them.[37] Overall, friendly people and affordable fees contributed to the participants' satisfaction with Malaysia as their destination country.[38]

The Way Forward

HEIs to Provide a Wide Variety of Support for International Students and Staff

3.7.30 The mini-survey and subsequent focus group, which targeted Malaysians who had studied abroad aimed to elicit information on best practices on social integration and community engagement from different parts of the world. One reflection that came up repeatedly, both in the mini-survey and the focus group was the wide variety of support that was made available to them abroad, which helped them through difficult times while overseas. Over and above mere academic support through tutors, many respondents pointed out that the non-academic support provided by their HEIs was the area in which they felt was most important. Upon arrival, settling in was made easier with housing support, either by providing housing or by helping with finding suitable rental options, as well as assistance to open a bank account.

3.7.31 Mental health and emotional wellbeing was also stressed as a vital support requirement of the HEIs. The flexibility of the system was something in which respondents placed high importance. One focus group participant shared how her university was flexible in allowing payment to be made over three instalments in a year. The university would have even allowed her to pay every month since they were sensitive to the anxiety that having overdue fees would cause her. This is in stark contrast with current practices at local HEIs where international students were barred from taking exams if they were to miss their fee payments. When asked for potential improvements to social integration and community engagement, participants in the policy labs also suggested increased pastoral care given to international students. Universities were recommended to improve their orientation programmes and include "language and social barrier-breaking courses".[39] The organisation of activities to provide opportunities for increased interaction and social learning was also suggested.

Improve the Global Mindset of Local Students, Staff and Community

3.7.32 The focus on social integration and community engagement within the realm of internationalisation is not merely how international students and staff integrate into their life in Malaysia but also in preparing the Malaysian students in our universities to have a global mindset. Ensuring globally connected domestic students and faculty, while providing a global environment for international students is vital and can be fostered through increasing English proficiency among faculty and local students, improving intercultural competencies and creating a global curriculum. In line with this, student and staff exchange programmes also have been identified to help build a global mindset among students and staff alike. The focus of internationalisation is not only on the international students but on changing the timid mindsets of our local students to make globally competitive.[40]

3.7.33 Policy lab participants in Universiti Sains Malaysia also discussed the importance of intercultural competency training.[41,42] The presence of a robust inter-cultural competency training for both academic and support staff in the universities is one of the most important steps to ensure staff (faculty and support staff) are ready to assist international students since there might be misperceptions that need to be addressed.[43] Intercultural skills or competence in higher education internationalisation is an essential component in preparing academics and students to be global citizens without prejudiced attitudes and behaviours towards those who are different. Without intercultural competence, local and international students and faculty would not be able to interact productively. These types of interactions empower and maximise students' university experience and prepare them for the global workforce.[44] To attract and retain high potential international students, the academic environment must be free of discrimination and bias.

Survey feedback

> *"I've embarked on my Masters at a highly-ranked Malaysian HEI. Reflecting on my experience, I'm thankful I'm not an international student in Malaysia owing to the attitudes of front line officers I have encountered in all departments, from finance to academic services. I did not encounter such dismissive attitudes in Montreal even though some people were mainly Francophones. It's not just about infrastructure – attitudes matter more."*
>
> *Malaysian Alumni of an Overseas University*

3.7.34 The idea of cultural exposure to create the awareness of diverse needs extends further than the HEI campuses and must be applied to the general public. It is only through educating the public that the discrimination faced by the international students and staff in the communities itself can be eliminated. A part of the public's negative perception of international students stems from the fact that there are certain nationalities which have a disproportionately large student presence in Malaysia.

3.7.35 It also timely for HEIs to look at quality rather than quantity and to take concerted effort to retain global talent. When discussing the future vision of UTM International for their international student enrolment, Dr. Mohd Ariffin bin Abu Hassan stressed that it is not about chasing numbers, but rather having a better balance of students from different nationalities that will bring a vibrancy to campus life.[45]

3.7.36 Along these lines, looking at the findings from the mini-survey, more than half of the Malaysian scholars who ventured abroad would just have stayed in Malaysia had they not been offered a scholarship. It stands to reason that we should be looking at providing targeted scholarships to countries with a low number of students coming to Malaysia. In this way, we too will be able to attract their best and brightest to study in our HEIs and improve the balance of international students currently in Malaysia.

Improve Immigration Support

3.7.37 Further than the actions within the HEIs direct control, issues of immigration support were also discussed in depth in the focus group. Having a dedicated lane for international students who are arriving during the peak season was observed in the UK, and the focus group participants agreed that it would help the students who were entering the country for the first time. It is noted that this recommendation is currently in the process of becoming a reality in Malaysia through the 32 Initiatives to improve international student management approved by the Cabinet.

3.7.38 Foremost, the visa and immigration struggles facing international students and faculty need to be addressed, and this was discussed at length at the policy labs as well. On a national level, recommendations included to "ease the process of issuance of visas for dependants" as well as "*allowing international students to work part-time*".[46] Also, Malaysia should consider offering a visa for fresh international graduates to stay on and look for work here.

Box 3.3 Specific Recommendations for HEIs to Improve Social Integration and Community Engagement

- Offer a wide variety of support including pastoral care, academic support, housing support, etc.
- Develop more sensitivity toward the needs of international students, and flexibility in meeting those needs.
- Improve orientation programmes and increase activities to promote social integration.
- Address language barriers: Increase overall English proficiency and make Bahasa Malaysia classes more readily available for international students and staff.
- Develop local student and staff exchange programmes to increase global exposure.
- Conduct intercultural training for students and staff, including support staff.
- Improve visa and immigration procedures, including considering work opportunities for international students during term time and after course completion.

Conclusion

3.7.39 This Study has shown that improving social integration and community engagement is vital in enhancing the internationalisation of HEIs in Malaysia, and several recommendations have been identified to progress in this area. At the very crux of the matter, the aim remains to improve the global exposure and acceptance of the non-actors (the public as well as the local and international students and staff communities within the HEIs), which will result in the reshaping of Malaysia's global positioning in the higher education sector.

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3.8 Summary of Key Findings from the Six Policy Areas

Introduction

3.8.1 The findings from the discussion on the six policy areas revealed the following themes.

Strengths

Top Level Commitment towards Internationalisation with Focused Strategies

3.8.2 The Government has introduced a number of strategies to enhance student mobility as well as promote internationalisation in general including initiatives at the HEI level to support international students and staff.

Sound Institutional Framework

3.8.3 The institutional framework for steering and driving the internationalisation agenda is sound. There are institutions established, for example, to oversee quality assurance of academic programmes as well as specific institutional structures in HEIs to address issues related to international faculty and students. In summary, the key agencies have been able to act together achieve the national aspiration of increased international student enrolment.

A Welcoming and Choice Destination

3.8.4 Overall, international students and staff found Malaysians hospitable, welcoming and willing to take the extra mile to help them integrate with their new environment. For many Muslim students from abroad, Malaysia is a choice destination since it is easier to fit in because of the similar religious faith.

The Reputation of Our HEIs, Affordability, and a Reasonable Cost of Living

3.8.5 Many international students indicated that high rankings and reputation of our HEIs (in the various ranking tables) influenced them in their decisions to study in Malaysia. Another key factor is the affordability of our tuition fees and our relatively low cost of living.

Areas for Improvement

Visa and Immigration Issues

3.8.6 Both international staff and students have expressed unhappiness over less than satisfactory visa and immigration services which have caused many of them untold miseries. Failure to quickly address these issues will undermine the nation's aspiration of increasing student enrolment from abroad. There is an urgent need for a responsive and forward-looking visa services for international students.

Need for Clear Structures and Guidelines

3.8.7 To support and assist international students and international faculty at all stages of their engagement with the country (from pre-arrival to departure), there is a need for greater clarity. The feedback we received revealed that Malaysia does not guarantee minimum standards of support services to international staff and students to assure them of what can be expected during their stay here.

Weak Competencies

3.8.8 It is disturbing to note from the feedback that our academic and support staff are found wanting in terms of managing diversity and intercultural competencies. Another aspect that was highlighted that requires improvement is English language proficiency among both faculty and support staff. Additionally, there was general unhappiness at the way R&D was managed in the HEIs – many expressed dissatisfaction at the lack of dissemination of information on grants, poor support services, and lack of team effort in undertaking R&D projects, etc.

Local Community Engagement

3.8.9 Many among the local community do not see the importance of international staff and students to the university and the economy. The university needs to play a more proactive engagement role in impressing upon them on the need to have a welcoming attitude and not allow racial biasness to get the better of them. Such awareness programmes must be conducted throughout the academic calendar to educate the public about our international 'guests'.

Unsatisfactory Coordination

3.8.10 Many international staff and students revealed their exasperation at the unsatisfactory coordination within the HEIs as well among the various government agencies. This poor coordination impacts their time, resources, and causes mental anguish in dealing with all these related organisations.

Lack of Access to R&D Funding Support

3.8.11 Many international staff particularly those from Private HEIs assert that they are not able to access national R&D grants. Even those staff who are with public HEIs are not accorded recognition as principal investigators even though they may have be the prime mover of the grant-awarded research proposal. International post graduate students also expressed disappointment over the lack of research opportunities for them.

Conclusion

3.8.12 The above findings will constitute the basis of the key takeaways and recommendations discussed in Part 5 of this report.

PART 4
ASSESSING HEI INTERNATIONALISATION IN SELECTED COUNTRIES (BENCHMARKING) AND EMERGENT AREAS OF INVESTIGATION

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4.1 Benchmarking Internationalisation Efforts Around the World

Introduction

4.1.1 This section is about benchmarking Malaysia's past and current internationalisation efforts with those of select countries – established as well as up-and-coming. It is to be noted that there are many public reports on this matter written by organisations all around the world. Therefore, this section will focus on key areas identified as vital by Malaysian stakeholders based on policy labs, feedback surveys, and interviews conducted by the Study Team.

4.1.2 The countries or regions for this benchmarking exercise are Germany, Canada, China, Japan, Australia, the UK, Russia, and the UAE/Dubai. They were chosen for, among other reasons, their position as an established or emerging education destination, regionality, and unique initiatives introduced.

4.1.3 The first phase of this benchmarking exercise has been conducted across the following areas:

(a) International student targets and profiles;
(b) Economic contributions; and
(c) During- and post-study work opportunities.

International Students: Snapshots of Targets, Visa Laws, and During- and Post-Study Regulations

4.1.4 Setting a target to attract international students is common among nations. While not always the most perfect indicator (the issue of quantity vs. quality must always be kept in mind), it is nonetheless one of the most tangible as a yardstick for success. The 2011 Internationalisation Policy describes international student mobility as "*the main indicator of the internationalisation of higher education*". **Table 4.1** summarises the international student mobility targets of the select nations.

4.1.5 Visa regulations are a constant area of debate. The call to liberalise visa regulations to attract more students has to be balanced with issues of national security and social cohesion. In Japan, student visa regulations will be tightened come April 2020 due to overstaying issues.[1] Generally however, flexible visa arrangements tends to lead to increased international student intake, as can be seen in the UK which saw a 16% in visas granted in 2019 on the back of an announcement to reintroduce the two-year post-study work visa.[2] Across our policy labs, surveys and interviews, the opportunity to seek employment (and to some extent, permanent residency) was often cited as a key attraction for international students and will enhance Malaysia's internationalisation efforts. **Table 4.2**, **Table 4.3** and **Table 4.4** that follow summarise relevant visa regulations.

Table 4.1 Profile of International Student Mobility Targets, Current Achievement, and Economic Contribution in Selected Countries (2018 – 2019)

	Europe		Pacific	Americas	Asia	
Country	UK	GERMANY	AUSTRALIA	CANADA	CHINA	JAPAN
Current International Student Numbers	2018: 458,490	2019: 393,570	2018: 399,078	2018: 572,415	2018: 492,185	2018: 298,800
Target	by 2023: 600,000	by 2020: 250,000	by 2025: 720,000	by 2020: 450,000	by 2020: 500,000	by 2020: 300,000
Year Target Set	2019	2013	2016	2014	2010	2008
On Track?	Yes	Yes Achieved 2016	Yes Projected 900,000 by 2025	Yes Achieved 2017 No new target set	Yes	Yes
Economic Contribution (USD/billion)	Current 25.5	Current 6.7	Current 19.7	Current 11.2	NA	NA
	Expected by 2030 46	NA	Expected over 30 billion	Expected over 20 billion C$	NA	NA

Table 4.2 Comparison of Visa Regulations Across Selected International Education Destinations

VISA COMPARISON (Salient points)								
	America/Europe/Pacific				Asia/ASEAN		Emerging	
Malaysia	UK	Germany	Australia	Canada	China	Japan	UAE/ Dubai	Russia
Up to 1 year or entire duration of study Nov 2019: 32 initiatives by Malaysian Cabinet introduced	Short term and long term (Tier 4) Long term visa issued for duration of study Can be applied inside or outside UK	Short term (3 months or less) Long term visa up to 2 years (via residence permit – can extend)	Short term (up to 6 months) and long term (duration of studies) Can enter Australia 90 days before course starts Visa can cover more than 1 programme	No need a study permit if programme is 6 months or less Study permit for long term Length of studies + additional 90 days upon graduation	Visa X1 – Short term (less than 180 days) Visa X2 – Long term (180 days and above) Students must apply for Temporary Residence Permit Lasts for up to 5 years	Short term (up to 90 days) Long term (20 weeks and above) In-between visa (more than 90 days, less than 20 weeks)	Reformed in 2016/17: 1–5 year visas And 10 years visa to retain skilled and professional talent	Reformed in 2017: 3-year visas

Table 4.3 Comparison of Current During-Study Work and Internship Regulations in Selected Countries

	DURING-STUDY WORK/INTERNSHIP OPPORTUNITIES								
		America/Europe/Pacific				Asia/ASEAN		Emerging	
	Malaysia	UK	Germany	Australia	Canada	China	Japan	UAE/Dubai	Russia
Allowed to work part-time?	Yes 20 hours/ week during semester breaks only	Yes 20 hours/week during term and full-time during breaks	Yes Part-time jobs – 120 days a year or 240 half-days	Yes Up to 40-hours per fortnight (14 days)	Yes Up to 20 hours per week	Yes Part-time and can do internships off-campus	Yes 28 hours per week maximum	Yes "Earn & learn" programme	Yes
Approval needed from authorities? Any conditions?	Yes Limited industries (hotel, petrol kiosks, mini-markets)	No But tax number needed	No Above and beyond academic work	No Above and beyond volunteer/ co-op work Postgrad no limit	No Just a Social Insurance Number Can also work as a co-op student	Yes From host university, police and local authorities	Need to get permit – can be done upon arrival at airport	Part-time work in special Dubai Creative Clusters	Yes Need additional work permit Strict conditions: location, industry

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Table 4.4 Comparison of Current Post-Study Work Regulations in Selected Countries

POST-GRADUATION WORK AND RESIDENCY OPPORTUNITIES								
	America/Europe/Pacific					Asia/ASEAN	Emerging	
Malaysia	UK	Germany	Australia	Canada	China	Japan	UAE/ Dubai	Russia
No Work opportunities under other immigration rules may be available, but the requirements set tend to be restrictive	Yes Up to 4 months upon graduation Soon extended to 2 years Likely in 2021	Up to 18 months to find employment after graduation No work restrictions Opportunity to get EU Blue Card and may lead to citizenship and migration to other EU countries	Yes Known as "485 Visa" Graduates can stay in Australia between 2 to 4 years, depending on qualifications June 2019 – about 92,000 visa holders	Yes Up to 36 months 2008 – 18,000 international student work permits approved 2017 – 115,000	Yes But only for Master's degree or equivalent Work permit up to 5 years Graduates in high-tech and e-commerce have special transition to workforce programmes in Beijing, Shanghai and Shenzhen	Yes Introduced April 2009 Graduates can work in 14 identified industries where there is workforce shortage Need to pass language test Up to 5 years	Yes As long as the student visa is still valid	No Unless students secure work visa before graduation/ visa expiration

Country Profiles: Focusing on Key Practices toward Successful Internationalisation

Germany

4.1.6 Germany set a target for 350,000 international students by 2020. They met and exceeded this target in 2016.[3] Germany ranks 8th overall[4,5] in top international education destination with 5% of total market share (Malaysia is at 2.5%). Germany's visa system is similar to many around the world. The residence permit lasts up to 2 years and can be extended. International students are allowed to work part-time up to 120 days a year or 240 half-days. There are opportunities for residence permits after graduation. Germany recognises the strong correlation between openness to immigration and international student flow. Germany lacks more than 300,000 workers.[6] In 2012, Germany extended the time international students can stay in the country to look for work after graduation from 12 to 18 months. Clear pathways to citizenship or the EU Blue Card are articulated for those interested.

4.1.7 Institutionally, the DAAD (German Academic Exchange Service) is one of the key drivers of internationalisation. It has an annual budget of EUR 558 million (2018), over 70 officers and 400 Lektors (German language teachers). In 2019, DAAD announced the Competence Centre for International Academic Cooperation which aims to support HEIs in identifying international partners in other countries and regions for purposes of research and other knowledge exchanges.[7]

4.1.8 Germany doesn't officially have a 'target market' but adopts a 'decentralised approach'. According to the CEO of DAAD, *"Marketing doesn't mean for us only international student recruitment, but also to support the internationalisation of our universities in all its aspects"*. DAAD has run a successful campaign known as 'Study in Germany – Land of Ideas' as well as 'Research in Germany – Land of Ideas'. Alumni are also recognised as vital academic ambassadors.

Canada

4.1.9 Canada also achieved their 2020 target in 2017. They have not set a new target, but instead are focusing on raising the quality of their offerings, after announcing a new strategy in 2019.[8] The Canadian Government has allocated CDN$147.9 million (USD 110 million) over the next five years to support the new strategy. Among the top three reasons cited for studying in Canada were (i) academic reputation, (ii) non-discrimination, and (iii) safety. A key strategy is to promote outbound student mobility, to encourage Canadian and international students in Canada to go abroad and gain international exposure.

4.1.10 Study permits in Canada are for the duration of studies plus an additional 90 days upon graduation. No study permit is required if a programme lasts 6 months or less. Part-time work up to 20 hours per week is allowed, with a work permit required for any additional work. Students can also work as part of co-operative programmes, which are work-based learning programmes. In 2018, Canada approved 18,000 post-study work permits. To promote international research, work permit requirements for foreign researchers were removed for those on short-term contracts at public universities.

4.1.11 In August 2019, the Canadian Federal Government announced a 5-year plan (2019 – 2024) to enhance their internationalisation efforts, allocating $148 million for scholarships, hiring agents, opening overseas offices, and more. In order to enhance social integration, some local leaders in Halifax, Nova Scotia, have connected international students to the local workforce. There, international students were reportedly worth $173 million to the local economy.[9]

China

4.1.12 China set a target to receive 500,000 international students by 2020.[10] As of 2018, it was just 8,000 students short of its target. International students represent just 0.6% of the overall student population; a testament to China's population size. In the context of the internationalisation of higher education, it makes China a juggernaut for its capacity to both receive inbound students, and send its students abroad. Close to 60% of students in China are from Asia, with 16.57% from Africa, followed by 14.96% Europe, 7.26% America and 1.27% Oceania.[11] China, after France, is the second top destination for students from Africa – a testament to their long-term diplomatic push which began in the 1990s and continues under the One Belt One Road (OBOR) initiatives.[12] While international students are allowed to work, China has strict rules governing this; authorisation from both the international university as well as the local authorities are required.

4.1.13 Since 2017, international students with a Master's degree or equivalent from a Chinese institution are eligible for a 5-year work permit. Graduates in high-tech sectors and e-commerce have special study-to-work transition programmes in Beijing, Shanghai, and Shenzhen.

4.1.14 In 2010, the Chinese Government's National Plan for Medium and Long-term Education Reform and Development 2010 – 2020 identified a roadmap for "further opening China's education" through internationalisation. OBOR, launched in 2013, has seen a rise in students from India, Laos, Indonesia and Pakistan. In 2019, China introduced 12 Policy Measures to enhance their internationalisation efforts. This includes enhancing English language programmes, providing scholarships and research grants as well as liberalising work and residency permits. The China Scholarship Council (CSC) is a non-profit organisation set up by the Ministry of Education China to promote the mobility of inbound and outbound students. As many as 274 Chinese institutions are offering scholarships to international students each year. Academic programmes such as medicine are attracting Indian students and Chinese medical institutions have ensured they are recognised by the Medical Council of India.

4.1.15 Xiamen University Malaysia Campus is the first Chinese public university to open overseas. This, together with multilateral agreements with BRIC nations – Brazil, Russia, India, and South Africa – are among the Chinese Government's efforts to position China as a serious education player. In 2015, Tsinghua University, China's most prestigious, built an exchange centre in the US in collaboration with the University of Washington and Microsoft.

Japan

4.1.16 Japan's target of attracting 300,000 international students by 2020 was launched in 2009 (an 11-year plan) and is on track to achieve the target early. Over 95% of international students in Japan are from Asia. Most enrolment growth has been driven by Japanese language schools, up 274% since 2011. Another big area of growth has been the Japanese Professional Training Colleges – specialising in professional skills and TVET programmes – which have grown 168% since 2011.

4.1.17 Motivated by an aging society and declining youth population, new work visa laws were introduced to in 2019.[13] A total of 47,000 work permits were made available for international students, but as of September 2019, only 219 were granted,[14] suggesting a gap in policy and implementation.

4.1.18 To improve their branding and marketing, in 2014, Japan launched the 'Top Global Universities Project', which provides annual grants to 37 universities for up to ten years to boost their global status. More English content and courses are being offered with better websites built for international students to access.

Australia

4.1.19 Australia in 2016 raised their international student enrolment target from 500,000 to 720,000 by 2025. According to Deloitte, they are projected to not only achieve it, but potentially exceed it, and could reach 900,000.[15] International students account for 45% of Australia's higher education sector. Malaysian students in Australia are ranked fifth amongst inbound

nations. Australia recorded double-digit growth in 2018 from countries such as Colombia, Sri Lanka, the Philippines, Bangladesh, Chile, Kenya, and Mongolia. And by 2025, their top markets are expected to be China, India, Vietnam, Thailand, Nepal, Malaysia, Brazil, and South Korea. Australia's immigration policies are generally very attractive to international students, as both work and residency opportunities are given.

4.1.20 In 2016, the Government launched the National Strategy for International Education 2025 which aims to enhance their internationalisation through the theme 'Adaptive-Innovative-Globally Engaged'.[16] A 10-year marketing roadmap was also created as part of this strategy. It also launched the Australia Global Alumni Engagement Strategy 2016-2020[17] to connect with alumni in a considered manner. Australia's IDP (International Development Programme) remains one of the world's most successful education management and promotion companies. In 2019, its revenue hit AUD 598 million.

The United Kingdom (UK)

4.1.21 In March 2019, the UK set a new target of attracting 600,000 international students by 2030.[18] This is expected to generate GB£35 billion in education export revenues.[19] The 458,490 international students in the UK make up approximately 19.6% of total the student population.[20] In 2019, the UK Government announced that it was going to reintroduce the 2-year post-study visa.[21] This coincided with a 16% increase in student visas in 2019.[22]

4.1.22 In terms of R&D, 55.25% of all UK publications are products of international research collaborations. As for its academic staffing, 20% are international.

4.1.23 The UK is well-known for its various marketing and branding campaigns such as the 'Education is GREAT' campaign. Currently, it is running the 'Study UK Discover You' campaign. In March 2019, it launched the 'International Education Strategy: Global Potential, Global Growth', which aimed to establish a 'whole-of-government' approach by implementing a framework for ministerial engagement with industry and key education stakeholders.[23]

Up-and-Coming Nations, Regions, and Trends

The United Arab Emirates (UAE)/Dubai

4.1.24 The UAE, which is a collection of seven emirates including Dubai and Abu Dhabi, has come up as a strong destination for international students in the last decade. According to UNESCO, it was home to over 77,463 international students in 2016, up from 48,600 in 2011 (an almost 60% increase).

4.1.25 In Dubai alone, there were 36,757 international students enrolled in higher education in the 2017/2018 academic year out of 55,820 enrolments overall. For the new academic year, 2018/2019, over 275,000 new students registered with an HEI in the Dubai International Academic City, a 7% increase over the previous year.

4.1.26 There are 62 higher education providers in Dubai – making it the second largest education cluster in the world after China. As many as 39 of these HE providers are in 'Free Zones' which allow the setting up of foreign branch universities with tax perks and 100%

foreign ownership. Twenty-four higher education providers in the free zones are international branch campuses from the UK, the USA, Australia, India, and Russia. The institutions there include Heriot-Watt Dubai, University of Wollongong Dubai, and the University of Birmingham Dubai.

4.1.27 Higher education in Dubai is managed by the Knowledge and Human Development Authority (KDHA). They are focused on the overall human capital development needs of Dubai, with international students forming part of the plan. The KDHA also works with the Department of Tourism to run the 'Study in Dubai' brand that focuses on markets like China, Russia, and African nations. The plan is aligned with the Study in UAE programme, which is part of the UAE's 2021 Vision project.

4.1.28 Visa regulations were recently reformed. They went from offering only 1-year visas to 5- and even 10-year visas as part of Dubai's push to retain professional and skilled talent. Under the "Earn and Learn" programme, students can work part time in specially created Dubai Creative Clusters.

Russia

4.1.29 In 2017, Russia announced a new international recruitment programme to support the "development of the export potential of the Russian education system" to increase international student intake from its current level of 220,000 to 710,000 by 2025.[24,25] Among the programme's components include strengthened support services for international students, expanded English-medium degree programmes, and an increasing range of (i) joint programmes, (ii) pathway options, (iii) summer programmes, and (iv) online programmes. This includes visa reform from yearly renewals to 3-year visas. Russia is currently the 7th largest host of international students.

4.1.30 The Russian Government expects to spend US84 million through 2025 and in return, anticipates Russian education exports to increase by 350% from their current level of US1.4 billion to US6.3 billion.

New Zealand

4.1.31 In New Zealand, NZ$ 877 million is invested annually for advanced research expertise through globally acclaimed faculty, labs, and technology. It was also the first country in the world to implement a *Code of Practice for Pastoral Care of International Students*, which, by law, requires education providers to offer and maintain certain standards of care for students.

Challenges

Graduation Rates

4.1.32 In Germany, graduation rates are a concern. In 2014, 41% of international undergraduate students did not complete their programmes compared to 28% of masters students. Contrastingly, German students were at 28% non-completion for bachelors and 19% masters. Another challenge is language proficiency for employment and relatedly, the retaining of the best talent for Germany's development needs.

Geopolitical Uncertainty

4.1.33 In Canada, geopolitical uncertainty has shown it can have an impact on higher education internationalisation. A 2018, a diplomatic spat with Ottawa saw Saudi Arabia abruptly cancel funding for its students and order their withdrawal from the country. Similar geopolitical challenges are faced in Australia, where there have been allegations of political interference and infiltration of communist ideologies in Australian universities due to the growing Chinese student population. A few years ago, there were incidences of racism against students from China and India due to growing unease and right-wing politics.

Diversifying the International Student Intake

4.1.34 Over-reliance on students from China and India tends to be a common theme among many top destination countries such as the USA, the UK, Canada, and Australia. This could hurt their internationalisation trajectory in the long run. However, Canada and Australia have started to diversify. Among the reasons for the slowdown of internationally mobile Chinese students to these top four countries include greater competition, lower prices elsewhere with comparable quality, and the declining Chinese university-aged population.

Keeping Locals Happy

4.1.35 China faces a different challenge, namely some locals are upset by perceived favouritism towards international students. At the same time, enhancing the international student experience is something China needs to improve on.

Declining Enrolment amidst an Aging Population and Economic Uncertainty

4.1.36 Japan needs to continue growing its international student population owing to its unique aging population challenge. Among the systemic difficulties faced in Japan include different admission systems (their semester begins in May) and economic uncertainty. These have led some HEIs to be too preoccupied with plans to merge and consolidate to survive declining domestic enrolment. Retaining talent is also a challenge due to different cultural norms, especially business norms. Recently, Japan had some problems with international students disappearing, especially those from Vietnam and Nepal, requiring them to step up their monitoring, vetting, and tracking, as well as potentially reform the duration of their visas.

Anti-Immigration Sentiment and More Geopolitics

4.1.37 In the UK, growing global competition compounded with Brexit and the growing right-wing political climate that tends to be anti-immigration has cast a cloud over the UK as a preferred destination. In the United States of America (USA), new data released by the Institute of International Education shows that foreign student enrolment only grew by 0.05% in the 2018/2019 academic year, and this is "the lowest growth rate in a decade". This could impact the bottom line for some universities. The decline is due to, among other factors, the political situation in the USA and the tightening of work visa regulations for foreign nationals, which had been made more difficult to obtain in 2019. Countries like Saudi Arabia

deprioritised sending its scholars to the USA in 2016, and this has contributed to a 16.5% decline as of academic year 2018/2019. Chinese students have reportedly found the US academic environment increasingly unfriendly in light of trade war between the two countries.

ASEAN: A Journey toward Cohesiveness

ASEAN's Potential

4.1.38 As a regional block, ASEAN is an emerging powerhouse with geopolitical developments keenly followed by the world's biggest nations.[26] With the ASEAN Community 2015 'One Vision. One Identity. One Community' initiative ongoing, many efforts are being made to create synergies across various sectors, education included, with the ultimate aim of improving the lives of ASEAN citizens.[27] Under the ASEAN Socio-Cultural Community (ASCC), also known as the 'people pillar' of ASEAN, increasing tertiary education enrolment is a key goal.

Patchy Inter-linkages and Diverging Priorities

4.1.39 In terms of internationalisation, it appears there are some efforts ongoing, but they are mostly rooted in mobility programmes, and described as "patchy" in a 2018 study by the British Council titled, 'The Shape of Global Higher Education: Understanding the ASEAN region'.[28] There are still significant social and political hurdles ASEAN needs to cross.

4.1.40 Malaysia and Thailand scored "very high" on the openness of the higher education systems, including student and academic mobility, while Myanmar scored low.[29] Among the challenges faced are the different levels of development of ASEAN countries and varying priorities. Vietnam, for instance, is focused on sending top students abroad, much like Malaysia once was many years ago.

4.1.41 Other ASEAN nations, like Myanmar, are still nascent in their higher education trajectories, and while they do send students abroad, they appear to be focusing more on internally building the knowledge capacity of locals.[30,31,32]

4.1.42 Singapore on the other hand, in light of its developed nation status, has shifted its focus to attracting high-value talent to attend its world-class universities, and has adopted a recruitment strategy of bringing in the best academics from around the world. This policy has, nevertheless, courted its share of controversy and faced several challenges (especially with regard to local academic talent and the issue of cost).[33,34]

Frameworks for the Mutual Recognition of Academic Qualifications

4.1.43 When it comes to recognising academic qualifications, the ASEAN Qualifications Reference Framework (AQRF),[35] launched in 2017, is slowly gaining prominence together with the ASEAN Quality Assurance Framework for Higher Education (AQAFHE) and the ASEAN Credit Transfer System (ACTS, modelled on the European Erasmus programme). As of February 2020, these frameworks are still being put to the test.

ASEAN Looks Down on ASEAN

4.1.44 As it is, ASEAN students do not appear to view ASEAN countries as top education destinations. It would appear that other ASEAN nations, aside from Indonesia, might not be easy targets for Malaysia.[36] Thailand and Vietnam are both top outbound mobility ASEAN nations, but for Thailand, Malaysia is only its fifth preferred destination, while we are not even in Vietnam's top ten.[37,38,39] Various factors contribute to this, including a preference to go to English-speaking developed countries, cultural considerations, and specific scholarships for Vietnamese students from nations such as New Zealand, Hungary, Russia, and Cambodia.[40,41] Singaporean students, on the other hand, prefer to go to developed countries, due to the perceived quality of qualification and certification.[42]

Malaysia's Competition in ASEAN

4.1.45 Thailand, Indonesia, and Vietnam are emerging as potential competitors to Malaysia as an international higher education destination. Thailand, for instance, allows international students to work and has seen a twofold increase in students from China since 2012 (i.e. 8,500 in 2017), mostly from the southern, largely rural provinces. Thailand is explicitly targeting students from China, and China also, as part of OBOR, wants to enhance its influence in Thailand. Thailand is motivated by falling domestic enrolments (from 2.43 million in 2016 to 2.41 million in 2017) and an aging population. In 2015, Thailand had about 16,000 international students.

Other Global Trends

4.1.46 According to the British Council report, 'The Shape of Things to Come: Higher Education Global Trends and Emerging Opportunities to 2020', research partnerships is a trend that will drive internationalisation. Researchers with international experience create the most highly cited research articles, and this correlates with quality. There is also a strong correlation between international research collaboration rates and citations per document. There is also huge potential in collaboration opportunities with businesses/multinationals and to leverage on internationalisation for purpose of commercialisation for global markets.

4.1.47 As for academic programmes, Malaysia's mature transnational education (TNE) market is seen as another pull factor for international students who want, for example, a UK education which is affordable. This puts Malaysia ahead of nations such as Pakistan, Nigeria, Indonesia, and Vietnam who face a combination of security issues, legislative barriers, and the relative lack of openness of the location education system.

Conclusion

4.1.48. In 2016, Malaysia and Germany were named the "best performers" in national policies on internationalisation of higher education. These findings were based on a study conducted by the British Council titled, 'Shape of Global Higher Education: National Policies Framework for International Engagement' which examined policies in 26 nations across three main categories, against 37 qualitative indicators. The three main categories were openness, quality assurance and recognition, and access and sustainability.

4.1.49 In many ways, this report validates Malaysia's internationalisation efforts and the country's push to attract large numbers of international students, as well as enhance R&D collaboration, attract more international staff, enhance academic offerings, and improve social integration and community engagement. Nevertheless, Malaysia is known for coming up with good strategic documents and policies. The challenge often lies in the execution of said strategies and policies, as well as communicating the vision, mission, and objectives of these documents to all stakeholders.

4.1.50 In November 2019, the Malaysian Cabinet approved 32 new initiatives to improve international student management. This is part of the government's ongoing commitment to internationalisation. On top of this, exploring new approaches, such as the internationalisation of TVET and looking at the role of new technologies, will be key to Malaysia having a competitive advantage against other nations who are looking to enhance their internationalisation efforts themselves.

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4.2 Branding 'Education Malaysia' and Malaysian HEIs

Introduction

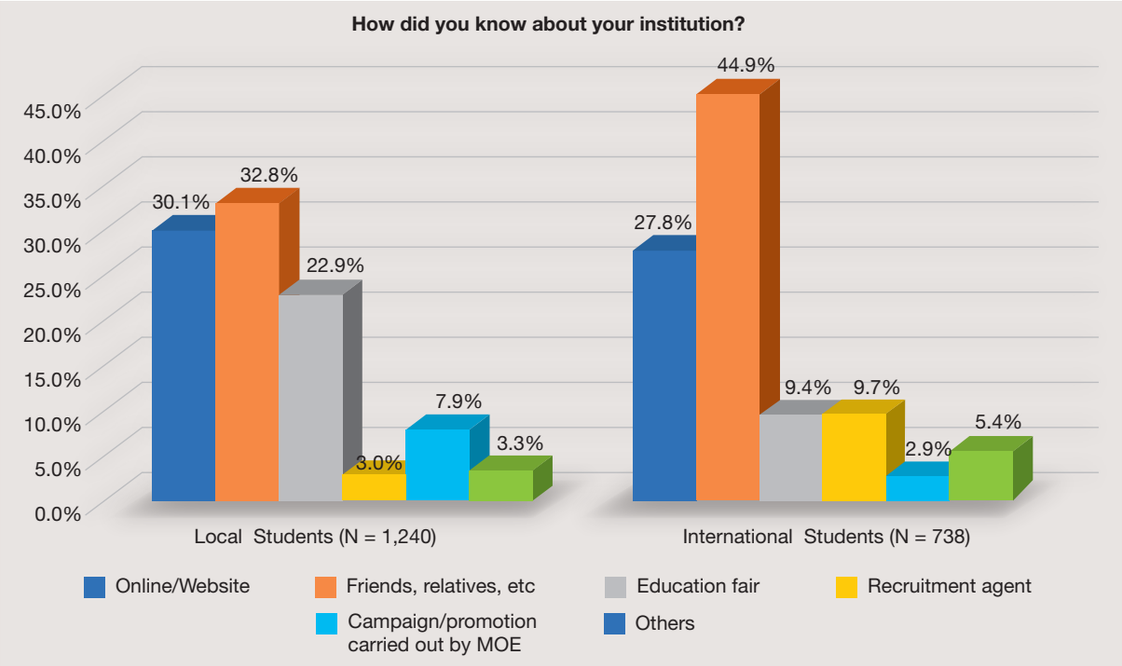
4.2.1 In recent decades, globalisation has transformed higher education to become more commercialised and accountable as HEIs compete for international students, scarce resources, and the attention of their stakeholders.[1] HEIs employ core value statements, visions, and missions to brand themselves, show what they stand for, and differentiate themselves from other institutions.[2] Due to increasing international competition among HEIs and a growing interest in creating 'flagship universities' and centres of excellence, HEIs increasingly use branding strategies to position themselves in a crowded arena and make themselves stand out.

4.2.2 Nation branding has also become increasingly important in the context of countries and regions contending for economic power and political influence in this international competition.[3] This is especially significant for Malaysia, which sees its higher education sector as one of the key economic areas that would help the country become a developed nation.[4] Malaysia's initiatives in branding itself as a regional education hub in Southeast Asia have been successful and Malaysia has become a serious contender against the big players (e.g. the US, the UK, and Australia) in attracting internationally mobile students.[5]

Where Are We Now?

4.2.3 Online research has emerged as a significant factor in decision-making for students looking for information on their universities of choice.[6] This finding was validated by the survey conducted by the Study Team among 1,240 local and 738 international students who were asked about their search processes for information on their HEIs.

Figure 4.1 Bar Chart of Students' Search Process for Information on Their HEIs

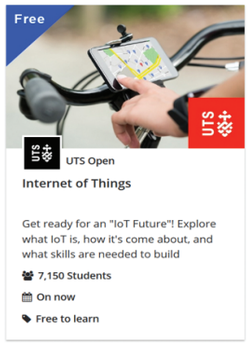


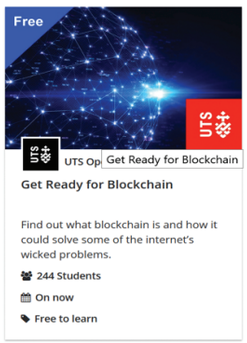
Note: Percentages may not add up to exactly 100% due to rounding error.

4.2.4 'Online/website' was the second-highest response, with 27.8% of international students and 32.1% of local students answering that they first learned about their HEI through this method. The first choice of both local and international students was recommendations from friends, relatives, and the community. This suggests that we should be putting our branding and marketing efforts into these two areas. **Box 4.1** shows how technology can be utilised at the institutional level to promote a university's brand and its courses.

Box 4.1 The Innovative Use of Technology in a University's Branding and Marketing Efforts

Case Study: Technology Enabled Marketing & Branding



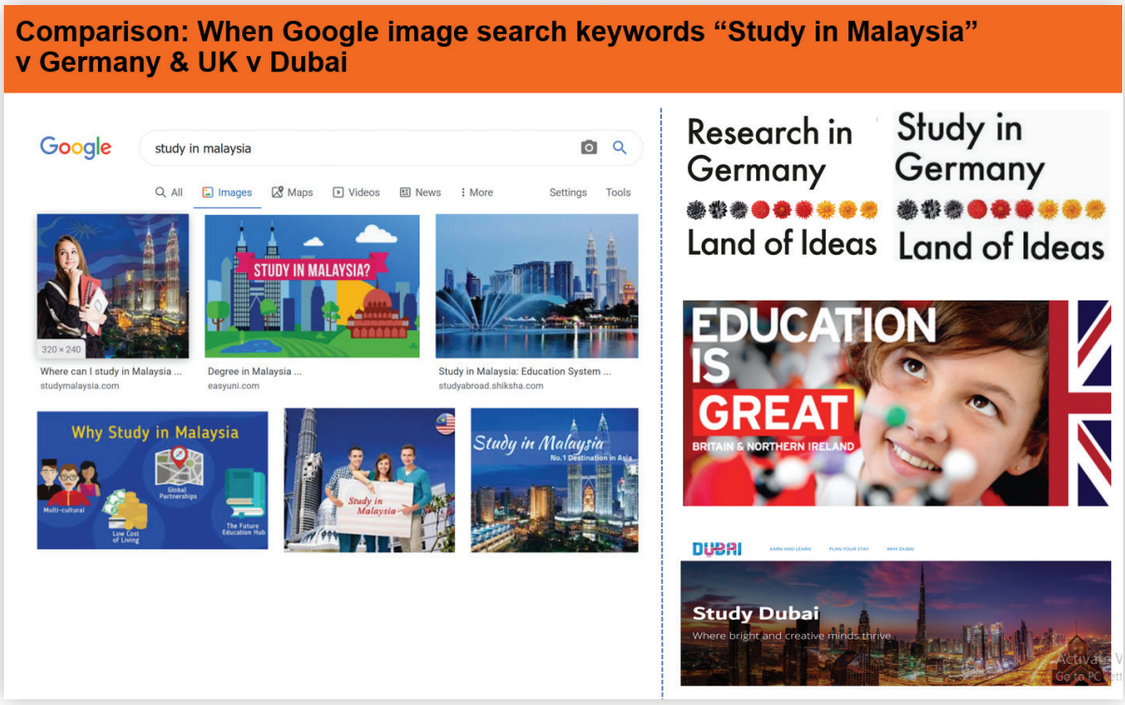


- **University Technology Sydney (UTS)** launched UTS Open in January 2018 on e-learning platform www.OpenLearning.com/uts
- **Objective**:
  - As a branding and marketing tool.
  - To gain **hot leads** for marketing & internationalisation efforts (the assumption is that students who take these courses have an interest in the area)
- **How?** By **creating free online taster courses** for students all around the world covering **technology, ethics and social impact courses**.
- **Outcome: Within 6 months, they were able to get over 5,000 leads**

4.2.5 Two official websites were created to provide information on higher education in Malaysia. Educationmalaysia.gov.my, launched in 2013, is an official website of Education Malaysia Global Services (EMGS), a company established and under the purview of the Ministry of Higher Education Malaysia (MOHE) to provide information about studying in Malaysia. Meanwhile, to "project the good image" of Malaysian higher education to local and international audiences, Studymalaysia.com, the online marketing tool for Malaysian HEIs, was established in 1998 to offer information on HEIs, study programmes, and scholarship opportunities. These websites probably act in two ways: (i) as the first gateways into Malaysian higher education to promote the Malaysian higher education brand and (ii) to communicate the positive brand attributes and values.

4.2.6 However, in a Google search for the terms "Study in Malaysia", a series of images came up with the KLCC Twin Towers and no other image to symbolise Malaysian education. In contrast, a search for "Study in Germany" showed the tag line of "Land of Ideas," and the UK showed images from their marketing campaign of "Education is Great" with the symbolism of the UK flag and the image of one of their renowned college buildings. Dubai's search results show a consistent use of their brand slogan ("Where bright and creative minds thrive"). Malaysia, it seems, still does not have a cohesive branding and marketing campaign and is far behind in nation branding.

Figure 4.2 Google Search for the Terms "Study in Malaysia"



Strengths

General Perceptions of 'Education Malaysia'

4.2.7. Participants in the policy labs, focus groups, and interviews were asked to attribute meanings and perceptions to the brand of 'Education Malaysia'. They had several (mostly) positive meanings they associated with the brand. The word cloud (**Figure 4.3**) shows the words that were associated with the Education Malaysia brand from focus groups data collected.

4.2.8 From an analysis of the data collected, the meanings associated with the brand 'Education Malaysia' are the following:

(a) Good quality;
(b) Wide range;
(c) Affordable;
(d) Good value;
(e) Innovation;
(f) Cost-effective;
(g) Emerging destination;
(h) Unity and diversity;
(i) English spoken widely; and
(j) Friendly and welcoming.

Figure 4.3 Word Cloud of the 'Education Malaysia' Brand

Students' Perceptions

4.2.9 Students, in particular, associated the following (again, mostly) positive meanings with the 'Education Malaysia' brand:

(a) Stepping stone;
(b) Ability to embrace other cultures and language;
(c) Secondary option;
(d) Good centre for travelling;
(e) I do not know what the brand 'Education Malaysia' is!; and
(f) Currently we are selling our university with our own version of "why Malaysia".

Parents' Perceptions

4.2.10 The 'Education Malaysia' brand were perceived by parents as:

(a) Balanced lifestyle;
(b) Pathways for my children to enter global community;
(c) Quality not good;
(d) Safe environment;
(e) Cheaper option than Europe/Australia/Singapore;
(f) Culturally appropriate; and
(g) Close to home, international standard.

Industry Players' Perceptions

4.2.11 To industry actors, the 'Education Malaysia' brand meant:

(a) Wider pool of talent;
(b) Partnership/collaboration;
(c) New perspective from foreign students;
(d) Industry-ready;
(e) Project an image of Malaysia as the catalyst for ASEAN market through education; and
(f) Depends where they graduate from.

Alumni Perceptions

4.2.12 Alumni had the following associations with the brand:

(a) Ability to work with people from different backgrounds and cultures;
(b) What can we do for alumni, not the other way around; and
(c) Local alumni not so proud of the standard, but foreign alumni are very proud.

4.2.13 It seems that the predominant attributes of the brand 'Education Malaysia' are to do with affordability and value for money, and to some extent, quality. Safety and cultural appropriateness were attributes that also mattered, although they did not dominate. These are Malaysia's brand strengths as a higher education destination for international students. However, as can be seen above, amidst these mostly positive associations different stakeholders had with the brand, there were unfortunately a smattering of neutral or even outright negative perceptions. The next section explores these perceptions more in depth.

Areas for Improvement

Limitations of the Brand

4.2.14 Study participants were also asked about brand limitations. Some brand weaknesses that emerged from their responses were:

(a) Sure pass;
(b) Quality?;
(c) Not providing work-ready graduates; and
(d) Lack of soft skills – communication and questioning.

4.2.15 Some policy lab participants felt that the branding strategies were inconsistent and lacked an overarching cohesive brand that was able to connect all the disparate components together. The branding of Education Malaysia is yet to form a cohesive whole for stakeholders; bits and pieces of the brand are seen, but not consistently reinforced.

4.2.16 Some were of the opinion that even with the brand attribute of 'affordability', Malaysia was still considered as third or fourth choice for the international students they targeted. Therefore, their offered solution was for Malaysia to strike a balance between affordability and quality to position ourselves as a 'more than third or fourth choice' destination.

Weak Inter-government Agency Support and Coordination in Branding and Promotion

4.2.17 From the policy labs and interviews, the feedback was that there was inadequate support and coordination in promoting the 'Education Malaysia' brand. For example, embassies were given little guidance on how to support brand promotion. HEIs, especially private HEIs, gave feedback that MOHE, the embassies, and other government agencies did not give them enough support and guidance in their trade shows overseas. Thus, there appears to be a need for an overall coordinating agency in charge of this area to ensure that all stakeholders are included and to coordinate a comprehensive and inclusive strategy when HEIs go abroad to promote themselves and the 'Education Malaysia' brand.

The Way Forward

4.2.18 There is, therefore, a need to reposition the 'Education Malaysia' brand. Lomer et al. in their study of the UK's repositioning of the UK Education brand over the years explained how the 'quality beyond dispute' brand campaign in 1999 was devised to associate high standards with the Education UK brand, and that their universities, colleges, awarding organisations, and schools were renowned globally for their excellence.[7]

4.2.19 Thus, the UK's desirability for international students is premised upon its reputation for "the quality and value of the education".[8] This campaign changed in 2010 when student experience became the touchstone to measure the value of an international education. HEIs were then encouraged to develop innovative study experiences for their students.[9]

4.2.20 Education UK used Cambridge and Oxford to represent quality and symbolise cultural capital rather than showcasing the diversity of British HEIs. Hence, Cambridge and Oxford served as representatives of British academic excellence, a positioning that would impact on the reputation of their entire higher education sector. The Study Team recommends that Malaysia could similarly employ this brand strategy and leverage on the world class reputation of UM, UPM, USM, and UTM to forge a brand identity associated with quality and cultural capital.

Recommendations from an Advertising and Branding Expert

4.2.21 Tan Kien Eng, Chief Executive Officer of Leo Burnett Malaysia, was interviewed for this study for recommendations on positioning the 'Education Malaysia' brand. He said that there would be different strategies for different segments of the market, but overall, he suggested that key attributes or advantages that Malaysia has should be foregrounded in any branding campaign. In the short term, any branding campaign should still focus on affordability.

4.2.22 Malaysia has the following strengths, according to Tan Kien Eng, from which his recommendations flow:

(a) Ease of fitting in (especially for students from China, India, and Indonesia) as we have similar cultures

> *"Indians from India and Chinese from China who do not wish to stand out from the crowd will find Malaysia easier to fit in because of the cultures."*[10]

4.2.23 With China and ASEAN economies as growth markets, international students' choice of either Malaysia or Singapore will help them fit in well. The feedback from the Indonesian policy lab and focus group students, for example, was that they find themselves fitting in as Malaysia has cultures similar to their own. Students from other ASEAN countries also expressed ease in fitting in as they come from largely similar cultural backgrounds and food palate as ours in Malaysia. Furthermore students from the Middle East said they found it easy to fit in as Malaysia is a Muslim-friendly country. They expressed a liking toward the diversity in cultures and yet found themselves at home with Muslim practices and food. These stories should be on the Education Malaysia website and the websites of individual HEIs in the form of videos and podcasts.

(b) The ability to give parents of international students' peace of mind

> *"Look at China, with the one child policy; very important to give parents the peace of mind when they send their children abroad. Malaysia has to build this image that it is safe, conducive, and able to give parents the peace of mind."*[11]

4.2.24 Malaysia has yet to build on its brand perception that it is a safe haven, free from wars, natural disasters, and violent racial conflicts.

(c) The potential to harness the power of narratives

4.2.25 Students and alumni have yet to tell their stories of their student experience in Malaysia.

> *"Student testimonials are powerful. Must remember the* ***lifetime generational value*** *of a student coming from a university."*

> *"Perception needs to be built on what type of student the 'Education Malaysia' brand produces. The idea of Education Malaysia is kind of lost."*

> *"Run a campaign to different target groups. Talk to different target groups to leverage proximity of growth markets in ASEAN, SEA."*[12]

Conclusion

4.2.26 In summary, the Study Team recommends that MOHE and Education Malaysia Global Services (EMGS) do the following:

(a) Review the 'Education Malaysia' brand to reconceptualise what it stands for and how it is differentiated for different target groups;

(b) Work with all HEIs, public and private, to promote consistency and cohesiveness of branding: one attribute such as quality should be the overarching theme;

(c) Work with other government agencies such as Tourism Malaysia and the Ministry of Home Affairs to ensure that all government agencies are promoting the same brand campaign and exemplifying the appropriate brand values; and

(d) Have a predominant coordinating body in MOHE that monitors the conduct of this branding campaign through marketing activities to ensure consistency of application (e.g. education fairs, searchable database of Malaysian educational programmes), oversees professional development and certification for education agents, coordinates changes to institutional marketing and recruitment practices, guides the development of new courses and programmes led by marketing, and student award programmes.

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1 Samokhvalova, A. (2017). Branding higher education: The case of Malaysian higher education promotion on the Internet. Kajian Malaysia, 35(2), 87–104. https://doi.org/10.21315/km2017.35.2.5

2 Sataøen, H.L. (2015). Higher education as object for corporate and nation branding: Between equality and flagships. Journal of Higher Education Policy and Management, 37(6), 702-717.

3 Ibid.

4 Samokhvalova (2017).

5 ICEF Monitor. (2016). Malaysia competing for a greater share of international students, 22 August 2016.

6 Samokhvalova (2017).

7 Lomer, S., Papatsiba, V., & Naidoo, R. (2016). Constructing a national higher education brand for the UK: positional competition and promised capitals. Studies in Higher Education.

8 Ibid.

9 Ibid.

10 Tan Kien Eng, Interview, 6 Dec 2019.

11 Ibid.

12 Ibid.

4.3 Star Academics

Introduction

4.3.1 Celebrity Academics or Super-Profs refer to academics whose fame go beyond the people working within their area of expertise, for example the late Stephen Hawking. Though Malaysia has not had an academic with a comparable level of fame, there are some efforts to highlight the research of promising academicians through award ceremonies. In order to examine if these types of awards were successful in improving the internationalisation of HEIs in Malaysia, the winners of the Malaysia Research Star Awards 2018 were contacted to reflect on the changes in their careers since receiving the award. Out of the 16 prominent researchers, only six responded to the email request for interviews. Furthermore, prominent academics were contacted to reflect if their increased visibility improved internationalisation.

Increase in International Recognition

4.3.2 Overall, the respondents unanimously agree that the award has opened doors for them to be more recognised internationally, especially in terms of invitation as keynote speakers to international conferences, and international research collaboration and funding. Reflecting on her year since getting the award, Professor Ir. Dr. Nor Aishah Saidina Amin from Universiti Teknologi Malaysia noted:

> *"I have received the 2019/2020 Fulbright Malaysia Fellowship, invited to be in the committee for proposal evaluation in European Research Council, appointed a committee member for Asia-Pacific Applied Catalysis Association and also been invited by Curtin University, Perth to give a talk at their university in 2020. I received all these accolades this year."*[1]

Increase in Quality and Quantity of Postgraduate International Students

4.3.3 Some of the star professors also noted an increase in the amount and quality of postgraduate international students under their care post-award. The recognition has helped put them on the map as quality postgraduate international students reached out to them for supervision. Reflecting on his experience, Professor Datuk Dr. Ahmad Fauzi Ismail, also from Universiti Teknologi Malaysia, said that:

> *"One of the positive aspects [of] being recognised as a Research Star is the recognition by overseas postgraduate candidates who are interested to continue their education in Master and PhD. levels. In my case, the number of foreign students under my supervision has increased."*[2]

4.3.4 A similar experience can be seen here when a star academic with an impressive CV, Dr. Tan Jun Jie, managed to attract PhD. students from China:

> *"I have 3 PhD. students from China and one Master local student. They are my ambassadors to China as they will discuss their experience working under me with their peers. The students know about me through a research collaboration (MOA) between their university and USM, this is a research co-supervision program. It was the supervisor in China counterpart who contacted me directly based on the information he gained from peers in USM and the website. And my research profile on Google Scholar too."*[3]

4.3.5 From the above statement and from the interviews with the group of star academics, it is important to note that first and foremost, a star academic does not only have to be among professors. Secondly, Memoranda of Agreement (MoAs) or Memoranda of Understanding (MoUs) could provide good platforms for research collaborations if both institutions (local and international counterparts) could identify a common ground for research. From these productive research collaborations, it is much easier to attract international student talent. Last but not least, academics must creatively profile their achievements on official websites and of course, the popular and viable Google Scholar and Researchgate platforms. Building a publication portfolio on sites like Publons and Orcid is also instrumental.

4.3.6 The importance of international exposure abroad at prestigious universities, for example Oxbridge and the Ivy League Universities, cannot be denied as one of the key factors in attracting potential 'talented' postgraduate students. For instance, Dr. Tan although just a senior lecturer, had excellent international exposure at renowned institutions. A stem cell biologist working on Heart Regeneration and Tissue Engineering in Advanced Medical and Dental Institute, USM, Dr. Tan earned his undergraduate degree in UPM Biomedical Sciences, graduating with First Class Honours. He then pursued his PhD. at the University of Oxford. He was also a visiting research fellow at King's College London and did his postdoctoral research at the Massachusetts General Hospital, Harvard Medical School.

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4.3.7 In addition to their personal experiences, these group of academics were asked for their suggestions in improving internationalisation of Research and Development at Malaysian HEIs. The recommendations centred on providing better funding opportunities, especially in terms of support in applying for international funding, including aligning R&D objectives with the Sustainable Development Goals and increasing strategic alliances with prominent researchers abroad. Professor Dr. Mohd Saberi Mohamad from University Malaysia Kelantan noted that ultimately, the most important driver of the internationalisation of research and development in Malaysian HEIs remains the commitment of the leaders within the ministry and university. If the buy-in at the top is present, then the internationalisation initiatives are bound to follow. Overall scholars suggest that R&D opportunities should be more flexible with relatively easy access to funding and less bureaucratic rigidity.

4.3.8 Given the responses, it is likely that the public celebration and promotion of research excellence within our HEIs can create improved internationalisation within our HEIs through increasing staff mobility, research, and development and to some extent, student mobility. While we celebrate star academics for their scholarly capabilities and achievements, research has shown that the underpinning factor for student satisfaction is the "supportiveness of supervisors". Therefore, further study needs to be done to fully address the question of how a balance could be struck; perhaps also a national level award for collegial excellence.

References for Part 4.3

1 Professor Ir. Dr. Nor Aishah Saidina Amin, Email Interview, 4 Nov 2019.

2 Professor Datuk Dr. Ahmad Fauzi Ismail, Email Interview, 4 Nov 2019.

3 Dr. Tan Jun Jie, Interview. 3 Feb 2020.

4.4 Education Clusters

Introduction

4.4.1 An education cluster refers to "a complex of educational institutions of all educational levels within certain a geographical area, [with shared] resource and employer suppliers, innovative system elements, as well as administration and government bodies, whose activity is connected with nearby industries and the development of a regional innovative system".[1]

4.4.2 Examples of such education clusters globally include prominent education institutions such as the International Institute of Information Technology (IIT), which resides within India's Silicon Valley in Bengaluru; Stanford and Berkeley in Silicon Valley; as well as Boston's education hub which hosts global universities such as Harvard University and Massachusetts Institute of Technology (MIT) in the Massachusetts Business Hub.

4.4.3 In all cases, these clusters have high degrees of internationalisation in the recruitment of faculty, staff, and students.

Malaysia as an International Education Hub: The Role of Education Clusters

4.4.4 Malaysia has great potential to become a global education hub. A shift in geopolitical trends and competitive global forces within the US and Europe, for instance, has helped Malaysia grow as a preferred destination of study for Muslims abroad.[2] Malaysia's unique culture and values as a moderate Muslim country also increases its attractiveness to international students, as does its image as a safe destination of interest.[3] Additionally, the widespread use of English as a medium of communication significantly reduces language barriers and eases communication for international students. Other considerations include the cost of studying in Malaysia, which has relatively economical academic fees and living expenses.[4] Finally, the easing of regulations has contributed to Malaysia's attractiveness as both private and public universities (including branch campuses) have been exempted from a five percent cap on international students at the undergraduate level.

4.4.5 Malaysia has increasingly developed an international reputation as a cosmopolitan education destination hub with many well regarded and well-ranked universities from all over the world. For example, Malaysia has the largest number of foreign branch campuses in the world, mostly from universities in the United Kingdom and Australia. Private higher education institutions have also contributed to the rise in international student enrolment. Private institutions such as Sunway University, KDU University College, Taylor's University, and INTI University on average have an international student population between 15% and 30%.[5] The rise in the number of international students has also contributed to higher revenue gains in private education. These factors suggest that Malaysia's vision of becoming a regional hub in higher education can be achieved with proper strategic planning. Malaysia can be transformed into an education hub through a focus on such dimensions of internalisation as student mobility, staff mobility, and collaboration with international higher education and industry.

4.4.6 This study provides a macro view of internationalisation in Malaysia and reviews the potential of two education clusters, namely EduCity in Johor and Cyberjaya. It does this firstly, by reviewing the extent of internationalisation in Malaysia and the level of internationalisation in identified education clusters vis-à-vis geospatial mapping and qualitative analysis. Secondly, it reviews the typologies of said education clusters and their levels of success based on a set of characteristics. And thirdly, it will make recommendations for improvements in its growth. It concludes on the importance of education clusters in helping Malaysia achieve its goal of internationalisation in higher education, besides its development goals of becoming a knowledge economy.

Types of Education Clusters

4.4.7 Education clusters or hubs are complex ecosystems with different objectives and impact on the surrounding areas, as well as the national education system.[6] Regional education hubs, despite their complexity, can still be categorised into three main typologies: (i) student hubs, (ii) training/skilled workforce hubs, and (iii) knowledge/innovation hubs.

Table 4.5 Types of Education Hubs[7]

Type of Education Hub	Student Hub (Level 1)	Training/Skilled Workforce Hub (Level 2)	Knowledge/Innovation Hub (Level 3)
Similarities	• Several universities and HEIs within proximity • Government support provided to institutions • International students actively recruited • International branch campuses invited • Revenue generation as a common motive		
Objectives	1 The internationalisation of domestic higher education 2 Raising the international status/prestige of local education	1 Developing a skilled workforce comprising of domestic and foreign students 2 Offering academic programmes and professional development opportunities for current employees in the area. 3 Promoting collaboration between industry and academia	1 Building a knowledge and service-based economy 2 Educating and training skilled labour for knowledge and innovation 3 Attracting foreign direct investment 4 Increasing regional economic competitiveness
Other Characteristics	Each campus typically has its own recruitment processes	Often co-located with non-degree-granting training institutions and other companies in one zone	Financial incentives are offered to foreign universities, institutes or companies with major R&D activities Collaboration among the stakeholders is vital to making this kind of hub a success

4.4.8. As can be seen in **Table 4.5**, Level 1 education clusters are typified as 'Student Hubs', which means that the HEIs behave independently and work individually towards their targets, in spite of geographical proximity and potential shared goals. Level 2 clusters described as 'Training/Skilled Workforce Hubs' and are more strategically focused with a higher degree of interdependence and closer linkages between industry and HEIs. The universities provide graduates for the industry players and help with upskilling the current workforce but are still lacking more robust forms of collaboration. The Level 3 cluster, i.e. the 'Knowledge/Innovation Hub', is the preferred type, as it attracts foreign investments, contributes to the development of a knowledge- and service-based economy, and increases regional competitiveness. In the 'Knowledge/Innovation Hub', beyond just education or training, the objective is becoming the production of innovation and knowledge, which requires the active participation of industry actors in research activities.

4.4.9 The importance of developing Level 3 education clusters is further corroborated by macro studies on Malaysia's knowledge economy, which view higher education institutions as key 'knowledge enablers' in developing a country's capabilities in innovation. In advanced economies, HEIs positively contribute to a country's dynamic capability in innovation by forming strong partnerships with other 'knowledge enablers' such as industry actors, trade associations, government agencies, and training institutions in order to collectively produce solutions for better product-market outcomes.[8] Education clusters, in this sense, may serve as greater enablers of innovation as compared to singular institutions, as is readily seen in the cases of Bengaluru and Silicon Valley.

4.4.10 Lee (2014), on the other hand, holds that the main objectives of creating education hubs are revenue generation and capacity building.[9] However, it is important to identify the type of talent that is the priority for each hub, be it local students and staff, international students and staff, or repatriated diasporic students and staff. The strategies for talent attraction then need to be aligned to this strategic decision.

4.4.11 Navarro et al. (2017) point out that although an education hub is ultimately a collaboration between universities and industry, the government plays a crucial role; first, a symbolic one when setting up the cluster, and then continuing as a facilitator of the collaborative culture.[10] Collaboration is usually in four main areas, consultancy, product commercialisation, technology transfer, as well as innovation and R&D.

4.4.12. A large percentage of Malaysia's IBCs are typically situated within clusters, close to other local HEIs. For example, Newcastle University Medical School is within the EduCity cluster and Heriot Watt University Malaysia is in the Putrajaya-Cyberjaya area where there are many local colleges. However, there is one hybrid version of a branch campus. Malaysia's first international branch campus, Monash University Malaysia, is located not within an area of other universities, but rather within the Sunway township where there are hotels, spas, a waterpark, etc. in close proximity.[11]

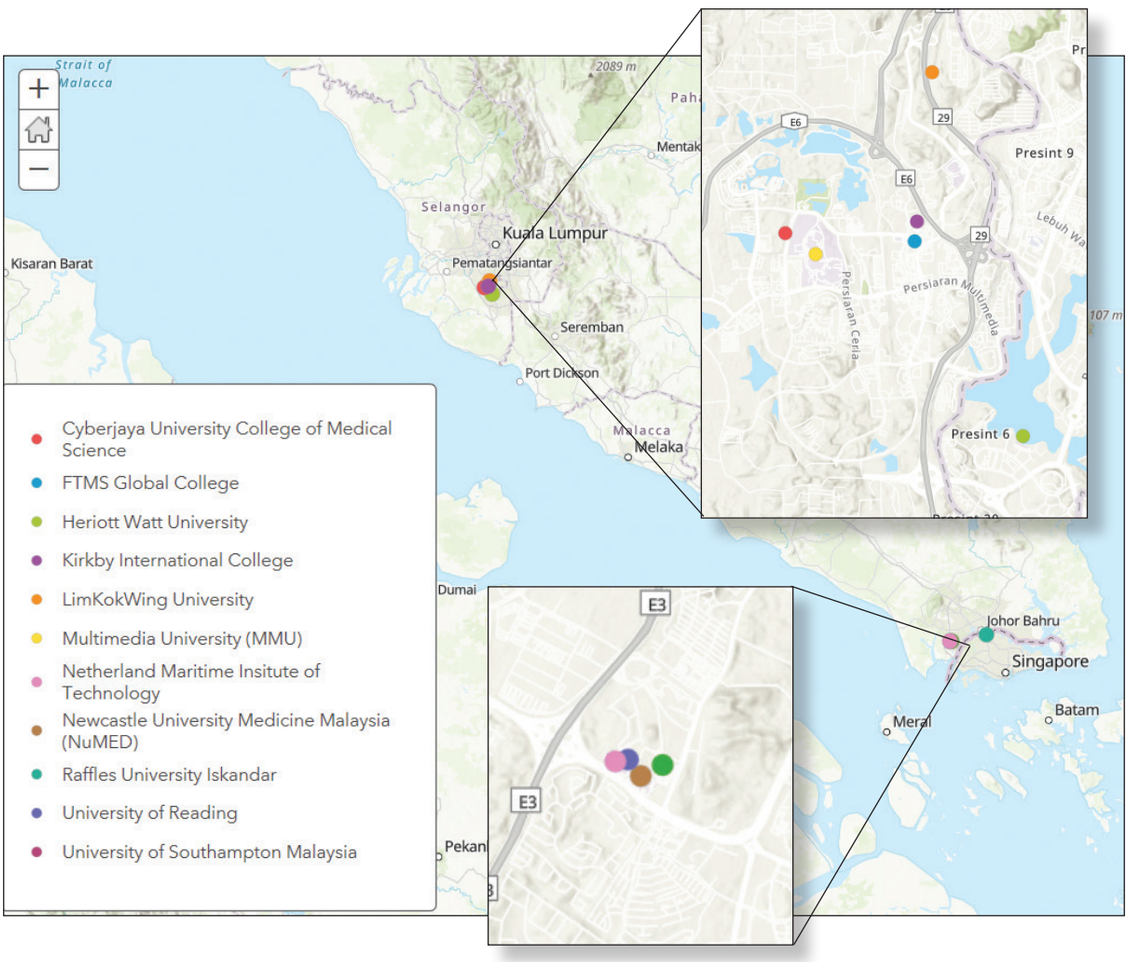
Where Are We Now?

Cyberjaya and EduCity: Malaysian Education Hubs

4.4.13 The selected study areas are Cyberjaya and EduCity, Iskandar Malaysia, Johor, with the exact study areas shown in **Figure 4.4**. Cyberjaya is known as Malaysia's Global Tech Hub with over 2,300 start-ups, SMEs, tech giants, as well as a higher education hub. Cyberjaya is a town with a science park at its core that forms a key part of the Multimedia Super Corridor in Malaysia.

4.4.14 Cyberjaya was launched 1997 as part of Greater of Kuala Lumpur and it is in the central region of Malaysia. Cyberjaya has 800 firms within its municipal borders, including 40 multinational corporations in addition to this education hub. It has a large student population from four universities and two colleges within the city. The education clusters of both Cyberjaya and Educity are illustrated in **Figure 4.4**.[12]

Figure 4.4 The Universities and Colleges in Cyberjaya and Educity



4.4.15 EduCity Iskandar Malaysia, on the other hand, is a 305-acre fully integrated education hub recognised as an Entry Point Project (EPP) under the National Key Economic Area (NKEA). EduCity was developed under Iskandar Investment Berhad (IIB) and integrated as an education hub in 2013.[13] Nine local and international HEIs were set up within the hub, and its main focus was revenue generation. The education institutions include Multimedia University, the University of Southampton Malaysia, University of Reading Malaysia, Newcastle University of Medicine Malaysia, the Netherlands Maritime Institute of Technology, Management Development Institute of Singapore, Raffles University Iskandar, Marlborough College Malaysia, and Raffles American School.[14] The locations of these institutions were carefully coordinated by the developer. EduCity brings together prestigious local and international institutions of higher learning within a strategically located area in Southeast Asia, just outside Johor Bahru and close to both Singapore and Kuala Lumpur. The current student population is about 4,000 students.

Data Collection and Method

4.4.16 To create a case study of Cyberjaya and EduCity, the main methods of data collection included taking a census of student populations, observations, as well as interviews and reflections from key stakeholders.

4.4.17 The Global Information System (GIS) software solution ESRI ArcGIS 10.5 was used for the mapping and spatial analysis of the data.

4.4.18 The administrative boundary shape files were acquired from publicly available sources such as OpenStreet (www.openstreet.my). All GIS data were converted into the same projection for consistency. The map showing the development regions of Peninsular Malaysia and Borneo, as well as the visualisation and data analysis, were developed using the abovementioned GIS software. A geocoding process was used to locate the actual geographic coordinates of a place in accordance to the street name. Thus, the addresses were assigned according to the coordinates. Shape files were created to compile information and to subsequently illustrate the point distribution of HEI clusters in Cyberjaya and EduCity.

4.4.19 The representations of institutions – denoted by coloured dots – were created randomly within state boundaries (without considering higher levels of administrative boundaries) and show the locations of HEIs in Cyberjaya and EduCity. This was to allow for a visual depiction of the geographic distribution and clustering of HEIs.

4.4.20 A high-density cluster was prepared separately based on the total number of international students, HEIs, and industry collaborations to produce heatmaps. The heatmaps illustrate the high-density clusters of companies or institutions irrespective of administrative boundaries. They also reflect the clustering of companies and of HEIs in Cyberjaya and Educity. In order to map the knowledge clusters in this study, only the data of foreign students and their institutions was used. The density was then calculated based on the number of foreign students. There are greater concentrations of international student enrolment in Cyberjaya as opposed to EduCity as seen in **Figure 4.5** and **Figure 4.6**.

Figure 4.5 Hotspot Mapping by Concentration of International Enrolments in Cyberjaya and Educity

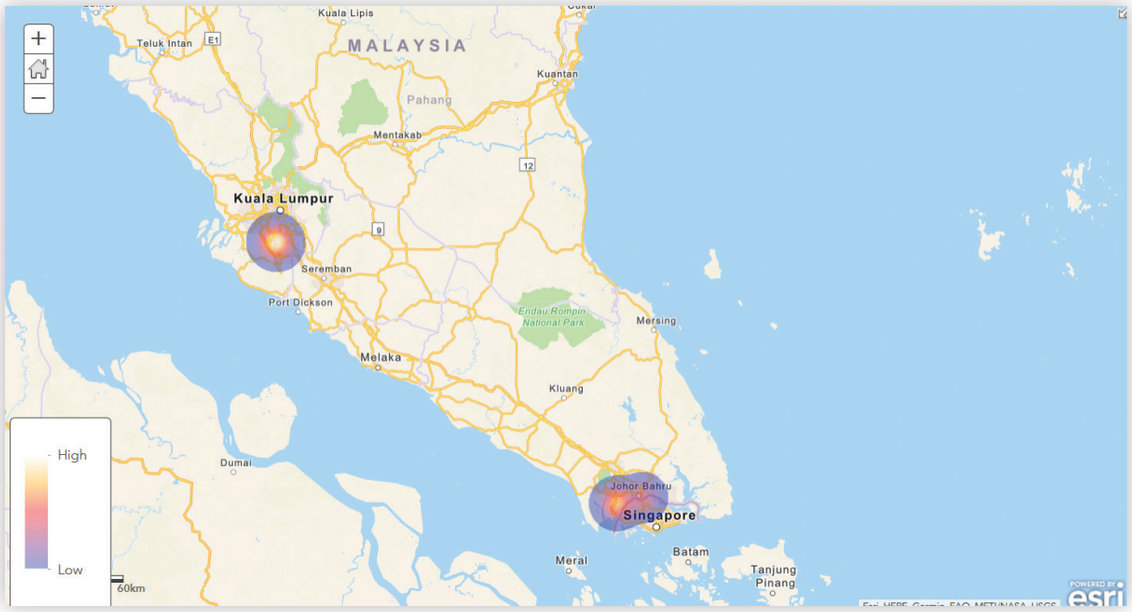
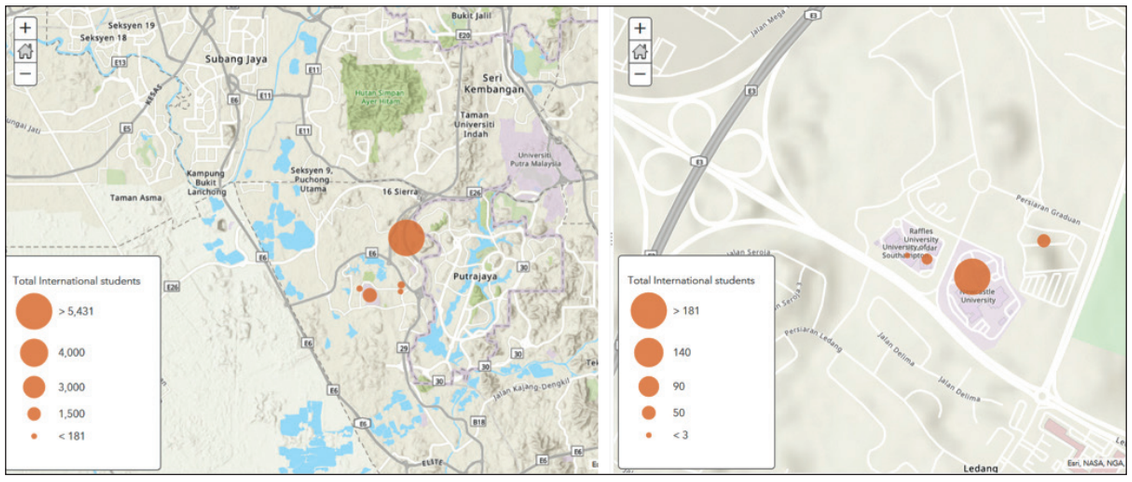
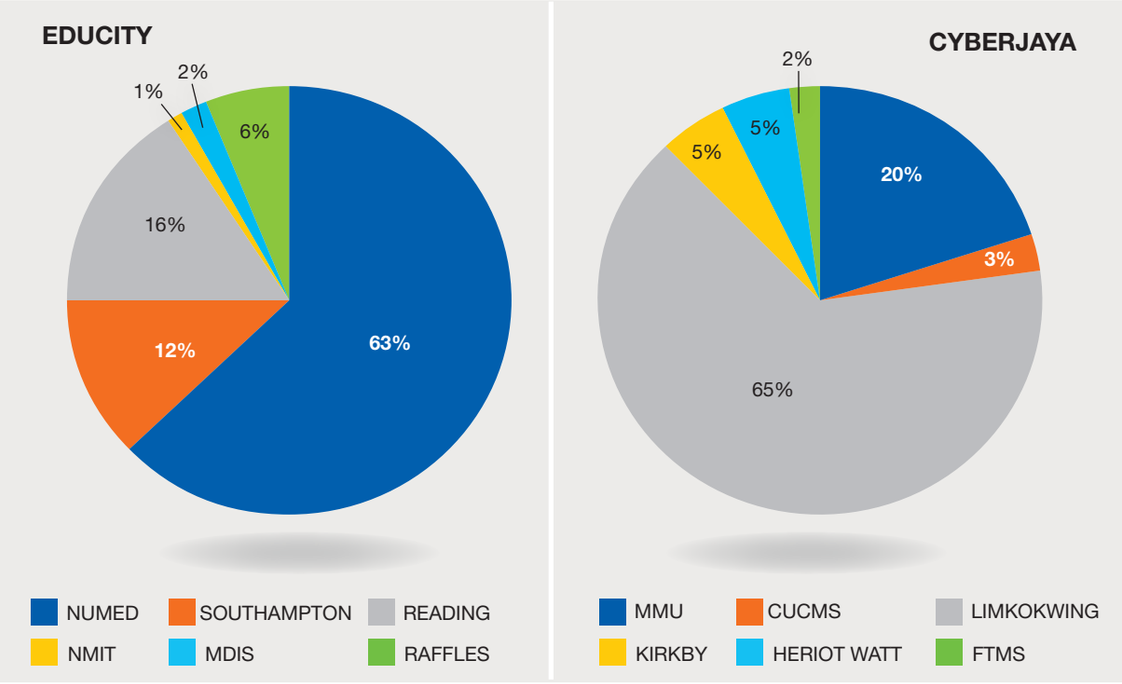


Figure 4.6 Geospatial Mapping of International Student Enrolment in Cyberjaya (left) vs Educity (right)



4.4.21 When reviewing the data, it was observed that a specific HEI within each cluster disproportionately accounted for a large overall number of international student enrolments. With reference to **Figure 4.7**, Newcastle Medical School in the Educity cluster and Limkokwing University in the Cyberjaya cluster accounted for over 60% of the total number of international student enrolments in their respective clusters. Neither one of these universities have the largest number of student enrolments (local and international) nationally, and therefore, this imbalance in international student recruitment stands out as anomalous and warrants further investigation.

Figure 4.7 Share of International Student Enrolments of HEIs in Educity and Cyberjaya



Strengths and Areas for Improvement

The Education Cluster Typologies of EduCity and Cyberjaya

(a) Educity as a Level 1 'Student Hub' Education Cluster

4.4.22 In this study, an attempt was made to assess the level of the Educity education cluster based on the typologies mentioned within the literature review. Several short interviews were conducted to make a qualitative review assessment of its type. These include reflections from multiple stakeholders especially member universities, surrounding universities and the management team of Educity. A summary of the findings regarding Educity is presented in **Table 4.6**.

(b) Cyberjaya as Level 2 'Training/Skilled Workforce Hub' Education Cluster

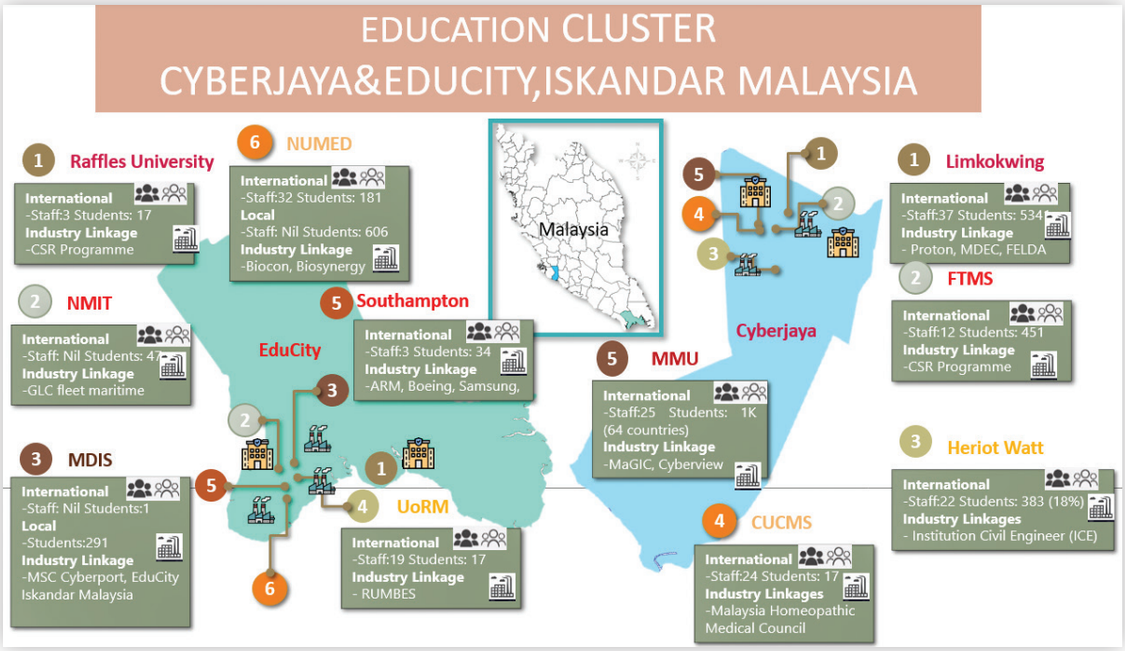
4.4.23 The data collected in Cyberjaya is not as comprehensive and the study furthermore does not include non-degree providing institutions such as technical and vocational education and training (TVET) institutes, which may also contribute towards the robust growth of an education cluster. Nevertheless, one main finding from the data suggests there is a much clearer industry focus within the Cyberjaya hub. There are more collaborations between the HEIs and the surrounding industry partners which support the engineering and technology sectors. This collaboration is centred on research and development but also extends to student internships and staff development programmes.

Table 4.6 Findings About the Status of Educity

Category	Findings
Leadership	There is a management office for the cluster that acts as a facilitator for all HEIs within the region. However, there is currently no cluster director or anchor HEI within the cluster that can provide strategic leadership to the cluster. Overall, however, it was generally agreed that there was de-facto leadership by the UK 3, which refers to the three British universities in Educity, namely Newcastle University of Medicine Malaysia, University of Reading Malaysia, and University of Southampton Malaysia.
Collaboration	HEIs collaborate with one another only in the same way they would collaborate with other universities outside the cluster. Although there is a level of collaboration, it cannot be attributed to the cluster itself. Student recruitment is currently being done separately by each HEI. Upon reflection, many of the respondents indicated that they would prefer to collaborate more closely with other universities within the cluster. Areas of intended collaboration include joint research, student recruitment, consultancy projects, facilities-sharing, and co-delivery of academic modules.
Strategy	HEIs admitted that overall their general strategy was like an HEI which was not within a cluster. However, the branch campuses indicated that their strategy was much less focused towards research as compared to their main campuses. Ultimately though, strategy was decided at the university level, without considering a shared strategic plan for the hub as a whole. Upon reflection, the HEIs felt that there was a massive opportunity to align strategically, especially with the facilitation of the hub management office. The incentive to do so was especially high given that the universities within each hub have very niche programmes, thereby lowering the chance of student cannibalisation by another HEI within the vicinity. Therefore, students needed to be attracted to EduCity as a whole, and only thereafter choosing the HEI of choice.
Support	Generally, HEIs were satisfied with the support provided by the management office of EduCity, since the office provided satisfactory support for student accommodation, and appreciated the attempts made by the office to increase the quality of student life within the hub. However, there were calls for further efforts in marketing the area as a preferred destination of study for local and international students.

4.4.24 As can be seen in **Figure 4.8**, there is a clearer focus on industry partnerships in Cyberjaya than in Educity, probably also because Cyberjaya was established sixteen years earlier than Educity in 2013. MMU, one of the topmost private universities in Cyberjaya has excellent collaborations with industry and government agencies and the "collaborations are in manifold ways – experts from the industry are invited as specialists; smart labs/learning experience space are established through collaboration with the industry; continuous professional programmes are undertaken with and for government agencies on a local and international arena".[15]

Figure 4.8 Findings Regarding International Enrolments and Industry Linkages



(c) Industry Proximity and Linkages with Education Clusters

4.4.25 Studies exploring the effects of geographical proximity between HEIs and industrial collaboration have shown mixed results. Geographical distance between a firm and HEIs have positive influences on collaboration only in relation to the perceived quality of said institution.[16] Findings from the United Kingdom suggest that firms are reluctant to collaborate locally with lower tier universities despite geographical proximity. Co-location with top-tier universities on the other hand results in greater collaboration for research.

The Way Forward

Critical Analysis and Recommendations

4.4.26 As Malaysia moves towards becoming a knowledge and service-based industry, it is vital for educational institutions, and educational hubs in particular, to establish key collaborations with industry. With the rapidly changing and challenging environment of the 4th Industrial Revolution (soon moving to Industry 5.0), intense competition has led to an increasing demand of expertise and qualified manpower. Industry therefore plays a very critical role in cultivating future generations and one such way to do so is in the integration of industries in education hubs – to allow for companies that have the intention of hiring well-trained and highly qualified personnel to be a part of the training process. HEIs that have strong linkages with industry therefore will be perceived as invaluable in the marketplace.

4.4.27 When analysing both Educity and Cyberjaya education hubs through the typologies created, it can be seen immediately that EduCity remains only at the 'Student Hub' level since the main focus of HEIs within the said cluster are on generating individual revenues. At present there are no synergies and shared strategies such as combining efforts in student recruitment or collaboration in research and academic programmes. Furthermore, since there is no clear industry focus within Educity, the likelihood of the cluster moving towards the next level of 'Training/Skilled Workforce Hub' is low. However, if collaboration between the HEIs is fostered, including the formation of a shared vision and strategic plan, Educity still has the potential of developing into a 'Knowledge/Innovation Hub' particularly given its proximity to Iskandar Puteri and given the concentration of Tier 1 universities within the cluster.

4.4.28 Given the limited research done on the Cyberjaya education cluster, it is reasonable to say that the cluster can be defined as a 'Training/Skilled Workforce Hub'. This is because the HEI-Industry linkages are more pronounced. These are facilitated by the co-location of both the Cyberjaya education cluster and the tech industry hub within the Cyberjaya township. Nevertheless, similar to the case of EduCity, greater and more concerted effort needs to be taken in order for the Cyberjaya education cluster to become the 'Knowledge/Innovation Hub' it aspires to be.

4.4.29 The smart community model in Cyberjaya and Iskandar by virtue of design should have the capacity to bring together and coordinate commercial enterprises, residential living, research parks, and education within the clusters. The state-of-the-art infrastructure of both these education clusters furthermore is impressive. However, both these clusters fail to achieve its full potential of being a 'Knowledge/Innovation Hub'.

4.4.30 This is fundamentally due to a lack of coordination and cooperation between the HEIs, partly due to a lack of a discernible HEI lead coordinator and subsequently a lack of shared strategic plans and mechanisms of accountability. A culture of competition for funding, personnel, and industry linkages between collaborating institutions in these education clusters provide a critical mass in support of economic benefits for the public and the various stakeholders.

4.4.31 Another factor is the general absence of systematic and strategic coordination between the education clusters as a whole with industries. Business and industry are critical stakeholders to education clusters. HEIs must continuously reach out to the industry and keep them informed about research endeavours that may produce commercial benefits. Similarly, HEIs must produce industry-ready students to improve the industry's confidence in HEIs quality.

Conclusion

4.4.32 There is potential here in the development of joint-standards and co-development of academic programmes between industry and academia besides more meaningful forms of research collaboration. Such collaborations have the potential to establish both education clusters as important recruitment centres for talented faculty and students, which in turn should contribute to economic growth and the innovation capabilities of the region. The productive collaboration between these stakeholders is vital for the continuity of these clusters.

4.4.33 Most importantly, although our study did not map this geospatially, the qualitative survey findings show a lack of coordination between the two education clusters and the state government. In Educity, for instance, there is a lack of consistent communication and support between HEIs with the local and state governments. The state government must provide continuous commitment to funding these clusters given that the success of these clusters will impact on the socio-economic development and overall progress of the state. In theory and concept, creating clusters for education and research is a good strategy, but it is important to recognise that these clusters require an enormous investment from multiple stakeholders. The financial and human capital investment must come from multiple sources, including the local and state governments, the city, and also private philanthropy.

References for Part 4.4

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16 Lauren et al. (2010).

4.5 Alumni Engagement

Introduction

4.5.1 Alumni play a key role in internationalisation and are one of its central drivers. Successful alumni engagement programmes align institutional priorities with graduates' interests, needs, and potentials. The benefits of effective alumni relations extend beyond fundraising, and the costs of undervaluing graduates' contributions are becoming more apparent. Alumni are contributing to a wide range of programmes that add value to institutions' international efforts in meaningful and innovative ways. Australia has launched a new whole-of-government Australia Global Alumni Engagement Strategy (2016 – 2020) that recognises the lasting, powerful impact of its global alumni connections.

Where Are We Now?

4.5.2 We have a rich pool of alumni – heads of government and state, ministers, central bankers, civil servants, and corporate captains – who sit in positions of influence in many parts of the world. They can open doors for our diplomats and businesses and facilitate research and industry linkages, besides being ambassadors of our HEIs. Our 2011 Internationalisation Policy and the Malaysia Education Blueprint 2015 – 2025 (Higher Education) recognised the importance of alumni engagement and proposed the MyAlumni initiative. EMGS has developed the EMGS Connect programme, but its outcome is inconclusive. Some HEIs have good alumni management and effectively use them as ambassadors (e.g. Asia Pacific University (APU); however, many others do not.

Strengths

4.5.3 In the survey conducted by the Study Team, the 69 alumni we managed to reach out to were given separate questionnaires, tailored to their unique situation, and treated as a distinct group to gain insights from. Out of the six clusters (representing the six policy areas this study is focused on), the two clusters that were the highest predictors of alumni satisfaction were Research and Development, and Social Integration and Community Engagement (see **Appendix G**: Structural Modelling).

4.5.4 When asked about their impressions of research and development in their alma maters, they reported that Malaysian HEIs had achieved a good reputation for research and development (with a mean score of 3.70 out of 5.00, indicating that, on average, they showed a high level of agreement that Malaysia's R&D reputation was good). Furthermore, the alumni approached by the Study Team saw the value in research and networking activities with their HEIs and international organisations.

4.5.5 This suggests two important inferences, with regards to alumni engagement:

- Malaysian HEIs have succeeded in creating a positive lingering image in the minds of the alumni surveyed, at least as far as R&D is concerned; and
- These alumni would be keen on engaging with Malaysian HEIs for research and networking activities.

4.5.6 What Malaysia has done well (in this very specific example from our survey) is to set a foundation for alumni engagement, i.e. to have alumni willing to engage with their alma maters in areas that they consider to be of mutual benefit (R&D and networking, in this case).

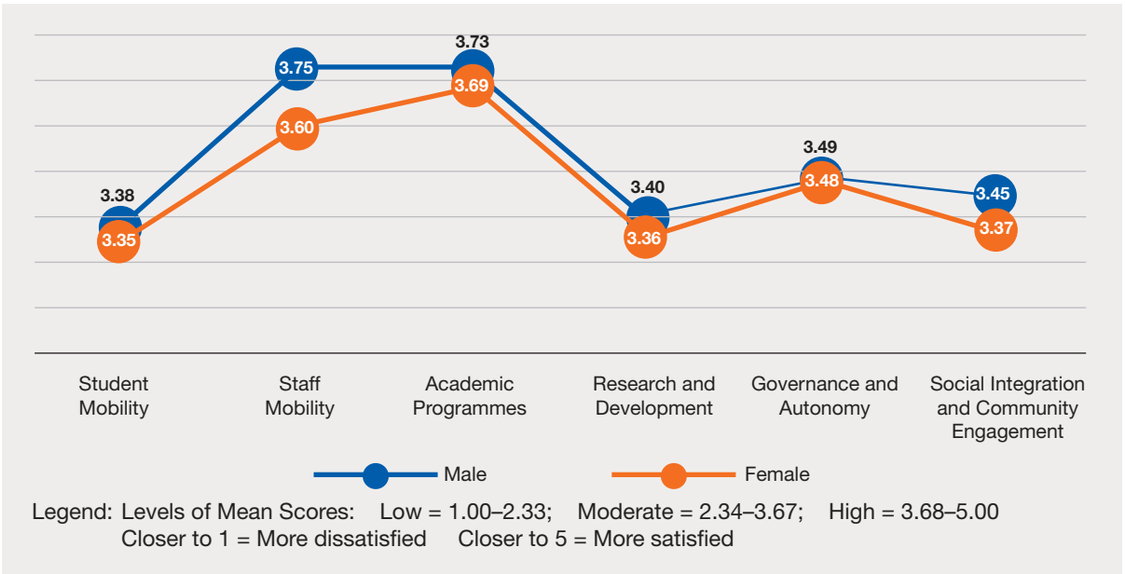
4.5.7 A reasonable objection may be levelled at this stage, that the inference above, however tentative, is not generalisable beyond its narrow scope, given the specific subject matter (R&D) and its small sample size (69 alumni). Thus, it is necessary to triangulate this data point with others to see if this inference holds.

4.5.8 The Study Team interviewed an an Afghan alumnus of the International Islamic University Malaysia (IIUM), Sebghatullah Qazi Zada (or Seb), currently based in Sydney, Australia.[1] Seb studied at IIUM from his undergraduate days all the way to his PhD. in Law. This is what he had to say about his time in Malaysia, when asked if he would prefer to work here or in Australia, given the opportunity:

> *"Malaysia has a special place in my heart. Malaysia made me who I am today. It would depend where I could contribute more."*

4.5.9 A third, indirect means of checking the inference would be to look at the feedback of future alumni, i.e. current students, to see if their HEIs in particular, and Malaysia more broadly, have created a positive experience for them, such that they might be eager, or at least willing to engage with their alma maters after graduation. In this regard, the fact that our survey results reveal international student satisfaction to be at least moderate-to-high across all six clusters is encouraging (see **Figure 4.9** below).

Figure 4.9 Satisfaction Levels on Internationalisation Policies between Male and Female International Students

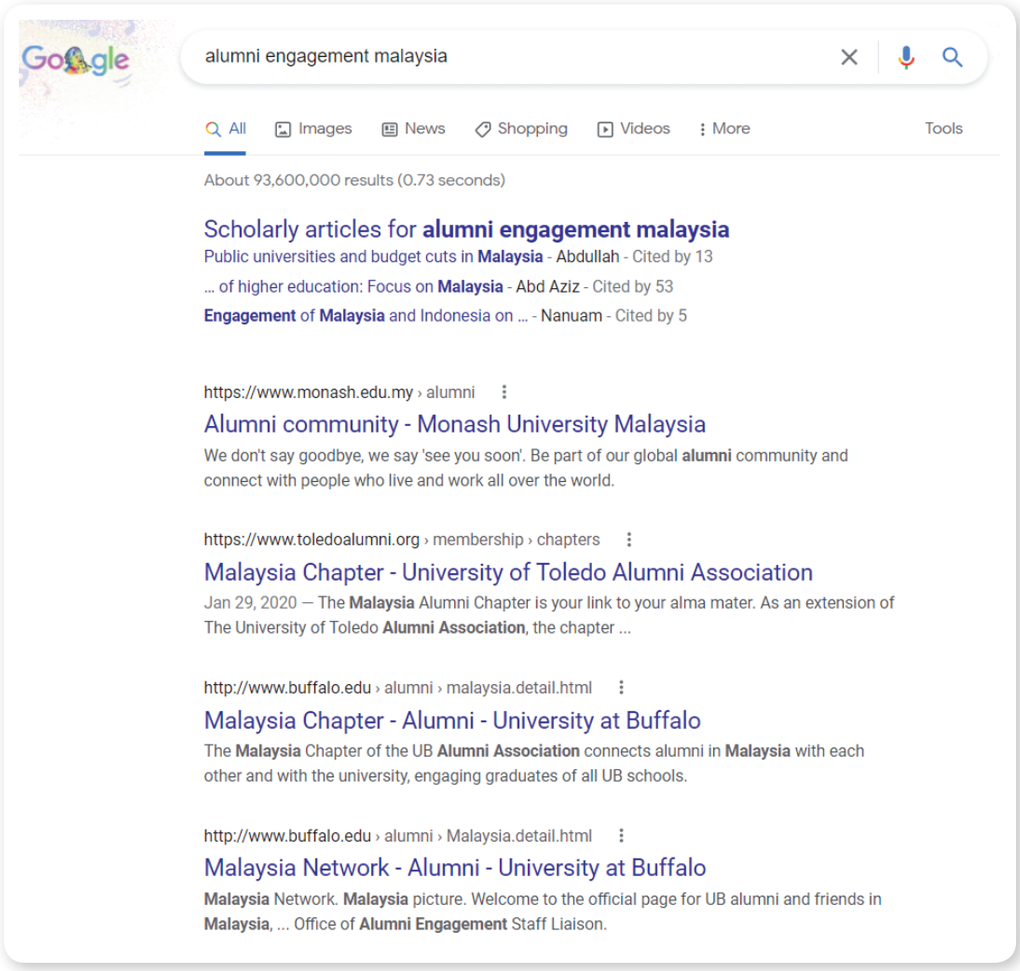


4.5.10 The conclusion here – once again, tentatively drawn – is that Malaysia has fulfilled the fundamental prerequisite of successful alumni engagement: to provide its students with at least a minimally satisfying experience such that they will at least be willing to engage with their alma maters as alumni, should their alma maters make an attempt at engagement.

Areas for Improvement

4.5.11 It is disconcerting to find alumni engagement by Malaysian HEIs to be rather patchy at best, or barely existent at worst. A simple Google search of the terms "alumni engagement Malaysia" was instructive:

Figure 4.10 Google Search Results for the Terms "alumni engagement Malaysia", as of September 2021



4.5.12 The top search results either pertained to the alumni associations of international branch campuses (IBCs) in Malaysia, or to Malaysian chapters of alumni associations from other countries' HEIs.

4.5.13 Returning to the results of our survey of the 69 alumni, social integration and community engagement emerged as the second-best predictor of alumni satisfaction with regards to their university experience. In particular, Malaysian students who had also studied abroad had interesting comparisons to make between their overseas alma maters and Malaysian HEIs:

Survey feedback

> *"There were many programmes designed to help international students mix and mingle with the local, allowing cross pollination of cultures and expanding camaraderie between coursemates. A week orientation every year that was not academic at all in nature, allowing real bonds and friendship to develop. One that is severely lacking in Malaysia."*
>
> *34-year-old scholarship recipient who studied in the University of Birmingham*

4.5.14 Once again, this is indicative of untapped potential. If Malaysia's strength is that this potential exists, then the flip side of that strength is that this potential is untapped. This is an area in which Malaysia needs to significantly improve. Combined with findings from our discussions on social integration and community engagement, we can and should be doing more to actively cultivate good experiences for our students while they are here, so they will be more likely to be international alumni ambassadors after they graduate.[2] And we must do more to engage alumni after graduation, in a more consistent manner across all HEIs. In fact, the literature suggests the same reasoning that applies to current students could be at least partially extended to after they graduate and become alumni.[3,4]

The Way Forward

4.5.15 Edershem (2017) suggests the following 'formula' for alumni engagement.

Define the Scope of Engagement

4.5.16 Consider how to help alumni who are both near and far away, and tailor the engagement in a well-defined manner to meet their needs. There are two groups of alumni to account for here.

4.5.17 For alumni who remain in Malaysia for some time longer before returning home, HEIs should actively be seeking to cultivate relationships with them, and include them in campus life and culture in ways that speak to their desire for community as well as their particular needs and interests. This would be a reasonable scope of engagement for this group of alumni. The benefits of such engagement to the HEIs themselves is that it helps to make campus life more vibrant and link current students to more experienced seniors who could mentor them.

4.5.18. Furthermore, the scope of engagement with these alumni, who are likely to have recently graduated, should be to emphasise connections between them and other alumni, as well as leverage on industry linkages the HEI might have, to help these recent alumni develop their networks, connect them to local career opportunities, and aid in their professional growth.[5]

4.5.19 The second group HEIs must craft a scope of engagement for are alumni already living overseas. For these alumni, the scope will – at least initially – have to be primarily through online, digital, and social media engagement.[6]

Identify Alumni, Then Connect with Them

4.5.20 Can an HEI (amplified by the efforts of the government) serve as a career counsellor and mentor to alumni overseas? Can they mobilise other alumni in this endeavour? Whatever the manner of this engagement, it must be well-defined, tailored, and mutually beneficial, beyond a simple transactional relationship.[7] None of this tailoring is possible without first identifying the alumni and understanding their needs.

4.5.21 This raises the question: How might alumni living overseas be identified? Edershem and Miller both suggest combining a more formal approach (e.g. using Malaysian foreign missions as a connector) with the power of social media networks. Individual HEIs can publicise that they are actively looking for alumni via LinkedIn, for example, and – in a coordinated branding and marketing strategy with the relevant government actors – relay consistent, cohesive messaging while they do so, that are likely to have positive spill-over effects for other HEIs, such that everyone's identification and messaging efforts mutually benefit and reinforce one another. To drive this point home: Efforts to connect with these alumni after they have been identified have to be well-thought through and coordinated, rather than being attempts at connection for its own sake.

Cultivate Meaningful Long-Term Relationships

4.5.22 Regardless of institutional or national goals, alumni engagement can only ever be successful if it is able to respond to some need of the alumni themselves, and cultivate their interest. And by the same token, these efforts can only be sustained in the long run if HEIs and nations find value in these long-term relationships. **Table 4.7** contains a case study from Australia's Global Alumni Engagement Strategy 2016 – 2020, regarding how this value proposition – which is the foundation of long-term relationships – can be conceptualised.

4.5.23. Many alumni engagement programmes run by universities run into the trap of confusing genuine engagement with tapping into alumni networks for fundraising.[8] Indeed, genuine alumni engagement must have clear goals beyond short-term transactionalism and must offer alumni something which they see as being of value.[9] One alumni respondent at a policy lab put it succinctly: "What can we do for alumni, not the other way around."

Table 4.7 Case Study – How Australia's Global Alumni Engagement Strategy Frames its Value Proposition[10]

Benefits to Australia	Benefits to Alumni	Benefits to Key Stakeholders
Enhanced influence, access and outreach, especially at the diplomatic level.	Improved access and connectivity to other alumni and alumni networks in Australia, the region and globally.	Prestige and increased recognition through the Australian Government's promotion of alumni.
Deeper and wider trade and investment linkages in the region and globally.	New opportunities to build meaningful connections with Australian business and research institutions.	Increased opportunities to connect alumni research and business.
Raised awareness of Australia's capabilities and credentials especially in education, science, research and innovation.	Raised visibility of achievements within their own country and through ongoing connections to Australia.	Raised visibility of institutional, academic and research capabilities and expertise.
Improved reputation as a contemporary, innovative, open society that is actively engaged with our region and the world.	Increased access to specialised and tailored professional and leadership development. New opportunities to support women in participating in decision-making and leadership within their communities.	Extended professional and leadership development offerings for alumni.
Better and stronger working relationships across governmental and with universities and other educational institutions.	Increased opportunities for alumni to stay connected to their Australian identity and experiences and to share them with others. Increased opportunities for Australians who have studied overseas to build enduring personal and professional networks and institutional links in the region or abroad and to share them with others.	Coordinated and timely access to information, knowledge and resources about alumni engagement through the diplomatic network.

4.5.24. Additionally, the example of research and networking from our alumni survey results comes into play here once again. After the scope of engagement has been defined (vis-à-vis the organisational and national goals), and after alumni have been identified, and once they have been connected with in a coordinated strategic manner, how can HEIs keep them interested? The literature and **Table 4.7** suggest that using resources to open doors for them in valuable ways without necessarily expecting an immediate return is an effective way to signal a desire for a committed, stable relationship. It will go a long way to keeping alumni invested enough in both their alma mater in particular, and in Malaysia more broadly, to be goodwill ambassadors of their own volition.[11,12]

4.5.25 Ultimately, alumni will be fully convinced of this desire for a non-transactional relationship when HEIs (and nations) celebrate them and their achievements.[13] **Figure 4.11** shows a simple example of a Malaysian HEI – Asia Pacific University (APU) – celebrating an alumnus on its website.

Figure 4.11 APU Celebrating its Alumnus' Achievement

Conclusion

4.5.26 This would seem to be a space in which Malaysia and Malaysian HEIs have much untapped potential. A concerted, cohesive alumni engagement strategy with a clearly defined scope and a genuine desire to do well for alumni seems most likely to reap rewards. Alumni who are so engaged with will not only be willing, but eager to be mobilised by their alma maters and the host country who gave them their higher education experience. Malaysia can and should strive to achieve this status among its international alumni.

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4.6 Scorecard for HEI Internationalisation

Introduction

4.6.1 Internationalisation has in recent years emerged as a key focus in the agendas of almost all HEIs in this country. As internationalising a university places a heavy demand on an institution's financial and human resources, its assessment becomes critical to ensure that it contributes to the relevance and quality of higher education as well as produces desirable outcomes. Measuring this process is not easy as internationalisation is a multi-dimensional phenomenon.

4.6.2 Research involving the development of methods for measuring university internationalisation has gained increasing attention. Several attempts have been made in different countries to develop instruments for visualising efforts toward internationalisation. However, a comparable approach for assessing the level of institutional internationalisation has not yet been established.[1] Recently, a new approach for developing indicators for university internationalisation across 17 flagship universities in Australia, China and Singapore was reported.[2] An Index for the Evaluation of the International Activity has been developed for use in a Spanish university.[3] Despite all these efforts, it must be said that due to the complexity of the internationalisation concept and the changes in the international environment of institutions, there is no consensus about defining a methodology to measure this concept.

Where Are We Now?

4.6.3 To date, no HEI or organisation in Malaysia has developed a scorecard on internationalisation. The Report on Internationalisation Policy for Higher Education Malaysia identified a number of indicators for specific recommendations but did not examine the need or the contents for an overall scorecard or index of internationalisation. The Study Team adopts the position that a scorecard on the internationalisation of HEIs is useful for institutions and the country as a whole to have for the following reasons:

(a) First, a well-developed scorecard will provide HEIs with relevant information to monitor and assess their performance that will help them to identify their areas of strengths and deficiencies;
(b) Second, because of the increased global competition and the importance of rankings and league tables, institutions need indicators to profile themselves and make comparisons with peers in terms of internationalisation; and
(c) Third, HEIs are expected to be more accountable and transparent in furnishing information on their performance.

4.6.4 The scorecard(s) developed could assist university administrators and policy makers on a better understanding of the internationalisation process as well as providing empirical based data for more informed decision-making.

The Way Forward

Key Questions before Introducing a Scorecard

4.6.5 A number of authors have cautioned that before introducing a scorecard or an index of internationalisation, the following needs to be answered:[4]

(a) What is the purpose of measuring?
(b) How are the findings to be used?
(c) What should be measured?
(d) What are the indicators?
(e) How should the indicators be measured? and
(f) What data should be collected? How are they to be collected?

4.6.6 The above as well as other issues need to be addressed by all the relevant stakeholders before a decision is made to embark on developing a scorecard. Ultimately, the scorecard developed must be able to provide contextualised information that enhances the decision-making process and the understanding of all stakeholders. We need to take cognisance that HEIs want to be assured that the value and usage of the information collected far outweighs the cost of producing it.

Towards a Scorecard for Malaysian HEIs

4.6.7 A scorecard, notwithstanding its limitations, is a useful tool to reveal how well the internationalisation process has been undertaken at the institutional level. The Study Team has developed a conceptual framework for measuring HEI internationalisation using a broad set of categories, sub-categories and indicators (see **Appendix H**: Scorecard on the Internationalisation of Higher Education) that could constitute the basis for a more detailed investigation into this subject.

4.6.8 Scoring and weightage systems in developing the scoring system for this scorecard will need to be developed. A separate and detailed investigation is needed to develop a more comprehensive version of this scorecard as well as its variants to cater for different categories of HEIs.

Conclusion

4.6.9 Recommendation: Initiate a study on the development of a scorecard on internationalisation for Malaysian HEIs.

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4.7 The New Student Enrolment Forecast

Introduction

What were the Original Targets?

4.7.1 The Malaysian Education Blueprint 2015 – 2025 (Higher Education) set targets of "200,000 international students by 2020 and 250,000 by 2025".[1] However, these targets in fact pertained to international student enrolment in all Malaysian educational institutions, **from preschools to HEIs**. These target numbers include pre-tertiary students, which is corroborated by the 2015 Economic Impact of International Student Enrolment in Malaysia report by EMGS. **Table 4.8** shows the year-to-year targets:[2]

Table 4.8 The Original International Student Enrolment Targets (2015 – 2025)[3]

HEI / Year	(Actual)	Targets						
	2015	2016	2017	2018	2019	2020	...	2025
Schools	31,581	30,000	34,000	36,000	38,000	40,000	...	50,000
HEIs	120,398	13,000	136,000	144,000	152,000	160,000	...	200,000
Total	**151,979**	**160,000**	**170,000**	**180,000**	**190,000**	**200,000**	**...**	**250,000**

4.7.2 Furthermore, the EMGS report explains how these targets were derived:[4]

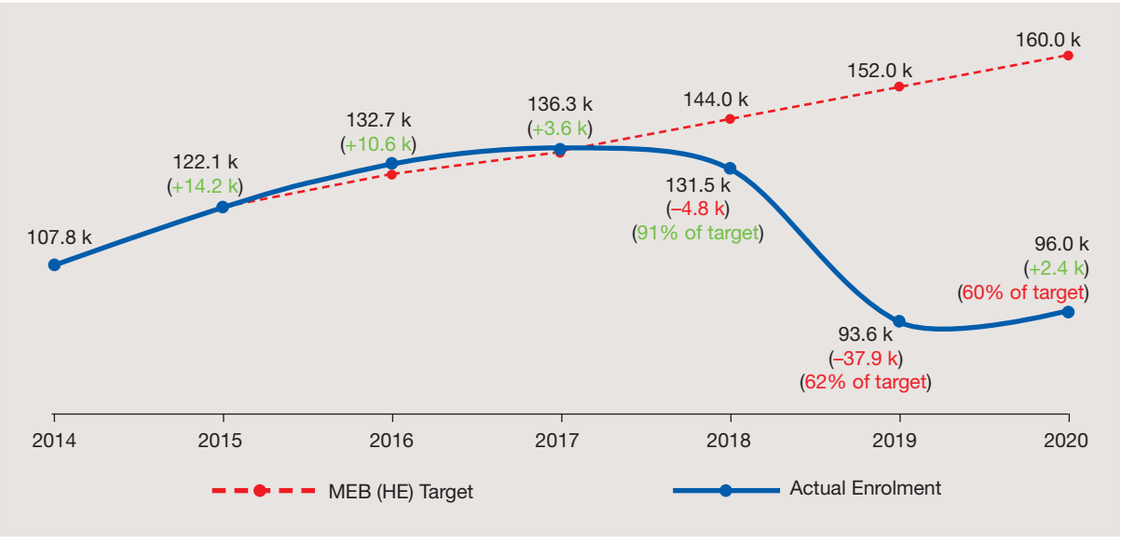
- The total targets were based on a straight-line growth projection, with an assumed increase of 10,000 students per year.
- The 2013 – 2015 distribution of 80% HEI students and 20% pre-tertiary students was assumed to remain constant till 2025.

4.7.3 While initially, there appears to have been an awareness of the fact that the 200,000 by 2020 and 250,000 by 2025 targets included school students,[5] somewhere along the way, this seems to have been forgotten.[6,7]

4.7.4 Thus, the actual targets for international student enrolment in HEIs were 160,000 by 2020 and 200,000 by 2025. While MOHE data and **Figure 4.12** show that even these true HEI targets have not been met, we did in fact come remarkably close in 2018, before a subsequent sharp decline in enrolment.

4.7.5 Regardless, a new enrolment forecast is clearly needed for the next few years, as a baseline to set new targets against. For this reason, and because the Study Team was tasked with this during the Interim Report presentation, we constructed an econometric model of international student enrolment at Malaysian HEIs and used it to produce a forecast to 2030. Subsequently, we used this model to estimate the contribution made to the Malaysian economy by the enrolled international students, because economic impact emerged as another important concern at the Interim Report presentation.

Figure 4.12 International Student Enrolment in all Malaysian HEIs (2014 – 2020)



4.7.6 At the outset, it is important to note that our forecast numbers are no longer useful, since this study was completed before COVID-19 emerged as a global pandemic. The value of this section of the report is, therefore, primarily methodological. It is hoped our endeavour may benefit those who come after us.

Modelling Approaches Explored

4.7.7 Various techniques such as regression, simulation methods, time series analysis, and subjective judgements (among others) are generally used to model student enrolment for forecasting.[8] Of these, time series analyses are theoretically considered to be the most robust, provided that their assumptions are met and that there is enough data over time.[9] However, empirically, the Makridakis- or M-Competitions have demonstrated that:

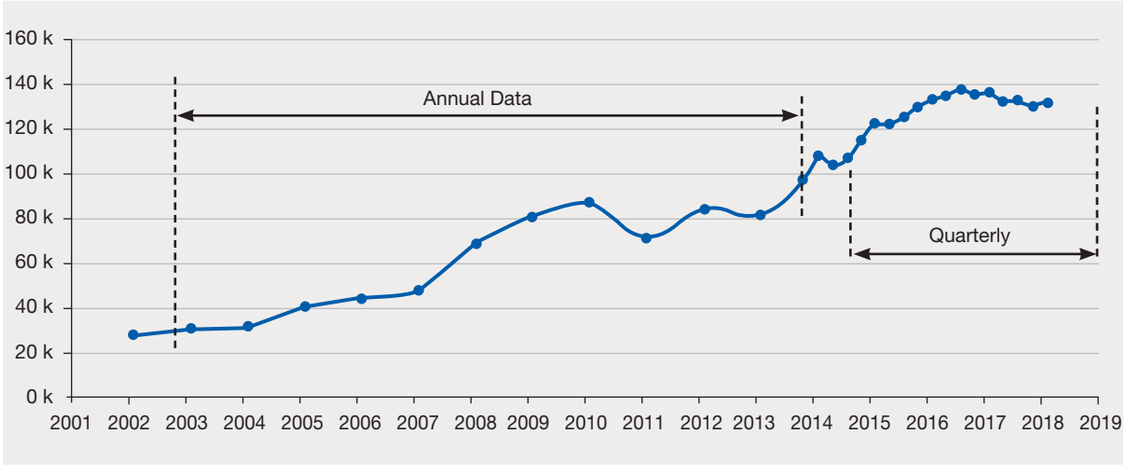
- Theoretically, more complex statistical models do not necessarily outperform simple ones, when measured (against benchmark models) by how closely their predictions align with the actual future that subsequently unfolds;[10,11,12]
- Even adding expert judgements or external variables that, in theory, are meant to capture additional information about the reality being modelled do not, on their own, tend to improve forecast accuracy;[13,14]
- Combinations of unsophisticated statistical models produce, on average, the most accurate forecasts, especially if strategically combined with machine learning techniques;[15,16,17] and
- Forecast accuracy is affected by forecast horizon (i.e. how far into the future one wishes to forecast) more than by sample size (i.e. the number of data points over time), especially when one produces combined models.[18,19,20,21]

4.7.8 In light of these findings from the literature, after briefly considering more complex Dynamic Linear Modelling (DLM)[22] and Vector Autoregressive (VAR)[23] approaches, the Study Team finally settled on obtaining a simple arithmetic mean of the point forecast values of three relatively unsophisticated techniques: (i) an (A, Ad, N) exponential smoothing (ETS) model,[24] an ordinary least squares (OLS) regression model,[25] and a (0, 1, 1) ARIMA model closely resembling a non-seasonal random walk with drift.[26,27]

Data Sources

4.7.9 At the time this forecast was generated, annual data on full-time international student enrolment at Malaysian HEIs from 2002 – 2018 were publicly available in the annual Education Statistics books published on the Ministry of Higher Education (MOHE) Malaysia website.[28] And quarterly enrolment data from September 2014 – December 2018 was obtained directly from MOHE. (Since then, the MOHE international student enrolment data for 2019 and 2020 have been published, but they were not available at the time of this study, and so are not considered here.) The Study Team had initially requested quarterly data from 2002 – 2018. However, despite the generous assistance of MOHE's *Bahagian Perancangan dan Penyelarasan Dasar* in searching their databases, liaising with other units at MOHE, and sharing all relevant data they had, ultimately only the 2014-2018 quarterly data were available. **Figure 4.13** consolidates all the enrolment data we finally collected:

Figure 4.13 Complete Dataset of International Student Enrolment in Malaysian HEIs (2002 – 2018)[29]



4.7.10 Theoretically, larger sample sizes (over time) are considered to yield more statistically sound models.[30] However, HEIs may not be readily able to track enrolment data back for, say, 50 years, and national and global trends could shift dramatically in that time, such that the earlier data points may not be of predictive value any longer.[31] This was why the Study Team requested quarterly enrolment data: to increase the number of data points over time without allowing the total time frame to grow unreasonably large. This issue will be discussed further in the following section on data analysis.

Methods of Data Analyses and Model Construction

4.7.11 Since the Study Team was unable to obtain quarterly data from 2002 – 2018, we ultimately elected to use only the annual data for two reasons:

(a) Methods exist to model unevenly spaced time series data, which would have allowed us to combine both the quarterly and annual data sets and analyse them together.[32] However, these techniques are by their very nature rather complex. So we elected to choose just one of the two data sets to maintain the simplicity of the models employed.

(b) In light of the Shared Prosperity Vision 2030 announced in October 2019, we desired, for aspirational purposes, to produce at least a tentative forecast to 2030, knowing full well that its accuracy would be minimal given the long forecast horizon, and that it would certainly have to be revised.[33]

  (i) Using the quarterly data would have entailed forecasting up to 48 steps after the most recent available historical data. This would have been an incredibly long forecast horizon (e.g. the M3 Competition did not go beyond eight steps for quarterly forecasts), given that our quarterly sample was only 18 data points over time.[34]

  (ii) Utilising the annual data on the other hand, entailed forecasting up to twelve steps after the most recently available data point. This is still less than optimal (e.g. the abovementioned competition did not go beyond six steps for annual data).[35] However, given the aspirational forecast horizon set, the annual data was clearly the better choice.

4.7.12 The OLS method for selecting a linear regression line of best fit is commonplace and well documented, and needs no elaboration here.[36] For both the ETS and the ARIMA models, model selection and parameter estimation were carried out via maximum likelihood estimation. Specifically, the log-likelihood function (LLF)[37] and Corrected Akaike Information Criterion (AICc)[38] values of each candidate ETS and ARIMA model were calculated and compared to the other candidates within the same family of models.

4.7.13 The candidate from each model family that fit the data best would be the one with the largest LLF and the smallest AICc values, whose residuals are nothing more than random white noise without any autoregressive conditional heteroskedastic (ARCH) effects. We used the Ljung-Box Statistic and the Modified Ljung-Box Statistic[39] to test for white noise and ARCH effects respectively.

4.7.14 To select the best-fitting exponential smoothing model from the entire ETS family of candidates, we employed the state-space framework developed by Hyndman, Koehler, Snyder, and Grose.[40] Meanwhile, to select the appropriate ARIMA model, we first used the Augmented Dickey-Fuller test (ADF) for stationarity to see if any differencing was necessary (which it was).[41] After stationarising the series, we did not use the typical procedure first outlined by Box and Jenkins involving plots of the autocorrelation and partial autocorrelation functions (ACF and PACF).[42] Small sample sizes tend to render that procedure unreliable, especially when the signal is weak (i.e. the φ and/or θ parameters have estimated values of

less than 0.9 and 0.8 respectively), 'pseudo' ACF and PACF patterns emerge due to the 'pile-up' effect at the non-invertibility boundary. Instead, we simply used the AICc to select the best model out of the (1, 1, 0), (0, 1, 1), (1, 1, 1), (2, 1, 0), and (0, 1, 2) ARIMA candidates, as recommended by Watson and Nichols in 1992.[43,44,45,46,47]

4.7.15 The NumXL 1.6X add-in to Microsoft Excel 2010 was used to perform all analyses. All 17 data points from 2002 – 2018 were used to establish a fit. Since the sample size was so small, we could not afford to withhold any data (as pseudo-future values) with which to test the accuracy of the forecasts against.

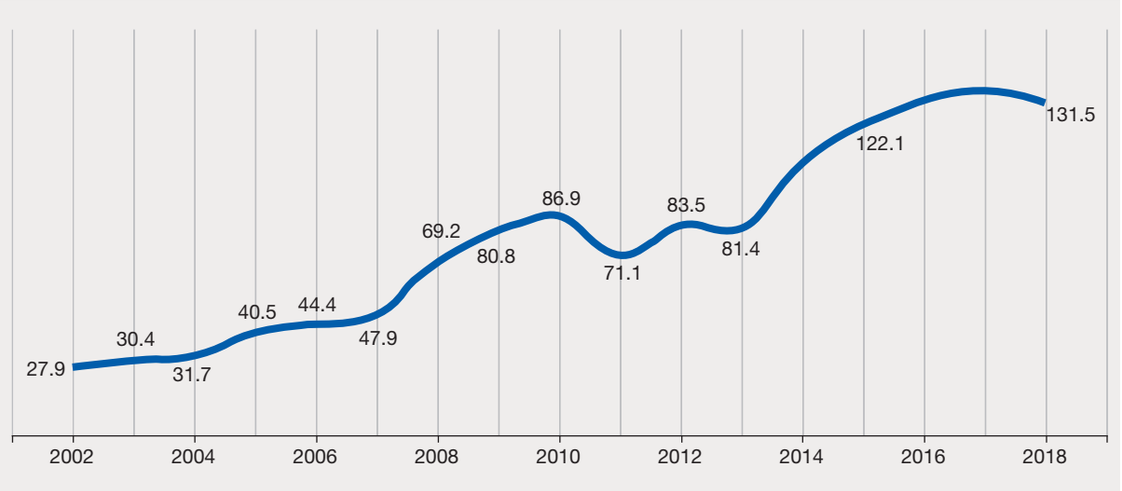
4.7.16 The point forecast values of each of the three models were then calculated for the years 2019-2030, and their simple arithmetic mean was obtained for each year. These means became the point forecast values for our combined model, as per the simplest combination methods employed in the M4 competition. (The competitors with the best results in fact used a weighted mean of their different component models, and utilised holdout tests – aided by machine learning algorithms – to select the appropriate weightages.[48] We did not have the time or expertise to avail of such techniques.)

4.7.17 The Study Team was unable to learn from the literature what the optimal methods might be to combine the 95% prediction intervals for each component model to form the combined prediction interval. Thus, we opted for the simple, relatively conservative solution of taking each year's largest prediction interval from among the three models as the combined interval. It is, however, unclear that our consolidated interval still constitutes a 95% interval.

Results and Discussion

4.7.18 **Figure 4.14** shows the plot of the annual data set we analysed:

Figure 4.14 Annual International Student Enrolment (in Thousands) in Malaysian HEIs (2002 – 2018)[49]



4.7.19 The ADF showed that the data was non-stationary and had to be differenced once for the ARIMA model. The final parameters estimated for the OLS regression, ETS, and ARIMA models as well as the LLF and AICc for each are given in **Table 4.9**, along with the parameters and estimators for a non-seasonal random walk with drift, used as a benchmark to compare the ARIMA model against. The standard symbols for all parameters have been used.[50,51,52,53]

Table 4.9 Estimated Parameters and Maximum Likelihood Estimators of the Selected ARIMA, OLS, and ETS Models

Model Family	Selected Model	Parameters	LLF	AIC_c
Random walk (benchmark for the ARIMA model)	0, 1, 0	$\mu = 6{,}477.63$, $\sigma = 9{,}760.61$	–169.681	347.36
ARIMA	0, 1, 1	$\mu = 6{,}477.63$, $\theta 1 = 0.02$, $\sigma = 9{,}770.01$	–169.677	347.35
OLS Regression	Linear	$\beta_0 = 7{,}249.22$, $\beta_1 = -14{,}492{,}932.31$	–178.245	358.76
ETS	A, A_d, N	$\alpha = 0.200$, $\beta = 0.200$, $\varphi = 0.975$	–364.486	736.82

4.7.20 The random walk, ARIMA, and OLS parameters above were all statistically significant at the 95% significance level. (This is not a relevant consideration for the ETS parameters.) And the residuals from all three models were normally distributed and free from any statistically significant autocorrelations in both their values and their squared values (i.e. white noise without ARCH effects).

4.7.21 It is worth noting from the LLF and AICc values that the ARIMA (0, 1, 1) model fits the historical data better than the non-seasonal random walk with drift (a.k.a. ARIMA (0, 1, 0)), though only barely.[54,55] This is unsurprising, since the moving average (MA) signal ($\theta_1 = 0.02$) was so low as to render it nearly indistinguishable from the benchmark. The LLF and AICc values of the OLS and the ETS cannot be compared to the random walk and the ARIMA as the latter two models differenced data and the former, undifferenced. However, just as the ARIMA can be compared to the random walk, the LFF and AICc of the ETS and the OLS can be compared. Evidently, this ETS, despite being the best ETS fit for this data, fits far worse than the OLS. Still, as mentioned before, the empirical evidence shows that aggregating these models should produce something that outperforms each component model in terms of predictive value (not necessarily in how well they fit the historical data), and often other more sophisticated ones too.[56]

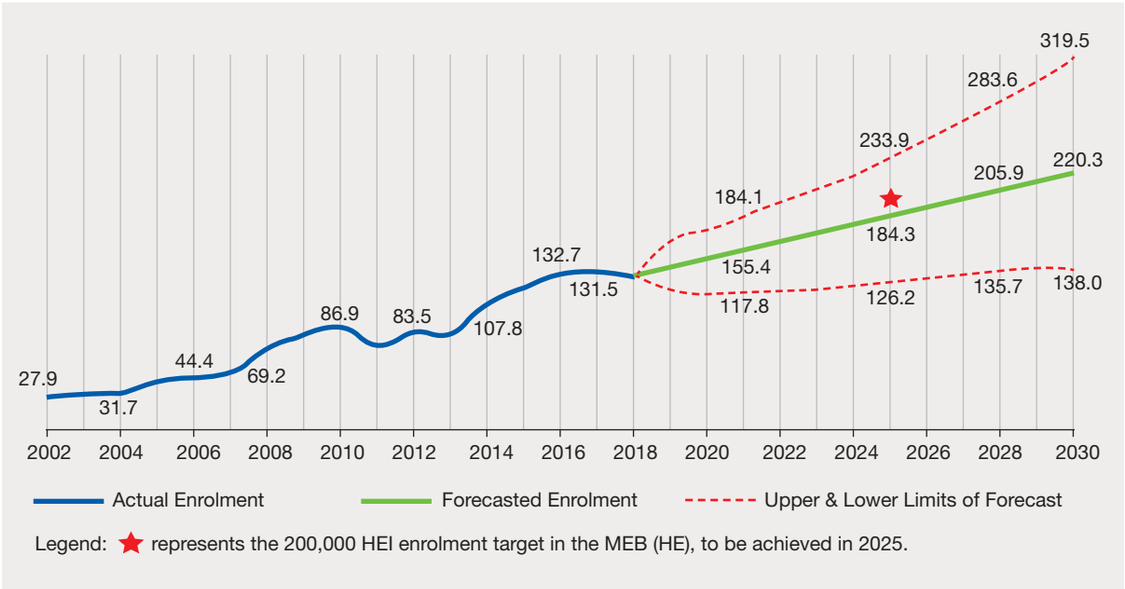
4.7.22 **Table 4.10** shows the combined point forecast values and upper and lower limits of the combined prediction intervals.

4.7.23. Finally, **Figure 4.15** shows the historical values, as well as the combined forecast.

Table 4.10 Student Enrolment Forecasts of the Combined Model (2019 – 2030)

Year	Point Forecast	Upper Limit	Lower Limit
2019	141,013	163,308	120,291
2020	148,223	171,637	127,768
2021	155,434	181,129	134,084
2022	162,644	159,602	109,097
2023	169,854	155,424	113,275
2024	177,064	155,424	113,275
2025	184,274	155,424	113,275
2026	191,484	221,458	172,789
2027	198,694	266,421	143,632
2028	205,904	283,631	142,230
2029	213,114	301,331	140,336
2030	220,324	319,452	138,022

Figure 4.15 International Student Enrolment (in Thousands) in Malaysian HEIs (2002 – 2018) with a Forecast to 2030



Limitations and the Way Forward

4.7.24 Once again, it must be noted that the actual numbers in this forecast are no longer useful, as these projections were completed before COVID-19 burst onto the world stage. However, it is hoped that the methods employed here may still be valuable as a reference for future forecasting endeavours. To that end, here follows a discussion of the methodological limitations of this forecast.

4.7.25 This forecast's time horizon is far longer than advisable. When this study was undertaken, we decided on this long time horizon aspirationally, to urge MOHE and future researchers to eye the Shared Prosperity Vision 2030 'deadline', and build upon our work as it neared. The Study Team would argue that the research community should be pushing our techniques to their limits to provide the best forecasts possible around the deadline, to inform policy-makers' decisions. This humble effort is our first tentative step in that direction.

4.7.26 No forecast will be able to predict the eventual outcome perfectly. Even the best can be vulnerable to totally unexpected and potentially impactful situations like the COVID-19 outbreak, for instance. Will we continue to see greater numbers of international students from China enroll in Malaysian HEIs – as we did in 2020 – if the pandemic continues for much longer?[57,58] Conversely, how will Malaysian HEIs tackle the drop in Bangladeshi intake that we saw in the same year? Australian universities, for instance, are already offering deferred start dates and online study options to students hit by the travel ban of non-citizens from entering Australia.[59] How is a model to account for such developments well enough to inform policymakers?

4.7.27 One way it could buffer itself against such shocks in the short-term, at least, is through conservative (i.e. wide) prediction intervals. A deeper study is needed in the area of constructing robust prediction intervals for the sorts of combined approaches we have attempted here. There is empirical evidence to suggest that current regularly-used single-model approaches also tend to seriously underestimate their uncertainty.[60] Much work will need to be done to address this gap, in our model, and the wider science of forecasting.

4.7.28 Returning to this study, a combined model with more than three components would be superior to ours. In particular, models that incorporate more members of the ETS family and make use of the latest machine learning techniques are likely to yield improved forecasts.[61] Machine learning insights and sound traditional statistical theory should also guide the weighing of the different component models in producing the final 'averaged out' point forecast values.[62]

4.7.29 Much insight can be gained by studies that compare empirical data to previously constructed models. This blend of empiricism and theory is, in the opinion of the Study Team, the way forward to produce forecasts policy-makers can genuinely rely on, once we begin to get a better sense of the impacts of the pandemic on the international higher educational landscape.

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4.8 The New Economic Impact Analysis

Introduction

4.8.1 According to a StudyPortals report, the estimated economic impact of the 5.1 million globally mobile students in 2016 was US$300 billion.[1] In Malaysia, the 2011 Internationalisation Policy states that "each international student is spending RM30,000 per year in the country throughout the course of his study, which translates to approximately RM2 billion for about 70,000 international students residing in the country".[2] In a 2019 report, MOE indicated that the 200,000 international students by 2020 target would have generated an estimated RM15.6 billion for the Malaysian economy.[3]

4.8.2 **Table 4.11** shows a comparison between the economic impact international students brought the USA, the UK, Australia, Canada, Germany, and Malaysia (based on latest readily available data):

Table 4.11 Estimated Economic Impact of International Students in Selected Countries

Estimated Economic Impact of International Students in Selected Countries (USD billions)[4]					
USA	**UK**	**AUSTRALIA**	**CANADA**	**GERMANY**	**MALAYSIA**
2016	2016	2016	2016	2016	2018
57.3	**25.5**	**19.8**	**11.2**	**6.7**	**2.72 (RM11.3)[5]**

4.8.3 Accurately estimating the economic impact of international student enrolment in our HEIs is a vitally important policy concern for Malaysia, as it is for other countries. Of course, new estimates must be made based on our evolving knowledge of student enrolment numbers and trends. That was therefore the objective of this section of the study, at the time it was concluded: to document how we estimated the total (i.e. direct, indirect, and induced) economic impact of international student enrolment in Malaysian HEIs, and to explain how we used our previously constructed enrolment forecast to do so.

4.8.4 Here, we must observe that the actual figures in this economic impact estimate are no longer useful, since they were based on our student enrolment forecast made prior to any knowledge of COVID-19. Indeed, this economic estimate takes onboard the problematic nature of the forecast and adds further uncertainties inherent to the estimation process itself. At the time this study was concluded, our hope was for this estimate to be more accurate than previous estimates based on the MEB (HE)'s HEI enrolment targets, which – as we had come to realise – would not be met. Unfortunately, given the still-unfolding global pandemic, our hope has not borne fruit.

4.8.5 As with the section on the forecast, we will now detail the methods that we employed so they might prove to be of use in future economic impact analyses.

Definitions

4.8.6 In this context:

(a) **(Gross) direct impact**[6] refers to business output, i.e. the revenue a particular sector of the economy receives directly from international students enrolled in Malaysian HEIs.
   (i) Examples include tuition and fees they pay to their HEI, rent they pay as tenants, money they spend buying food from restaurants, etc. These are all revenues for those sectors of the economy.
   (ii) This is merely a gross measure of economic impact; it does not account for the fact that not all this revenue was generated by inputs from the local economy. Some of it arises from leakage out of the economy.[7]
   (iii) For instance, some of the equipment students pay their HEIs to be able to use may have been imported, restaurants may have used imported ingredients in their food, etc.

(b) **Net direct impact**[8] refers to the direct impact after accounting for the leakages out of the Malaysian economy involved in generating that revenue.
   (i) If the education sector generally does 85% of its spending domestically to obtain a ringgit of revenue, the revenue's direct impact after leakages is 85 sen.

(c) **Indirect impact** here refers to the business-to-business (or sector-to-sector) spending generated by the revenue collected from international students.[9] Hence, every ringgit students spend in Malaysia has a multiplier effect on the rest of the Malaysian economy.
   (i) For example, the HEI uses its revenue from students to pay architects, contractors, builders, etc. to construct new facilities for itself, while the restaurant uses its revenue to buy the next day's ingredients, paying farmers, food distributors, etc. They in turn, pay their suppliers.
   (ii) If, for every ringgit of revenue the education sector re-spends locally, the other industries it 'buys' from in turn domestically re-spends 53 sen altogether, the education output multiplier measuring the size of the indirect impact is 1.53 (including the original ringgit of education sector spending). This would be the Type I educational output multiplier.[10]

(d) **Induced impact** in this context refers to the changes in total household spending (on food, clothing, retail goods, etc.) arising from the money employees, shareholders, etc. are paid, due to international student spending.[11]
   (i) For example, some of the money students pay their HEIs or the restaurants they eat at goes into paying the employees of those industries. Those employees' households will, in turn, spend on their own needs, generating further revenue for the Malaysian economy. This is another type of multiplier effect.

(ii) If, for every ringgit of revenue the education sector re-spends locally, its employees' households in turn re-spend 1 sen domestically, then the educational output multiplier, including both indirect and induced impacts would be 1.54. This would be the Type II educational output multiplier.[12]

(e) In sum, the **total economic impact** measured in this study includes direct, indirect, and induced impacts, after accounting for leakages. A few caveats must be made at this juncture:

(i) The Study Team did not account for leakages due to any scholarships given to international students.

(ii) We also did not factor in impacts due to revenue generated by research activities students undertake, be they patents, sales, etc.

(iii) Our total impact calculation already includes government tax revenue (after subtracting subsidies), but does not estimate the number of jobs created, as the input-output tables we used had no data on full-time employment (FTE) equivalent jobs.[13]

Data Sources

4.8.7 We used a variety of data sources to account for the direct, indirect, and induced impacts in question. Since this study was concluded, more up-to-date data has been released by many of these same sources. However, since they were not available to us at the time of this study, they shall not be considered here. **Table 4.12** lists the direct impacts (before leakages) we accounted for, and where we sourced the data, as well as the data source we used to calculate direct impact after leakages, and the total impact.

Table 4.12 Data Sources for Direct Impacts Before and After Leakages and for Total Impact

HEI FEES	
• Private HEI fees for Diploma, Bachelor's, Master's, and PhD. programmes (2018)	MOHE[14]
• Private HEI fees for Certificate programmes (2019)	EasyUni website[15]
• Public HEI fees for Bachelor's programmes (2019)	Education Malaysia website[16]
• Visa fees (2019) • Insurance costs (2019)	Education Malaysia website[17]
PERSONAL LIVING EXPENSES (2016, unless otherwise stated)	*Study in Malaysia Handbook (9th International Edition)*, as cited in the Study Malaysia website[18]
• Accommodation • Food and housekeeping • Clothing and laundry • Transport	

PERSONAL LIVING EXPENSES (2016, unless otherwise stated)	*Study in Malaysia Handbook (9th International Edition)*, as cited in the Study Malaysia website[18]
• Communications and utilities (2016 for mobile bill, 2011 for electric bill, 2019 for water bill, 2018 for gas bill, and 2019 for broadband internet bill)	• Also, conference paper: Global Solar Energy Use and Social Viability in Malaysia;[19] • The Edge markets article: PetDag calls off price hike on home deliveries following public outcry;[20] • Malay Mail Online article: SPAN - Water tariff hike long overdue;[21] and • iMoney.my website: Discover and compare the best broadband plans.[22]
• Books and stationery • Miscellaneous personal expenses	
• Family-related living expenses (for students with families) • Visitors' Expenses (2015)	EMGS Report: 2015 Economic Impact of International Student Enrolment in Malaysia[23]
Malaysian annual inflation rate (1960–2018)	World Bank, as cited in MacroTrends website[24]
To calculate direct impact after leakages and total impact: Input-Output Tables for Malaysian Economy (2010–2017)	Asian Development Bank (ADB) Data Library website[25]

Note: Data from all online sources were retrieved 1–3 February 2020

Method and Underlying Assumptions

HEI Fee Estimates (2018 – 2019)

4.8.8 The HEI fee data were grouped according to HEI status, field of study, and level of study according to the data provided by MOE. The amounts given were total fees, not fees per annum. They included Private HEI fees for Diploma, Bachelor's, Master's, and PhD. programmes in the following fields of study:

(a) General Programmes;
(b) Education;
(c) Arts and Humanities;
(d) Social Sciences, Business, and Law;
(e) Sciences, Mathematics, and Computing;
(f) Engineering, Manufacturing, and Construction;
(g) Agricultural and Veterinary Sciences;
(h) Health and Welfare; and
(i) Services.

4.8.9 The weighted arithmetic mean of the medians of the fees per annum of each type of Private HEI (i.e. HEI status), for each field of study, by each level of study, was calculated. Three rounds of weighting were applied, in which the weightages were chosen according to the ratio of students studying in each: (i) type of Private HEI (i.e. HEI status), (ii) field of study, and (iii) level of study. Between rounds (i) and (ii), the per annum fees were calculated by dividing the total fees by the average duration of programmes in each level of study.

- **Assumption:** On average, a Diploma programme would take 2.5 years; a Bachelor's, 3.5 years; a Master's, 2 years; and a PhD., 3.5 years.

4.8.10 To obtain the ratios of students in each category, we took the harmonic means of the ratios from 2015 – 2018, calculated from the student enrolment numbers from the annual Education Statistics books for this period.[26] (We chose this range because 2015-2018 were the years for which the international student data was broken down into the relevant categories with enough detail.)

- **Assumption:** These mean ratios would hold steady from 2015 – 2030.

4.8.11 Additionally, between rounds (ii) and (iii) of the weighted averaging process, a median figure to represent Private HEIs' certificate fees had to be calculated. To do this, each Certificate fee data point we obtained from the EasyUni website had to first be rescaled to a per annum figure (the various courses all had different durations). However, all the MOE Private HEI fee data was from 2018, whereas this data was from 2019.

- **Assumption:** Private HEIs did not increase their fees between the 2018 and 2019 intakes.
- **Assumption:** Where the EasyUni website offered no information on international student fees, the local student fees were assumed to apply to international students as well.

4.8.12 Through this process, the Study Team obtained a representative estimate of Private HEI fees. Next, we had to do the same for Public HEI fees. The Education Malaysia website had fee estimates for five different Bachelor's programmes from three Public HEIs. These were used to calculate the median Public HEI Bachelor's fee, as well as the median fees per annum. (We did not use this process to calculate Public HEI fees for other levels of study because the Education Malaysia website had no fee information on Certificate, Diploma, or PhD. programmes and only offered fee information on Master in Business Administration programmes from three public HEIs.) The ratio between this median Public HEI Bachelor's fee per annum and its Private HEI counterpart was calculated. This ratio was applied to all the median Private HEI fee estimates for the levels of study to obtain their Public HEI counterparts. And from these counterparts, using the same process we did for Private HEIs, a final representative fee estimate for public HEIs was obtained.

- **Assumption:** The Public-Private fee ratio for Bachelor's degrees applies to programmes at all other levels of study.
- **Assumption:** Given the absence of sufficiently broken down Public HEI enrolment data in the Education Statistics books (2015 – 2018), we assumed the Private HEI field of study and level of study ratios also applied to Public HEIs.
- **Assumption:** These Public HEI fee data were for 2019, so once more, we assumed no HEI fee increases from 2018 – 2019.

4.8.13 A final single, representative figure for HEI fees per year, per international student was obtained by taking a weighted mean of the Public and Private representative fee estimates. The mean was weighted according to the ratio of international students attending Public vs. Private HEIs from 2015 – 2018. Once again, these ratios were harmonic means of each year's ratios.

- **Assumption:** All non-tuition fees (administrative costs, etc.) are 10% of the tuition fee. Unfortunately, we were unable to obtain data on non-tuition fees.

Estimating Visa and Insurance Costs (2019)

4.8.14 Our estimate for visa expenses per international student came from the Education Malaysia website. The site only provided a single fee estimate, so this is what the Study Team used. Our insurance fee estimate came from the same source. Here we took the median annual premium of the various insurance plans the site provided information about.

Estimating Personal Living Expenses, Excluding Communications and Utilities Costs (2016)

4.8.15 The fee estimates for monthly personal living expenses provided by the Study Malaysia webpage were all given as ranges. All these were for the year 2016. We elected to use the middle value of each range as our personal living expense estimate for each category of expenses. These figures were then multiplied by twelve to obtain per annum estimates.

- **Assumption:** All international students take public transport and do not drive.

Estimating Communications and Utilities Costs (2011, 2016, 2018, and 2019)

4.8.16 The only exception to this general procedure was in the estimate for communications and utilities expenses. The figure in the Study Malaysia webpage clearly only included monthly expenses for a mobile phone plan for 2016; electric, water, gas, and internet bills were evidently not a part of their estimate. We found sources for each of these utility fees for the years 2011, 2016, 2018, and 2019 respectively. We accounted for how these fees changed due to inflation, so they would all be appropriate for 2016, then added them up for a total communications and utility cost estimate. (Our estimation processes involving price inflation over time shall be discussed in the following paragraph 4.8.19.)

- **Assumption:** The estimates we found for utility bills were for a household. Assuming a household has four people, and that students lodge together, we divided each of these estimates by four to obtain per student bill estimates.

Estimating Additional Expenses for International Students with Families

4.8.17 Some students arrive with families of their own, typically spouses and/or children. Naturally, these students consume more than single students, and so bring more revenue to the Malaysian economy. What are the ratios of married international students, with and without children? How much additional revenue do they bring in? The Study Team adopted the following assumptions made in the 2015 Economic Impact of International Student Enrolment in Malaysia report by EMGS:[27]

- **Assumption:** All undergraduate students are single, while 80% of postgraduate students are married.
- **Assumption:** All married students live in Malaysia with their spouse and one child.

- **Assumption:** What we might call the 'family output multiplier' is therefore 1.45, so for every ringgit a single student spends in living expenses, insurance, and visa fees, a married student spends an additional 45 sen for their family's needs. This multiplier effect is assumed to be consistent and unchanging from 2015 – 2030.

Estimating Visitors' Expenses (2015)

4.8.18 While international students live in Malaysia, they are often visited by relatives, and friends from their home countries.[28] This resulting tourism increases the revenue brought into the Malaysian economy. The abovementioned EMGS report, citing the Department of Statistics Malaysia (DoSM), stated that each tourist brought in RM2,966 in annual revenue. Once more, we adopted the relevant assumption from the report:

- **Assumption:** Every ten students bring in five visitors per year (i.e. each student brings in half a visitor per year, on average). Furthermore, we assumed this figure to be constant from 2015 – 2030.
- Thus, on average, each international student brought in RM1,483 in tourism revenue from visitors' expenses in 2015.

Accounting for Inflation

4.8.19 Each of the above estimates is only for a single year, yet this study set out to track how these economic impacts would change over time with changing international student enrolment. This meant accounting for inflation. The Study Team obtained Malaysian inflation data from 1960 – 2018 from a MacroTrends webpage. We took the arithmetic mean of these inflation data and applied it to all years after 2018, while the historical data were used to factor in inflation from 2015 – 2018. We also made two important assumptions regarding inflation:

- **Assumption:** All living expenses, visa and insurance costs, and visitors' expenses increase each year with the national annual inflation rate.
- **Assumption:** HEI fees increase once every three years, at their own unique inflation rate of 15% per increase. This is based on an MOE report, which stated that under current regulations, Private HEIs are only allowed to increase their fees at most once every three years, by up to 30% at most. We assumed different HEIs would increase their fees anywhere from 0–30% and elected to take the middle value of this range.[29]
- **Assumption:** HEIs do not all share the same three-year fee increase schedule. Thus, we smoothed out the 15% increase over each three-year period, rather than having drastic increases every three years.

Estimating Leakages and Multiplier Effects

4.8.20 Following a similar methodology to those adopted by the Government of Canada,[30] the State Government of Hawaii in the USA,[31] Bekhet (2011),[32] Yen and Ong (2017),[33] and a 2018 Khazanah Research Institute report, the Study Team used an input-output approach to estimate leakages and calculate the multiplier effects of international students enrolled in Malaysian HEIs.[34,35]

4.8.21 We obtained input-output tables for the Malaysian economy from 2010-2017 from the Asian Development Bank (ADB) library website, constructed 'A' Tables from each of these, and calculated both leakages and Type II Multipliers for each year from the latter using their Leontief Inverse matrices.[36,37] In doing so, we stopped at two rounds of re-spending. The leakage rates for each year were obtained by looking at the ratio of import consumption vs. total consumption for each industry. We then calculated the arithmetic means (across the eight years' worth of input-output tables) for each relevant industry's leakage rate and Type II Multiplier.

4.8.22 Once the leakage rates and multipliers for the relevant industries had been obtained, we matched each expense item on our list of direct impacts to their relevant industry. Where a direct impact affected multiple industries, we took the arithmetic mean of the leakage rates and total output multipliers for each of those industries, and matched these means with the gross direct impact in question.

4.8.23 Thus, we applied the following formulas to each gross direct impact to calculate its nett direct impact and its total impact:

Direct Impact after Leakages = **Direct Impact before Leakages** × **(100% – Leakage Rate)**

Total Impact = **Direct Impact after Leakages** × **Type II Multiplier** = **Direct + Indirect + Induced Impacts**

4.8.24 Finally, after applying these formulas and obtaining per international student estimates of the (gross and nett) direct impacts and the total impacts, and accounting for how these changed over the years with inflation, we simply multiplied these impacts by the number of enrolled international students for each year predicted by our forecast. (We naturally used historical data for 2016 – 2018.)

- **Assumption:** For all other expenses, we simply multiplied the per person expense for a year by the number of students enrolled in that year. For visa fees, we multiplied the per person fee by the twice the difference in enrolment between a given year and the previous year, assuming that many students would only need to pay once for a visa for the entire duration of their study.
- Based on feedback from policy labs (among other data points we collected), the Study Team learned that some students are granted visas for the entire duration of their study, and so only need to apply once, while others are granted visas with shorter durations, and so have to apply to renew their visa at least once. Our assumption attempts to capture this reality.

Results and Discussion

4.8.25 **Table 4.13**, **Table 4.14**, **Table 4.15**, and **Table 4.16** show the cumulative international student enrolment numbers from 2015-2018, broken down by HEI status, field of study, level of study, and Public vs. Private status respectively. These cumulative totals represent the ratios we used for each category.

4.8.26 The Public vs. Private fee ratio was 67.58%, i.e. Public HEIs' fees were about two thirds of those of Private HEIs. From the data in **Figure 4.16**, we obtained a mean inflation rate of 3.02%.

4.8.27 **Table 4.17** shows our estimates for each gross direct impact, its leakage rate and multiplier, and its nett direct and total impacts.

Table 4.13 Cumulative International Student Enrolment at Malaysian Private HEIs (2015 – 2018), by HEI status

College	University College	University	University: International Branch Campus	**Total**
160,246	27,671	169,871	21,365	**379,153**

Table 4.14 Cumulative International Student Enrolment at Malaysian Private HEIs (2015 – 2018), by Field of Study[39]

Field of Study	No. of Students
General Programmes	22,410
Education	3,508
Arts and Humanities	27,815
Social Sciences, Business, and Law	185,673
Sciences, Mathematics, and Computing	39,377
Engineering, Manufacturing, and Construction	55,175
Agricultural and Veterinary Sciences	15
Health and Welfare	9,555
Services	35,625
Total	**379,153**

Table 4.15 Cumulative International Student Enrolment at Malaysian Private HEIs (2015 – 2018), by Level of Study[40]

Certificate	Diploma	Bachelor's	Master's	PhD	**Total**
31,595	137,047	170,170	30,958	9,383	**379,153**

Table 4.16 Cumulative International Student Enrolment at Public vs. Private HEIs (2015 – 2018)

Percentage Public Enrolment	Percentage Private Enrolment
22.5%	77.5%

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Table 4.17: Economic Impact per International Student, Leakages, and Multipliers (2016)

Source of Expense	Gross Direct Impact (GDI) (RM)	GDI, Accounting for Families (RM)	Sector(s) of the Economy	Leakage Rate(s) (%)	Nett Direct Impact (RM)	Type II Output Multiplier(s)	Total Impact (RM)
HEI (including non-tuition fees)	26,523.17	NA	Education	15.11	20,468.79	1.544325	31,610.45
Visa expense	1,639.00	1,701.78	Consumption Expenditure by Government	2.27	1,663.14	1.803247	2,999.05
Insurance premium	730.00	757.96	Financial Intermediation	8.41	694.21	1.726059	1,198.25
Accommodation	5,400.00	5,606.84	Real Estate Activity	7.38	5,193.01	752.300	9,099.71
Food and housekeeping	9,000.00	9,344.73	Food, Beverage and Tobacco Hotels and Restaurants Other Social, Community and Personal Services	11.75 9.76 17.05	8,143.39	1.626774 1.668988 1.513409	13,054.32
Clothing and laundry	720.00	747.58	Textile and Textile Products Leather, Leather Products and Footwear Other Social, Community and Personal Services	23.44 23.55 17.05	588.00	1.371122 1.389294 1.513409	837.67
Transport	1,380.00	1,432.86	Inland Transport	16.17	1,201.19	1.520633	1,826.58
Communications and utilities	1537.00	1,595.91	Post and Telecommunications Electricity, Gas and Water Supply	15.51 18.27	1,326.36	1.555383 1.463333	2,001.95
Books and stationery	900.00	934.47	Pulp, Paper, Paper Products, Painting and Publishing	22.63	722.97	1.394328	1,008.06
Miscellaneous personal expenses	1,80.00	1,868.95	Retail Trade, Except of Motor Vehicles and Motorcycles, and Repair of Household Goods	17.99	1,532.67	1.494695	2,290.88
Visitors' expenses	1,513.99	1,571.99	Hotels and Restaurant Inland Transport Retail Trade, Except for Motor Vehicles and Motorcycles, and Repair of Household Goods	9.76 16.17 17.99	1,341.82	1.668988 1.520632 1.494695	2,095.17

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Figure 4.16 Malaysian Annual Inflation Rate (1960 – 2018) from Consumer Price Index[41]

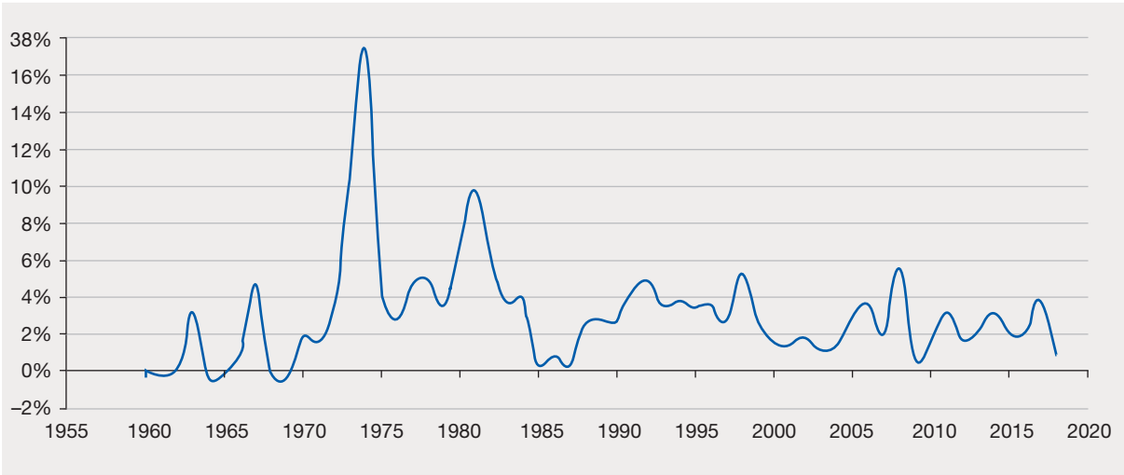
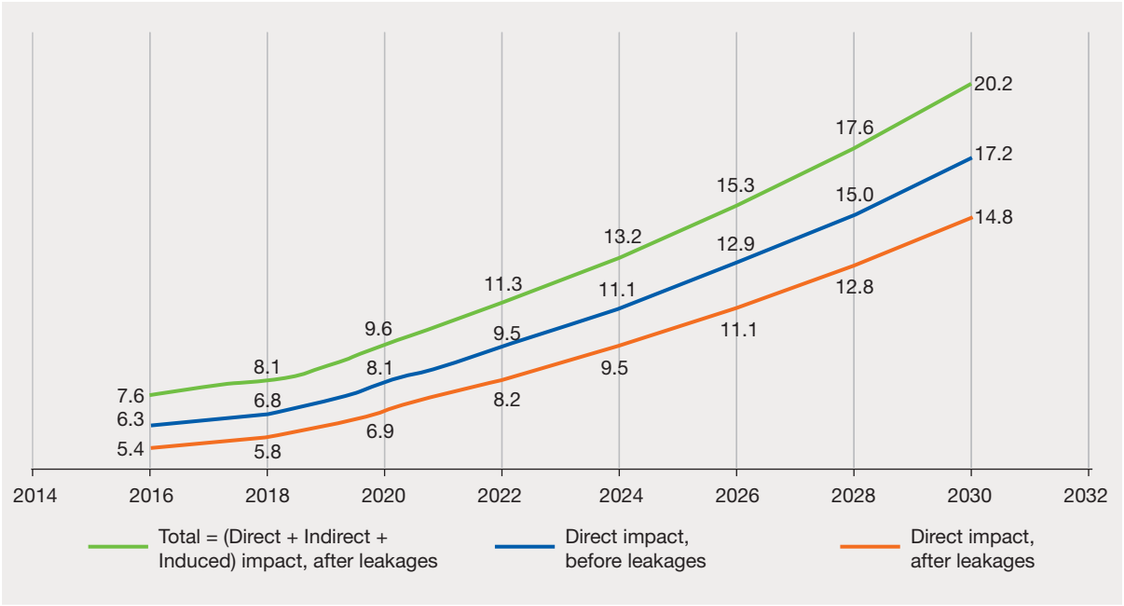


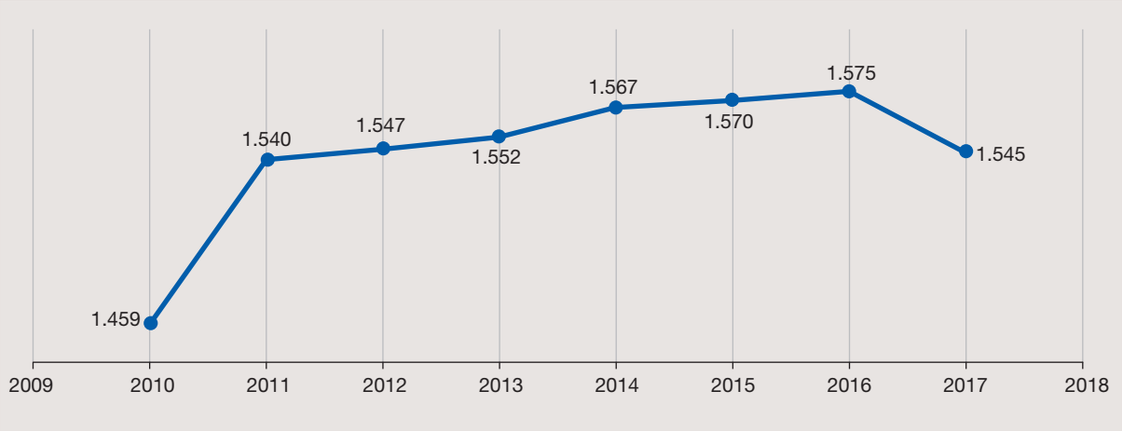
Figure 4.17 Estimated Economic Impact (in billions of RM) of International Students Enrolled in Malaysian HEIs (2016 – 2030)



4.8.28 Finally, **Figure 4.17** shows our estimates for the gross, nett, and total economic impacts of international students studying in Malaysia from 2016 – 2030.

4.8.29. This estimate had one advantage over similar endeavours in the past: access to a more frequent set of input-output tables from the ADB Library. The Department of Statistics Malaysia (DoSM) has only published input-output tables roughly once every five years (1983, 1987, 1991, 2000,[42] 2005,[43] 2010,[44] and 2015[45]). It would be much harder to track the evolution of the linkages and leakages of the different sectors within the Malaysian economy using these. The ADB's annually released input-output tables offer an opportunity to see how the education sector's ripple effects change over time. **Figure 4.18** shows the year-to-year change in the multiplier effect of the educational sector from 2010 – 2017. A the time this study was concluded, this was the most recent data available to us.

Figure 4.18 Type II Output of the Malaysian Education Sector (2010 – 2017)



4.8.30 A comparison between the other sectors in the Malaysian economy over time, using the combined data of the ADB and DoSM might even allow for a time-series treatment of these multipliers.

4.8.31 On the other hand, Yen and Ong's work in 2017 showed that in 2005, the higher education sector had multipliers that were below the median of the entire Malaysian economy. This study did not perform such an analysis, but even from the industries selected in **Table 4.17**, it is clear that industries like food and beverage as well as hotels and restaurants have, on average (from 2010 – 2017) larger multiplier effects than the education sector. It is of particular note that government expenditure has the largest multiplier effect, on average, in the period studied, among the sectors in the table.

Limitations and the Way Forward

4.8.32 This analysis has several limitations. As previously stated, it relies on our enrolment forecast performed prior to COVID-19. Just as there is a pressing need to perform a new forecast from the ground up, so too is there a need to update this estimate.

4.8.33 Moreover, the Study Team has not seen any previous work in the literature where a confidence interval is constructed when estimating the multiplier effects or the indirect and induced impacts of specific sectors of the economy. As such, we were also unable to develop confidence intervals for these estimates. This is of special concern after the discussion on limitations in the previous section on the forecast model, stressing the importance of prediction intervals in forecasting. Such concerns should naturally apply to any estimates based on these forecasts.

4.8.34 Another limitation that applies to our estimate as well as that of Yen and Ong (2017) is that the Input-Output tables we used do not separate higher education from pre-tertiary education. As there is no *a priori* reason to assume the two sectors behave the same, it is not at all unlikely that they have different multiplier effects.

4.8.35 We were also unable to account for several impacts, such as the impact on job creation (EMGS suggests that in 2015, each international student generated, on average, a total of 2.4 jobs), the leakages due to international student scholarships, and the revenue generated by research activities these students engage in. We also assumed all international students took public transport. This led us to neglect the economic impact of international students who drive in Malaysia.

4.8.36 But the largest impact that this estimate has been unable to account for is the revenue generated by international students who educate their children in private or international schools in Malaysia, even as they pursue higher (often postgraduate) education here. In this sense, it can be seen that the impacts of HEI internationalisation are very much connected to those of pre-tertiary education internationalisation.

4.8.37 Future studies would benefit from availing themselves of more frequently released input-output data, to approach input-output analysis in a more dynamic manner, recognising the evolution of the economy over time, and plugging the gaps of this study.

Conclusion

4.8.38. The Study Team would argue that it is better for future estimates to err conservatively while the student enrolment situation is this uncertain during the pandemic. That aside, it is worth ending this analysis by pondering the following point:

- Given that married international students with children have a much larger multiplier effect than their single counterparts, and given that postgraduate students are more likely to come here with their families, it is apt to revisit the quantity vs quality debate briefly touched on in the benchmarking discussion in Section 4.1. MOHE may wish to consider focusing on attracting postgraduate international talent to Malaysia as an alternative to chasing ever-higher enrolment numbers overall. Students of this profile are also likely to bring additional revenue by enrolling their children in primary and secondary international schools. This is not a concrete recommendation by the Study Team, merely a suggestion for the consideration of MOHE which merits further study.

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PART 5
KEY TAKEAWAYS AND RECOMMENDATIONS

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This section distills our study's findings into twelve key takeaways and includes our main recommendations in each of these areas.

Key Takeaway 1: Strengthen the Governance Framework

Why This is Important

5.1 Governance has emerged as a crucial issue in steering the direction of higher education, whether at the national, regional, or institutional levels. Tight budgetary resources, intense competition and greater expectations from the state and society mean that HEIs all need to reconfigure themselves in a changing economic landscape. Such restructuring would be greatly enhanced by having in place a dynamic governance framework (encompassing, among other areas, institutional, autonomy, financial, personnel, and regulatory governance) that promotes all aspects of higher education, including internationalisation.

Why It Matters to Malaysia

5.2 A sound governance framework is vital given that Malaysia's higher education sector has witnessed rapid expansion in recent years, including an upsurge in enrolment of international students. Our framework for internationalisation is sound, but mechanisms for coordination and linkages are weak. The scope of internationalisation needs to be expanded to include MNCs operating within the country. Regulations impeding private HEIs from recruiting overseas students need to be reviewed. Additionally, our incentive regime and management at the institutional level must encourage and support researchers to participate in more international research collaborations.

Recommendation

5.3 Establish an Inter-Ministerial Committee on the Internationalisation of Higher Education chaired jointly by MOHE and the Ministry of Home Affairs (MHA), with membership drawn from relevant ministries (in particular, the Ministry of Foreign Affairs) and agencies as well as industry players to ensure committed leadership, a holistic approach, and strong policy direction. The new process of knowledge diplomacy should involve the role of our professional diplomats at our embassies abroad.

5.4 Liberalise regulations pertaining to governance and autonomy of private HEIs.

Key Takeaway 2: Deliver Forward-Looking, Responsive Visa Services

Why This is Important

5.5 Visa issues (processing time, document submission, renewal, etc.) were consistently ranked as the top concern by our study stakeholders. This is despite various efforts having been taken by EMGS and the Immigration Department (JIM) to reduce processing time (now just seven days on average). Among the key concerns included a lack of communication on changing policies, the inconsistent application of policies by JIM, need for yearly renewal (commercial motivation), the inability to convert from spouse or social visa to something else (e.g. a study visa), differentiated treatment between Public and Private HEIs, etc.

Why It Matters to Malaysia

5.6 Globally, visa processes are becoming more open, especially as countries aim to attract international students. Japan, however, is considering tightening visa regulations after international students from Vietnam went missing. These differing responses underscore the need to strike a delicate balance between security concerns as well as promoting the internationalisation agenda.

5.7 In summary, Malaysia needs to continue monitoring visa-satisfaction to ensure that our internationalisation efforts are not derailed.

Recommendation

5.8 Ensure continuous tracking, transparency and reporting of visa improvements as per the 32 initiatives approved by Cabinet in November 2019.

Key Takeaway 3: Expand During- and Post-Study Work Opportunities

Why This is Important

5.9 According to 'The Growing Competition for Global Talent' report by the Institute of International Education (IIE), published in November 2019, the opportunity to gain work experience is a key driver of internationalisation together with a clear skilled migration pathway. Accordingly, the motivations of the two groups of students need to be understood as follows:

(a) Group 1: Work experience will help them secure better jobs at home; and
(b) Group 2: Students who, due to economic uncertainty at home, prefer to invest in countries where there are work opportunities (Malaysia is relevant because we tend to attract students from less-privileged countries).

5.10 Canada and Australia have seen an upsurge in international students due to the expansion of post-study work opportunities and clear articulation of opportunities.

Why It Matters to Malaysia

5.11 This came up as a key issue to attract international students – post-graduation work opportunities are seen as part of the 'investment' of studying abroad. Some students have expressed their inability to work in Malaysia as a "waste" of their talent and time – they do not get to leverage on the networks they have built or the cultural appreciation they have developed. The reality is that most international students work for a year and then return to their home nations.

5.12 Concerns of limited employment opportunities for locals can be mitigated by mapping available international student talent against gaps in the job market, and taking these talents in select industries where we have a skills shortage.

Recommendation

5.13. Enhance during- and post-study employment options for international students.

Key Takeaway 4: Enhance Intercultural Competencies

Why This is Important

5.14 International students have expressed feeling "unwelcomed" or, worse still, "discriminated" against in Malaysia, either by local communities or HEI staff. These negative perceptions impact student experiences and create a negative image of Malaysia. There is a lack of community awareness on the benefits of international students. In Halifax, Nova Scotia, Canada, local university leaders work with local business and government leaders to integrate international graduates into the local labour market and act as incubators. International students were reported to contribute almost US173 million to the local economy in 2009. When taking into considering the overall economic impact of international students to Atlantic Canada in 2017, this equated to $795 million in sales, $495m in GDP, $329m in income, and 6731 jobs Full-time Jobs Equivalent (FTE) created.

Why It Matters to Malaysia

5.15 As a country that prides itself on being welcoming, negative treatment including discriminatory profiling of international students is unacceptable. Student-Community integration is important for effective and sustained internationalisation. Building intercultural competencies also provides an opportunity to promote Bahasa Malaysia by incentivising international students to learn it, and empowering them to better integrate into Malaysian society by acquiring proficiency in it. It is also an opportunity to Malaysian values such as 'adab', 'sopan santun', etc.

Recommendation

5.16 Strengthen intercultural competencies and English and Bahasa Malaysia language training.

5.17 Form strategies for heightening an awareness and appreciation of internationalisation among HEIs, government entities (including AKEPT), students, industry actors, and communities.

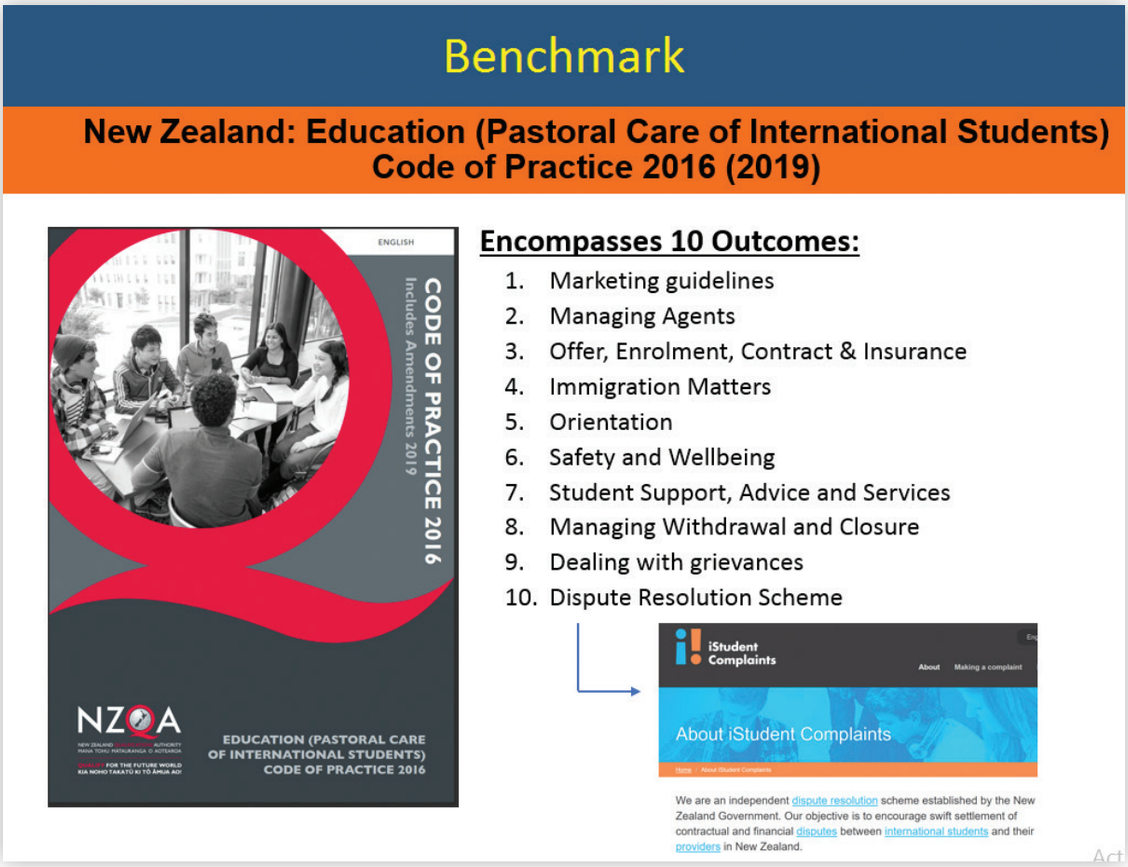
5.18 Recognise international students economic contributions and factor that in with regard to government support and the multiplier effect generated to the economy from the enrolment of international students.

Key Takeaway 5: Launch Pastoral Care Guidelines

Why This is Important

5.19 International students can often be anxious, insecure, lonely, and vulnerable when they first arrive in a new country. Acclimatising to a new country can take time. A Code of Practice is vital to ensure that international students are well informed, safe, and properly cared for. New Zealand is the first country in the world to introduce comprehensive pastoral care guidelines encompassing ten areas (see **Figure 5.1**). HEIs that do not adhere to this Code may lose their international student recruitment licence.

Figure 5.1 New Zealand's Comprehensive Pastoral Care Guidelines



5.20 The Code is a document which provides a framework for service delivery to international students by educational providers and their agents. It sets out the minimum standards of advice and care that are expected of educational providers with respect to international students. The Code applies to pastoral care and provision of information only, and not to academic standards.

Why It Matters to Malaysia

5.21 Presently, there is no such comprehensive code being adopted by any HEI in Malaysia. The absence of a unified code across all HEIs leads to varying treatment of international students, which in turn impacts how they perceive Malaysia. And students become ambassadors – following the completion of their studies – to promote the country. In short, a Code ensures all HEIs properly care for the welfare of their international students and enables MOHE to hold HEIs accountable for discharging this duty of care. The absence of a Code across all HEIs leads to varying treatment of domestic students as well.

Recommendation

5.22 Introduce a comprehensive Code of Practice for Pastoral Care to be adopted by all HEIs to enhance the welfare of both domestic and international students.

Key Takeaway 6: Initiate an Alumni Engagement Strategy

Why This is Important

5.23 Alumni play a key role internationalisation and are one of its central drivers. Successful alumni engagement programmes align institutional priorities with graduates' interests, needs, and potential. The benefits of effective alumni relations extend beyond fundraising, and the costs of undervaluing graduates' contributions are becoming clearer. Alumni are contributing to a wide range of programmes that add value to institutions' international efforts in meaningful and innovative ways. Australia has launched a new whole-of-government Australia Global Alumni Engagement Strategy (2016 – 2020) that recognises the lasting, powerful impact of its global alumni connections.

Why It Matters to Malaysia

5.24 We have a rich pool of alumni – heads of government and of state, ministers, central bankers, civil servants, and corporate captains – who sit in positions of influence in many parts of the world. They can open doors for our diplomats and businesses and facilitate research and industry linkages, besides being ambassadors of our HEIs. Our 2011 Internationalisation Policy and the Malaysia Education Blueprint 2015 – 2025 (Higher Education) recognised the importance of alumni engagement and proposed the MyAlumni initiative. EMGS has developed the EMGS Connect programme, but its outcome is inconclusive. Some HEIs have good alumni management and effectively use them as ambassadors (for example, APU).

Recommendation

5.25 Develop an Alumni Engagement Strategy that will, among other benefits, enhance our HEIs' international alumni management as well as mobilise the potential of our international alumni to achieve the goals of our internationalisation policy.

Key Takeaway 7: Promote the Internationalisation of TVET

Why This is Important

5.26 The demand for Technical and Vocational Education and Training (TVET) qualifications is growing globally, especially for tech TVET. A number of countries have introduced various initiatives to expand such education. In Japan, for example, there are currently 67,475 international students in the country's Professional Training Colleges (PTC). This number has grown by a remarkable 168% since 2011. PTCs are classified as HEIs and focus on vocational skills and knowledge. China converted 600 universities to polytechnics in 2014. The British Council in 2017 launched a report titled 'Changing Lives: Internationalising the Skills Sector' that explored how internationalisation can make a difference to the UK skills sector.

Why It Matters to Malaysia

5.27 Malaysia's TVET space is robust. There are no less than 11 Ministries which are involved with TVET or have TVET institutions. Generally, there are a total of 1,248 TVET providers, comprising of 593 public TVET institutions, 633 private TVET institutions and 22 state government TVET institutions. There are over 36 polytechnics, 104 community colleges, and a total of four technical universities within the Malaysian Technical University Network (MTUN). Several Chinese companies have expressed interest to support Malaysian TVET students in China. Similarly, ZTE Education has offered to sponsor 300 students from China to study in MTUN as well as a proposal to open the China-Malaysia Institute in Sultan Salahuddin Abdul Aziz Shah Polytechnic. Presently, inbound mobility in polytechnics is limited – China (16), Indonesia (93), South Korea (110), Thailand (140), Japan (31), Singapore (28), Scotland (4).

Recommendation

5.28 Expand the scope of the internationalisation of higher education to incorporate the TVET sector.

Key Takeaway 8: Launch a Cohesive Branding and Marketing Campaign

Why This is Important

5.29 Positioning via marketing, branding, and communications efforts is growing in importance due to intense competition in the internationalisation space. Yet, no one entity in Malaysia seems to be responsible for leading the overall higher education branding and positioning effort. The ownership of 'Education Malaysia' – as a brand or in reference to the former Malaysian Students Department (MSD) – has not been resolved. However, the more fundamental question to answer is: Does the 'Education Malaysia' brand create a strong Call to Action (CTA)?

5.30 Students the Study Team interviewed said they relied on Google to find out about Malaysia, and rankings were important to them in determining whether to apply to a Malaysian HEI. This raises questions about traditional promotional efforts such as expos. Nevertheless, in Australia, agents were responsible for 73% of undergraduate intake in 2018! Hence, agents could still have a vital role to play.

5.31 The importance of digital marketing and alternative technology-based methods cannot be underestimated. For example, University Technology Sydney (UTS) was able to generate 10,000 leads by offering free online taster courses which featured their professors sharing knowledge about offered programmes (www.openlearning.com/uts).

Why It Matters to Malaysia

5.32 Branding is vital beyond just attracting international students. It is also important in attracting top researchers to collaborate in Malaysia and promoting Malaysian academics abroad. A coherent brand and message are vital, as clear communication enhances internationalisation efforts. "Value for Money" and "Affordable" were key terms often associated with Malaysian education. And in our branding, we need to capitalise on Malaysia's geographical location and socio-political stability to resonate with prospective students and their parents concerned about the safety of alternative study destinations.

Recommendation

5.33 Entrust MOHE (EMGS) with the responsibility of coordinating the branding and marketing promotional campaign among various relevant ministries to position Malaysia in the internationalisation space, including the use of technology alongside traditional methods and agent management.

5.34 Work with the Ministry of Foreign Affairs and other agencies including MARA and the Public Service Department (PSD).

Key Takeaway 9: Target and Profile International Students Strategically

Why This is Important

5.35 The reality is that international student numbers are plateauing. Nations such as the US, Australia and the UK are deemed over-reliant on students from China and India. Conversely, fewer Chinese students are going abroad as the quality of their local HEIs improves, and the value of an overseas degree diminishes (due to over-supply). At the same time, there is growing hunger for students from MENA, ASEAN, sub-Saharan Africa, and the Americas for international education. Focusing on and targeting the right international students is therefore vital, as is having the right strategy, such as attracting international branch campuses, growing transnational education (TNE), and using technology (big data, digital marketing, etc.). Similarly, the availability of scholarships is a big pull factor.

Why It Matters to Malaysia

5.36 Malaysia's appeal, while global, is nevertheless primarily to international students from emerging and developing countries – as evidenced by, among other facts, the lack of European, American, or Oceania students here. This, however, means that Malaysia will firmly be on the radar of students from emerging regions – MENA, sub-Saharan Africa, and ASEAN. As home to over ten international branch campuses, and having a long-established TNE ecosystem, Malaysia is in a prime position to capitalise on the next wave of international students. However, the recent decline suggests more a sophisticated approach is needed.

Recommendation

5.37 Coordinate strategic and targeted approaches for attracting international students, including leveraging on branch campuses and transnational education (TNE).

5.38 It is indispensably necessary to share data for informed policy-making on the internationalisation of higher education.

Key Takeaway 10: Promote Lifelong Learning Models in Tandem with 4IR / Digitalisation

Why This is Important

5.39 International students are motivated to take up programmes that enhance future job prospects and career trajectory opportunities. They are also part of the global lifelong learning trend – upskill, reskill, etc. Top nations such as Japan and China, for instance, have introduced more technology-based courses. Germany on the other hand is offering more courses taught in English to attract students into their world-renowned engineering programmes.

5.40 At the same time, offering new learning models – such as that of General Assembly (GA), which provides 10-14 week courses on the latest in-demand courses such as artificial intelligence (AI), big data, cybersecurity, and user interface/user experience (UI/UX) – could also see increased international mobility students. On the other hand, for postgraduate students at the Masters and PhD. levels, R&D opportunities are a big attraction factor. Hence, financial support and scholarships are key.

Why It Matters to Malaysia

5.41 We must show that our offerings are relevant in today's 4th Industrial Revolution (4IR) and that international students have good prospects upon completion of studies. Under the Twelfth Malaysia Plan, 2021 – 2025 (RMKe-12), Malaysia is already building a lifelong learning digital talent pipeline. We need to include internationalisation as part of this strategy.

Recommendation

5.42 Explore new learning models to attract lifelong learning international students.

Key Takeaway 11: Promote Effective Internationalisation of R&D

Why This is Important

5.43 At the institutional level, funding and funding management is key to ensuring that HEIs are able to carry out the internationalisation of their research activities. However, Malaysia's HEIs have not previously exhibited an appetite for external research funding given the generous government funding that used to be available. However, the recent reductions in government funding support have placed pressure on HEIs to seek external research funding.

5.44 On an individual level, international postgraduate students are currently not allowed access to local research funding support, much to their dissatisfaction. And many researchers are unaware of the numerous international grants available, as HEI management offices do not proactively inform them. Researchers are also often unfamiliar with international grant requirements. To meet this challenge, Indonesia has engaged specialised grant writers, conversant with the relevant requirements for EU grant applications.

5.45 The weak management of R&D also emerged as a recurrent theme in our policy lab feedbacks. Research in Malaysia is still undertaken in silos and suffers from weak engagement with external parties. For instance, research collaborations between ASEAN member countries have been limited. HEIs have also been unable to fully utilise the talents of their international research staff, as these staff are presently not allowed to be principal investigators of publicly funded research.

Why It Matters to Malaysia

5.46 The internationalisation of R&D was one of the few factors important in ensuring the satisfaction of all stakeholders the Study Team surveyed, i.e. local students, international students, local staff, and international staff, and alumni. Healthy, robust, internationalised R&D activities are also a crucial component of university rankings. Furthermore, global rankings have been a critical pull factor in attracting international students to enrol in and international staff to join Malaysian HEIs. The successful internationalisation of research will be vital to maintaining Malaysian HEIs' rise in global rankings.

5.47 Increasing international research collaboration would also allow for solutions to be found for the regional and global challenges facing Malaysia in our increasingly interconnected world. In particular, ASEAN member countries can benefit if resources are shared in jointly addressing common problems such as the recurrent haze issue, the need for environmentally sustainable palm oil production, etc.

Recommendation

5.48 Strengthen management of R&D in HEIs to promote effective internationalisation.

Key Takeaway 12: Introduce an Internationalisation Scorecard

Why This is Important

5.49 A scorecard is a strategic management performance metric used to measure progress or achievement towards a set of defined objectives or targets. It provides policy-makers and HEI administrators with the ability to combine specific metrics in order to gain a holistic perspective on internationalisation.

5.50 Up until now, no HEI or organisation in Malaysia has developed a scorecard on internationalisation. The Report on Internationalisation Policy for Higher Education Malaysia identified a number of indicators for specific recommendations but did not examine the need or the contents for an overall scorecard or index of internationalisation.

Why It Matters to Malaysia

5.51 A well-developed scorecard will provide HEIs with relevant information to monitor and assess their performance that will help them to identify their areas of strengths and deficiencies. Institutions need indicators to profile themselves and make comparisons with peers in terms of internationalisation. HEIs are expected to be more accountable and transparent in furnishing information on their performance.

5.52 In summary, a scorecard, notwithstanding its limitations, is a useful tool to reveal how well the internationalisation process has been undertaken at the institutional level. It helps to provide empirical based data for more informed decision-making.

Recommendation

5.53 Entrust MOHE with the development of an Internationalisation Scorecard with adaptations from the 2011 Internationalisation Policy.

PART 6
ACTION PLANS, OUTCOMES AND EPILOGUE

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Action Plans and Outcomes

6.1 The Action Plans for the proposed key takeaways and recommendations, as well as their expected outcomes, are detailed in **Appendix I**: Key Takeaways, Recommendations and Action Plans.

Epilogue: Internationalisation of Higher Education in Malaysia Post-COVID-19

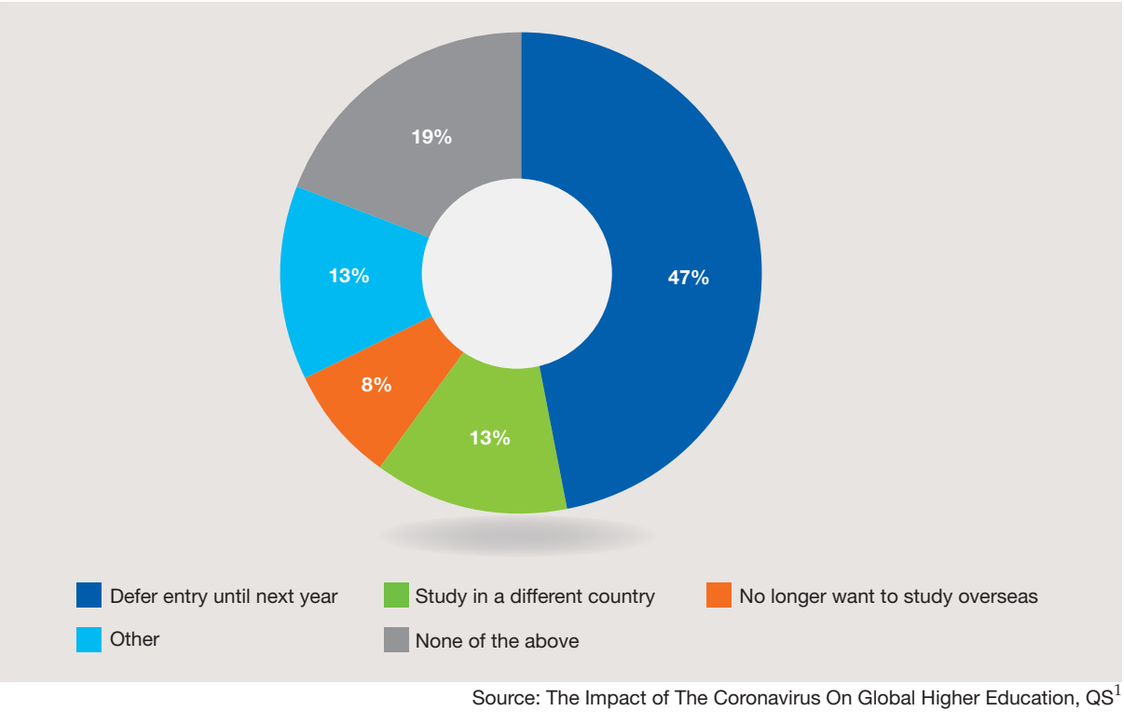
6.2 At the time of this study, the Study Team had not taken into consideration the global impact of the COVID-19 pandemic and Malaysia's subsequent Movement Control Order on the higher education sector. COVID-19 has undoubtedly affected all industry sectors, including higher education, and has gone on to create 'new normals' in all aspects of life from restrictions on travel to changes in social relationships; to new working environments, and to the accelerated adoption of new technologies.

6.3 Given the limited amount of studies available, the Study Team can only estimate the anticipated changes to the landscape of internationalisation in higher education.

Attitudinal Shifts Among Prospective Students

6.4 A global survey of over 400 students found significant shifts in student study plans with 47% planning to defer their studies, 13% deciding to study in a different country and 8% no longer wanting to study abroad, as shown in **Figure 6.1** below.

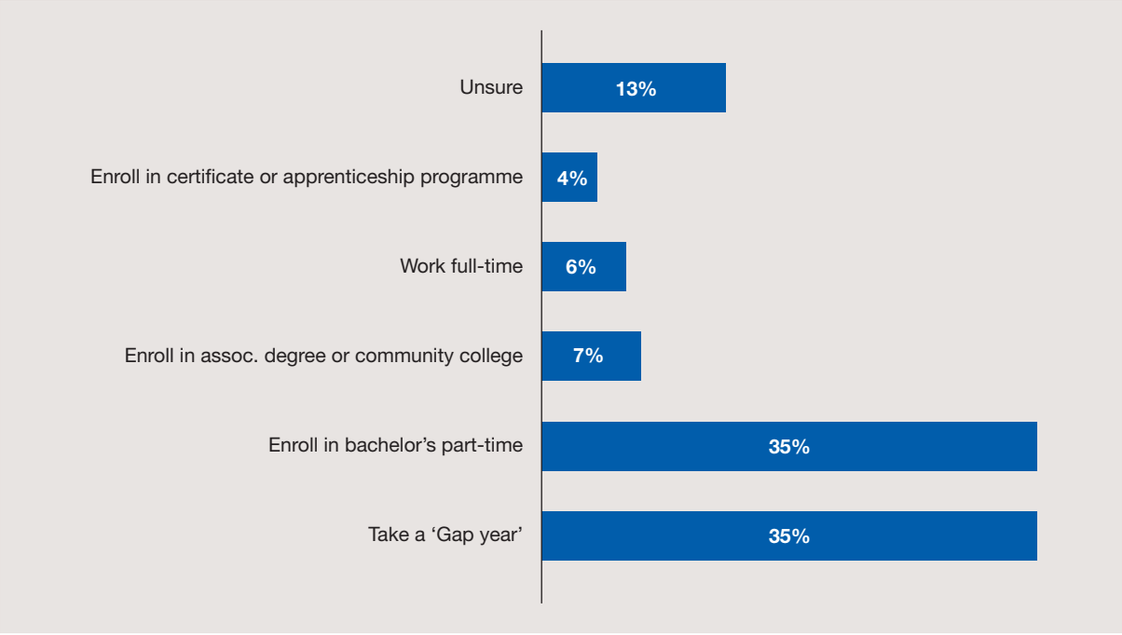
Figure 6.1 How the Coronavirus Changed Student Plans to Study Abroad



Source: The Impact of The Coronavirus On Global Higher Education, QS[1]

6.5 A similar survey of 487 university-prospective students in the United States found that nearly one fifth or 17% of students surveyed had changed their higher education plans following the emergence of COVID-19. Of the 17% surveyed, 35% had decided to defer their studies with another 35% choosing to enroll on a part-time basis (**Figure 6.2**).

Figure 6.2 How Student Plans Have Changed



Source: Impact of The COVID-19 Pandemic On College-Going High School Seniors, Art & Science Group[2]

6.6 The study also found that the majority of students (63%) were concerned that they would not be able to attend their most preferred university of choice, i.e. their first-choice university. Reasons for these concerns include difficulties with the admissions process, affordability as well as health-concerns over family members or themselves.

Investments in International Students

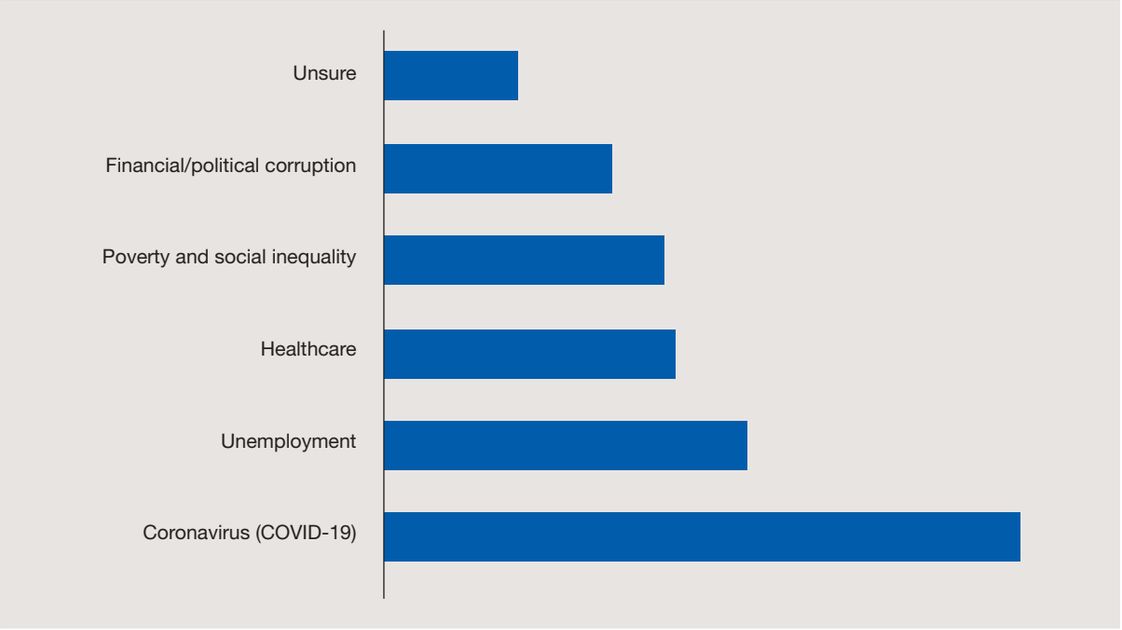
6.7 Reports suggest that top-ranking universities in Australia (Group of 8) had overinvested in infrastructural upgrades to attract international students, particularly students from mainland China, with some of the internationalisation programmes being carried out even at the expense of meeting domestic student's needs. These universities, according to the report by The Australian Population Research Institute, experienced over a 50% loss in revenues when the Australian Government clamped down on foreigners entering Australia.[3]

Concerns over Affordability and Health

6.8 Although similar surveys on attitudes towards higher education have yet to be conducted in Malaysia, polls by global market research firm Ipsos found that globally there are overarching concerns over health and finances.[4] As seen in **Figure 6.3**, in an international survey involving 28 countries, COVID-19, unemployment and healthcare ranked top in the list

of concerns among respondents, which suggests impending challenges to internationalisation in higher education namely i) whether or not students/academicians would be willing to travel to a foreign country to study because of health concerns and ii) whether or not students can afford to study abroad.

Figure 6.3 The Top Five Global Concerns



Source: Global Advisor, Ipsos

6.9 Furthermore, fears over health and finances are not merely attitudinal. Globally, the World Health Organization (WHO) cites 226,844,344 confirmed COVID-19 cases including 4,666,334 deaths by mid-September 2021.[5] Economic concerns are equally troubling. Although more difficult to quantify, a June 2020 forecast by the World Bank suggests a 5.2 percent contraction – citing the biggest universal recession in decades. Per capita income is projected to shrink in advanced economies by up to 7%, which may have spillover effects on emerging markets, predicted to decrease by 2.5%. As can be seen in **Figure 6.4**, the downgrades include international markets identified in this study.[6]

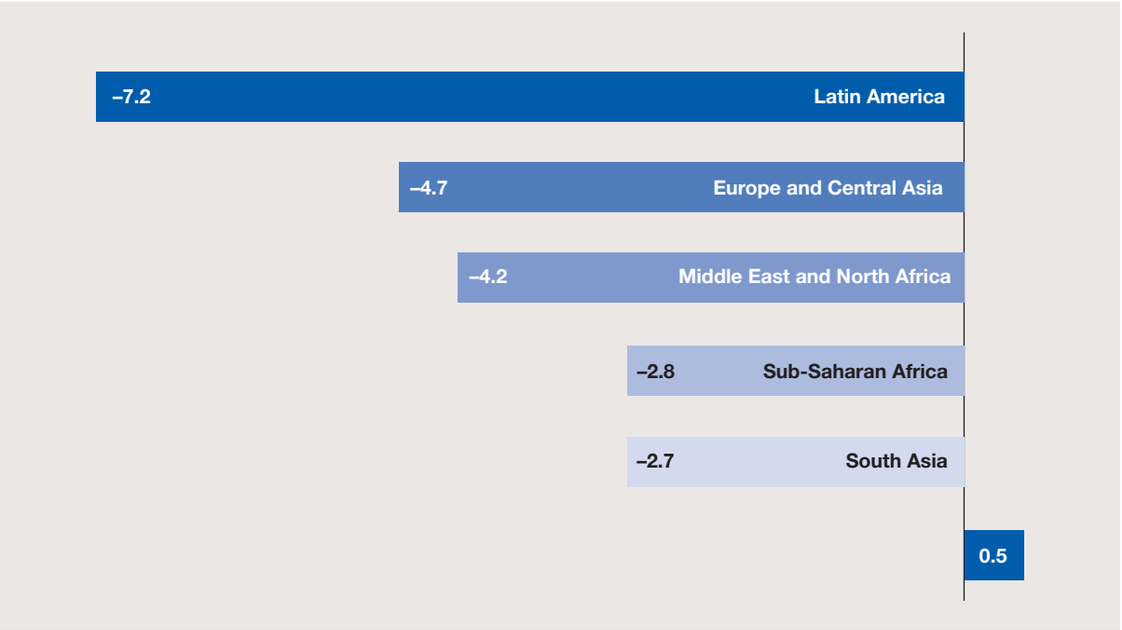
6.10 As individuals and governments shrink so do their capacity to invest in international education or in some instances' individuals may even choose to disregard tertiary education altogether preferring to work instead.

Changes in Regulations

Travel Restrictions

6.11 Besides changes in demand for higher education, regulatory measures will also impact internationalisation in higher education.

Figure 6.4 Growth Downgrades by Region



Source: Pandemic, Recession: The Global Economy in Crisis, World Bank

6.12 In his national address on 7 June 2020, the former Prime Minister of Malaysia, Tan Sri Muhyiddin Yassin, had announced that Malaysia would enter a recovery phase from 10 June 2020 to 31 August 2020. Several restrictions have been eased including interstate travel. However, international travel would continue to be banned with the exception of Malaysian citizens abroad returning home.[7]

6.13 Outside of Malaysia, other countries have imposed similar restrictions on travel and in higher education institutions. In April 2020, research by the World Tourism Organization (UNWTO) found that 217 global destinations had travel restrictions:[8]

- 45% countries had borders completely or partially closed to tourists;
- 30% countries had completely or partially suspended international flights;
- 18% countries banned passengers from specific countries of origin or passengers who have transited through specific destinations from entering; and
- 7% countries have unique measures, e.g. quarantine requirements for 14 days and visa measures.

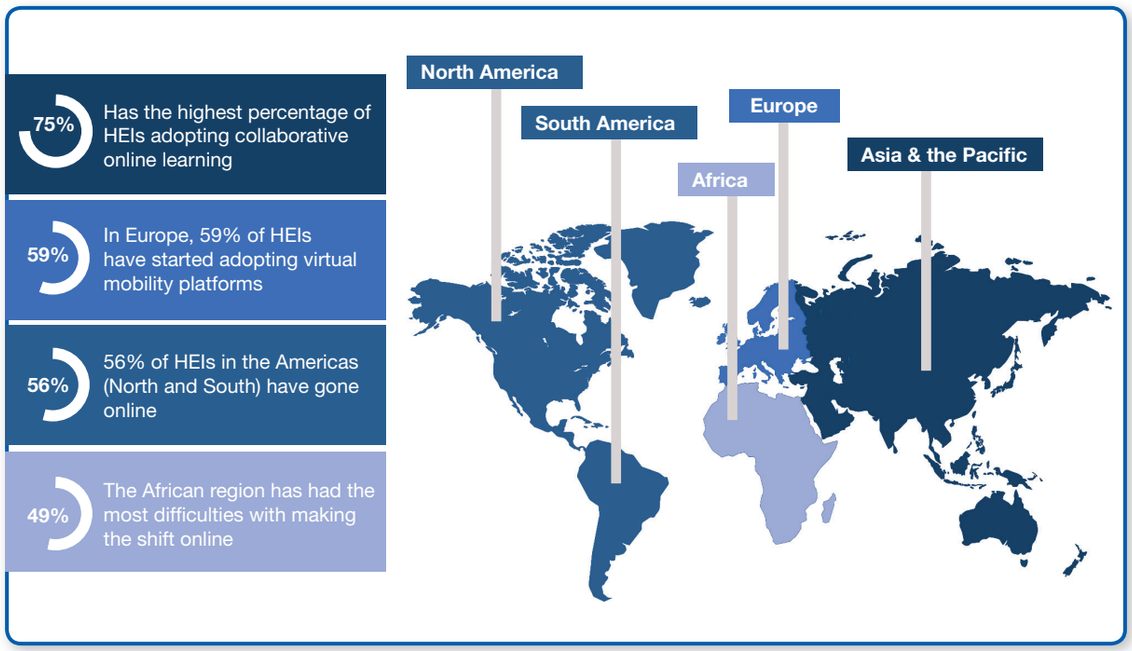
6.14 Since April 2020, some European countries have eased measures with other EU countries;[9] whereas in South East Asia, Vietnam is slowly moderating restrictions.[10] It remains to be seen how travel restrictions will change over time.

Challenges with Online Learning

6.15 Besides travel restrictions, governments have also imposed restrictions on face-to-face learning within higher education institutions given its associated public health risks. The Ministry of Higher Education in Malaysia extended its online learning in higher education institutions until 31 December 2020 save for a few special cases.[11]

6.16 Similar requirements can be seen around the world compelling more HEIs to use online learning platforms as reflected in a study by the International Association of Universities illustrated in **Figure 6.5** below.[12]

Figure 6.5 Regional Analysis: Adoption of Virtual Mobility or Collaborative Online Learning Platforms



Source: COVID-19: Higher Education challenges and responses, The International Association of Universities, 2020

6.17 The IAU study found that the Asia and Pacific region had the highest increase in virtual learning at 75% followed by Europe at 59%, the Americas (North and South) at 56%, and Africa at 49%. The study further cites difficulties in Africa could be linked to access to technical infrastructure.[13]

6.18 Although commendable and necessary to minimise disruptions in student learning, online learning is not without its own set of challenges (see **Table 6.1**).

Table 6.1 Challenges with Online Learning

Quality of Learning Experience	The shift from face-to-face learning to online learning may diminish the quality of learning for students, particularly in terms of hands-on learning in TVET and laboratory work for students in the sciences. On-campus internationalisation furthermore will also be affected, by reducing the potential for organic social interactions between faculty and peers.
Student Perception of Value in Student Fees	Students may raise questions over admission fees given the aforementioned perceived reduction in quality of learning experience as well as a reduction in services typically included in student fees, e.g. transportation costs, access to library, facilities, etc.
Institutional Capacity	Different institutions have diverged in terms of readiness to fully adopt online learning due to issues with infrastructure, system, and staff capabilities.

Disparity in Infrastructure Access	Online learning has brought to light disparities in internet access among students across nations. In Malaysia alone disparities can be seen in different states with Sabah and Labuan having the lowest broadband penetration rates at 76.4% and 72% respectively.[14]
Complications with Admissions	With social distancing measures in place and travel restrictions, admissions processes for international students in particular will be even more complicated, in an already complex visa process as identified in this study.
Difficulties with Assessments	HEIs face administrative difficulties with online assessments, particularly for global examinations or central testing systems that have traditionally been conducted in-person. There are also risks associated with cheating, as seen in an incident at the National University of Singapore.[15]

6.19 In Malaysia, public HEIs have given equal emphasis to internationalisation and local development needs by balancing the demands of both domestic and international students. However, private HEIs and IBCs, who are overly reliant on tuition fees, may be irreversibly affected by the pandemic. These institutions were already operating in the red, often relying on new injections of funds from shareholders before the epidemic.[16] But with COVID-19 affecting household income, there are increasing calls for a reduction in tuition fees, particularly with students in public HEIs from B40 households. Students also have to rely on their resources and less on the university facilities for online learning which contribute to demands for lower fees.[17] Already a report in the UK demonstrates that international students are unwilling to spend money on online learning experiences without having the opportunity to be physically present to integrate within the community of scholars and intellectuals. To them, this is what real learning is all about.

6.20 The situation posits critical strategic questions. How will Malaysian HEIs manage the new normal in internationalisation? What kind of flexibility should be given by authorities to promote digital education and blended learning in universities? Can Malaysia offer something unique to other countries in the region? Where should we place and invest our resources to ensure Malaysia's competitive edge? How do we ensure that international higher education continues to be an important contributor to the nation's GDP? These and other pressing questions are vital for HEIs and governments to address in the face of the complex challenges presented by COVID-19. The experiences of the past 18 months have offered opportunities for HEIs and governments to revisit their operating models and national strategies. History teaches us that disruptive innovations become more prevalent during times of crises. Accordingly, the challenges posed by the COVID-19 pandemic can stimulate Malaysia to develop and hasten the adoption of innovative models of international education particularly in curriculum design and delivery and the creative integration of technology into all aspects of internationalisation. Above all, a holistic framework incorporating all segments of government, industry and society is imperative in propelling Malaysia's international higher education aspirations in a post-pandemic world.

Conclusion

6.21 International higher education has not escaped from the devastation of the COVID-19 pandemic. Despite this disruption, the demand for international education, and the benefits

it offers will continue to grow. Meeting this demand in the face of these challenges will require new approaches and new operating models. This study has submitted a total of 12 key takeaways to address the deficiencies identified in the 6 policy areas examined, namely, governance and autonomy; student mobility; staff mobility; academic programmes; research and development; and social integration and community engagement. These recommendations are not made redundant because of COVID-19. On the contrary, they assume even greater urgency given the debilitating impact of the pandemic on the finances of governments and HEIs. Given commitment and conviction, we are confident that Malaysia, through the effective implementation of the recommendations of this report, can become a leading player in the internationalisation of higher education.

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APPENDICES

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Appendix A: Terms of Reference (ToRs) of the Study

The Consultant is expected to address the following:

1. Analyse the achievements of existing policies and implemented initiatives of internationalisation of higher education;
2. Analyse the current scenario of internationalisation of higher education agenda in Malaysia;
3. Benchmark Malaysia's implementation of policies on internationalisation higher education with selected countries;
4. Critical analysis of the effectiveness of existing internationalisation of higher education policies;
5. Evaluate current policies to enhance Malaysia's position as an internationally-favoured education destination;
6. Identify issues, challenges and institutional gaps for internationalisation of higher education;
7. Enhance the involvement and collaboration of various agencies to open up new markets to make Malaysia more competitive;
8. To detail the improvement and direction of internationalisation of higher education in Malaysia;
9. To include all stakeholders including government, private sector, industry, professional bodies, alumni, non-governmental organisations and related agencies as well as the public;
10. The importance of increasing the visibility of local experts at the international level to increase the ability of local HEIs to attract international students;
11. The importance of enhancing local HEIs' collaboration with universities overseas to allow graduates to receive academic and professional certification as one of the strategies to attract foreign students to study in Malaysia;
12. Strategy to increase the number of international students in IPT;
13. Accord specific focus to the student market of the ASEAN countries and also the setting up of universities from ASEAN in Malaysia to enhance international students intake;
14. Malaysia's potential as a host for international bodies conducting training and research in strategic areas;
15. The ability of a basic educational institution to achieve international standards through the benchmarking process or any related processes.

Appendix B: Composition of Study Team

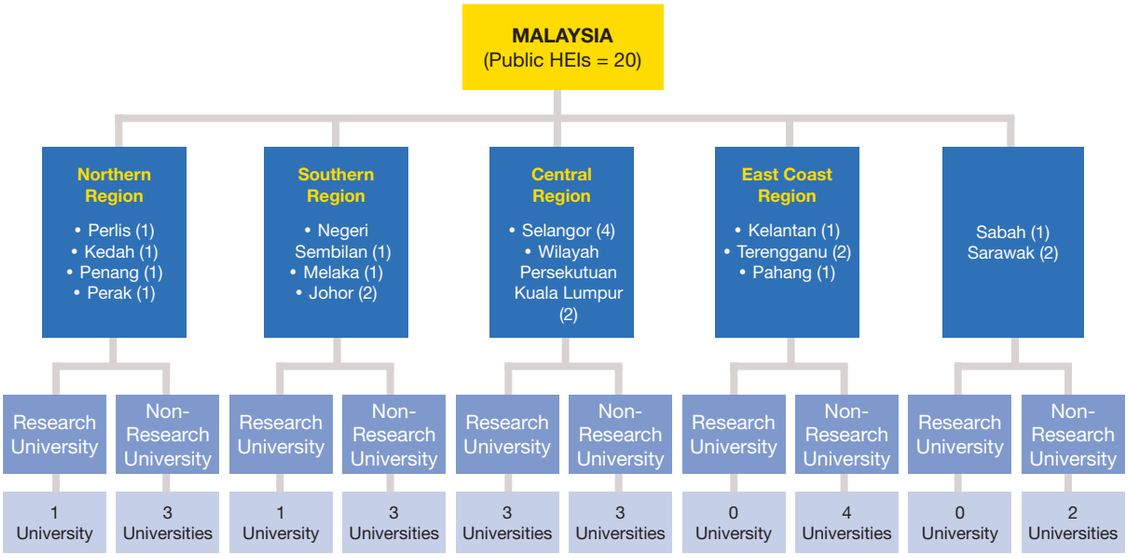
Table A1 The Study Team

Name	Position	Organisation
Professor Dr. Shakila Yacob	Lead Consultant	INPUMA, University of Malaya
Professor Dr. Chan Nee Nee	Consultant	Quest International University Perak
Dr. K. Thiruchelvam	Consultant	Freelance Consultant
Mr. Danial Rahman	Consultant	Sunway Education Group
Dr. Ooi Pei Boon	Consultant	Sunway University
Ms. Nadya Subramaniam	Project Secretariat	The Asia Foundation
Mr. Wilson Wong	Project Executive	Freelance Consultant
Dr. Junaidah Binti Yusof	Data Scientist	Quest International University Perak
Ms. Chan Wei Wei	Brand Advisor	Freelance Consultant
Mr. Satya Venugopal	Economic Analyst	Freelance Consultant
Ms. Nurul Shafiqah Hazelin	Geographic Information System Analyst	UiTM/UM

Appendix C1: Public HEIs Invited to Participate in the Study

Geographical Distribution of Research and Non-Research Public HEIs in Malaysia

Figure A1 Public HEIs by Region



List of all Public HEIs in Malaysia: http://jpt.mohe.gov.my/portal/ipta/institusi-pendidikan-tinggi-awam/direktori-universiti-awam

List of Malaysian Research and Non-Research Public HEIs: https://semakanonline.com/senarai-universiti-awam-ipta/

List of Public HEIs Invited to Participate

Table A2 Public HEIs Invited to Participate

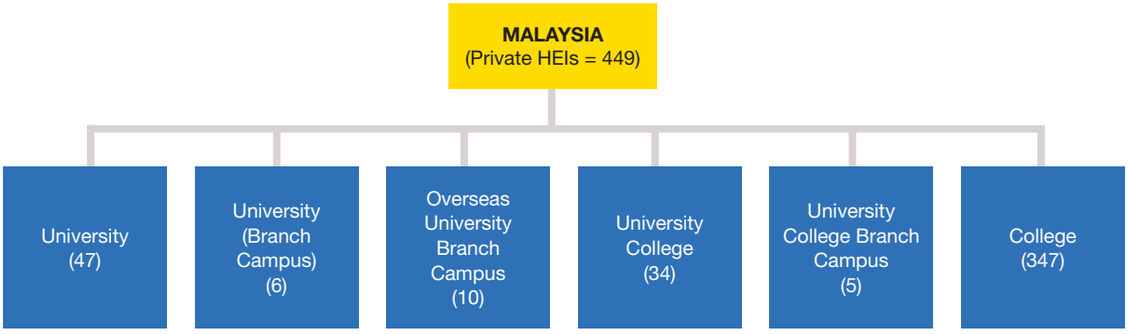
	Public HEIs	State
1	Universiti Malaya	Wilayah Persekutuan Kuala Lumpur
2	Universiti Sains Malaysia (USM) (Minden)	Penang
3	Universiti Sains Malaysia (USM) (Nibong Tebal)	Penang
4	Universiti Sains Malaysia (USM) (Kampus Kesihatan) (Kubang Kerian)	Kelantan
5	Universiti Kebangsaan Malaysia (UKM) (Bangi)	Selangor
6	Universiti Kebangsaan Malaysia (UKM) (Cheras)	Wilayah Persekutuan Kuala Lumpur
7	Universiti Kebangsaan Malaysia (UKM) (KL)	Wilayah Persekutuan Kuala Lumpur
8	Universiti Putra Malaysia (UPM)	Selangor
9	Universiti Teknologi Malaysia (UTM)	Johor
10	Universiti Islam Antarabangsa Malaysia (IIUM) (Gambang)	Pahang
11	Universiti Islam Antarabangsa Malaysia (IIUM) (Bandar Indera Mahkota)	Pahang
12	Universiti Islam Antarabangsa Malaysia (IIUM) (Tengku Ampuan Afzan Hospital)	Pahang
13	Universiti Islam Antarabangsa Malaysia (IIUM) (Persiaran Duta)	Wilayah Persekutuan Kuala Lumpur
14	Universiti Islam Antarabangsa Malaysia (IIUM) (Jalan Damansara)	Wilayah Persekutuan Kuala Lumpur
15	Universiti Islam Antarabangsa Malaysia (IIUM) (Bandar Universiti Pagoh)	Johor
16	Universiti Utara Malaysia (UUM)	Kedah
17	Universiti Malaysia Sarawak (UNIMAS) (Kuching)	Sarawak
18	Universiti Malaysia Sabah (UMS) (Kota Kinabalu)	Sabah
19	Universiti Pendidikan Sultan Idris (UPSI)	Perak
20	Universiti Sains Islam Malaysia (USIM)	Negeri Sembilan
21	Universiti Teknologi MARA (UiTM) (Shah Alam)	Selangor
22	Universiti Teknologi MARA (UiTM Kampus Seremban 3)	Negeri Sembilan
23	Universiti Teknologi MARA (UiTM) (Perlis)	Perlis
24	Universiti Teknologi MARA (UiTM) (Puncak Alam)	Selangor
25	Universiti Teknologi MARA (UiTM) (UiTM Cawangan Johor)	Johor
26	Universiti Teknologi MARA (UiTM) Cawangan Perak Kampus Seri Iskandar	Perak

	Public HEIs	State
27	Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang	Penang
28	Universiti Teknologi MARA (UiTM) Sarawak	Sarawak
29	Universiti Malaysia Terengganu (UMT)	Terengganu
30	Universiti Tun Hussein Onn Malaysia (UTHM)	Johor
31	Universiti Teknikal Malaysia Melaka (UTeM)	Melaka
32	Universiti Malaysia Pahang (UMP)	Pahang
33	Universiti Malaysia Perlis (UniMAP)	Perlis
34	Universiti Sultan Zainal Abidin (UniSZA)	Terengganu
35	Universiti Malaysia Kelantan (UMK)	Kelantan
36	Universiti Pertahanan Nasional Malaysia (UPNM)	Wilayah Persekutuan Kuala Lumpur

Appendix C2: Private HEIs Invited to Participate in the Study

Number of Private HEIs by HEI Status

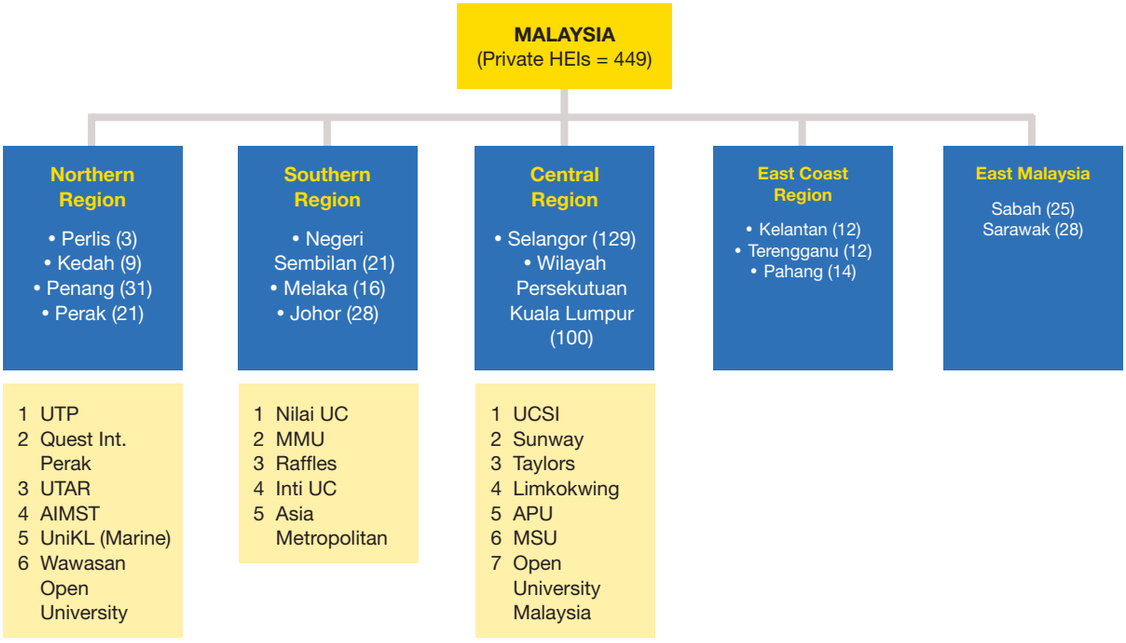
Figure A2 Private HEIs by HEI Status



Sources:
List of Private HEIs: http://www2.mqa.gov.my/mqr/akrbyipts.cfm?StartRow=58
https://drive.google.com/drive/folders/1Jfr5dvczs58tEP3SsZck-nmC59ON-qnZ
Private HEIs' statistics: https://drive.google.com/drive/folders/18w0PWQnD7DV2W1Dspio3zHm5Up5-AC3l

Geographical Distribution of Private HEIs in Malaysia

Figure A3 Private HEIs by Region



List of Private HEIs Invited to Participate, by HEI Status

Table A3 Private HEI Universities Invited to Participate

	Universities	State
1	Al-Madinah International University (MEDIU)	Selangor
2	Asia e University (AeU)	Selangor
3	Asia Pacific University of Technology & Innovation (Asia Pacific UTI)	Wilayah Persekutuan Kuala Lumpur
4	Asia School Of Business (ASB)	Wilayah Persekutuan Kuala Lumpur
5	Binary University of Management & Entrepreneurship (BUME)	Selangor
6	City University	Selangor
7	City University Kampus Johor Bharu (City University Johor Bharu Campus)	Johor
8	DRB-HICOM University Of Automotive Malaysia	Pahang
9	Manipal GlobalNxt University	Wilayah Persekutuan Kuala Lumpur
10	International Centre for Education in Islamic Finance (INCEIF)	Wilayah Persekutuan Kuala Lumpur
11	International Medical University (IMU)	Wilayah Persekutuan Kuala Lumpur

	Universities	State
12	International University of Malaya Wales (IUMW)	Wilayah Persekutuan Kuala Lumpur
13	Malaysia University of Science and Technology (MUST)	Selangor
14	Malaysia Institute For Supply Chain Innovation (MISI)	Selangor
15	Management and Science University (MSU)	Selangor
16	Manipal International University	Negeri Sembilan
17	Meritus University	Wilayah Persekutuan Kuala Lumpur
18	Perdana University	Selangor
19	Putra Business School (PBS)	Selangor
20	Quest International University Perak	Perak
21	Raffles University (RU)	Johor
22	Sunway University	Selangor
23	UNITAR International University	Selangor
24	Universiti AIMST (AIMST University)	Kedah
25	Universiti Antarabangsa Albukhary (Albukhary International University)	Kedah
26	Universiti Antarabangsa INTI (INTI International University)	Negeri Sembilan
27	Universiti HELP	Wilayah Persekutuan Kuala Lumpur
28	Universiti Infrastruktur Kuala Lumpur	Selangor
29	Universiti Islam Malaysia	Selangor
30	Universiti Kuala Lumpur (UniKL)	Wilayah Persekutuan Kuala Lumpur
31	Universiti Kuala Lumpur Kampus Cawangan Malaysian France Institute (UniKL – MFI)	Selangor
32	Universiti Kuala Lumpur Kampus Cawangan Malaysian Spanish Institute (UniKL – MSI)	Kedah
33	Universiti Kuala Lumpur Kampus Cawangan Malaysian Institute of Chemical & Bio-Engineering Technology (UniKL – MICET)	Melaka
34	Universiti Kuala Lumpur Kampus Cawangan Malaysian Institute of Aviation Technology (UniKL – MIAT)	Selangor
35	Universiti Kuala Lumpur Kampus Cawangan British Malaysia Institute (UniKL – BMI)	Selangor
36	Universiti Kuala Lumpur Kampus Cawangan Malaysian Institute of Marine Engineering Technology (UniKL – MIMET)	Perak
37	Universiti Kuala Lumpur Kampus Cawangan Royal College of Medicine Perak (UniKL – RCMP)	Perak
38	Universiti Kuala Lumpur Kampus Cawangan Institute of Medical Science (UniKL – MESTEC)	Selangor

	Universities	State
39	Universiti Kuala Lumpur Kampus Cawangan Malaysia Italy Design Institute (UniKL – MIDI)	Wilayah Persekutuan Kuala Lumpur
40	Universiti Kuala Lumpur Kampus Cawangan Malaysian Institute of Industrial Technology (UniKL MITEC)	Johor
41	Universiti MAHSA (MAHSA University)	Selangor
42	Universiti Metropolitan Asia (Asia Metropolitan University)	Selangor
43	Universiti Metropolitan Asia Kampus Cawangan Johor Bahru (Asia Metropolitan University, Johor Bahru Branch Campus	Johor
44	Universiti Multimedia, Kampus Cyberjaya (Multimedia University, Cyberjaya Campus)	Selangor
45	Universiti Multimedia Kampus Melaka (Multimedia University, Melaka Campus)	Melaka
46	Multimedia University (MMU), Kampus Johor	Johor
47	Universiti Nilai (Nilai University)	Negeri Sembilan
48	Universiti SEGi (SEGi University)	Selangor
49	Universiti Selangor (UNISEL) Kampus Bestari Jaya	Selangor
50	Universiti Selangor (UNISEL) Kampus Shah Alam	Selangor
51	Universiti Sultan Azlan Shah (USAS)	Perak
52	Universiti Taylor's (Taylor's University)	Selangor
53	Universiti Teknologi Kreatif Limkokwing (LUCT)	Selangor
54	Universiti Teknologi Kreatif Limkokwing Kampus Cawangan Melaka (Creativity In Tourism)	Melaka
55	Universiti Teknologi Petronas (UTP)	Perak
56	Universiti Tenaga Nasional Kampus Putrajaya (UNITEN) Kampus Putrajaya)	Selangor
57	Universiti Tenaga Nasional (UNITEN), Kampus Sultan Haji Ahmad Shah	Pahang
58	Open University Malaysia (OUM)	Wilayah Persekutuan Kuala Lumpur
59	Universiti Terbuka Wawasan (WOU)	Penang
60	Universiti Tun Abdul Razak (UNIRAZAK)	Wilayah Persekutuan Kuala Lumpur
61	Universiti Tunku Abdul Rahman (UTAR)	Perak
62	Universiti Tunku Abdul Rahman (UTAR), Kampus Cawangan Sungai Long	Selangor
63	Universiti UCSI, UCSI University	Wilayah Persekutuan Kuala Lumpur
64	Universiti UCSI (UCSI University), Kampus Terengganu	Terengganu
65	Universiti UCSI, Kampus Sarawak (UCSI University, Sarawak Campus)	Sarawak

	Universities	State
66	University Malaysia of Computer Science and Engineering (Universiti Malaysia Sains Komputer dan Kejuruteraan)	Selangor
67	Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah (UniSHAMS)	Kedah

Table A4 Private HEI University Colleges Invited to Participate

	University College	State
1	First City University College	Selangor
2	Kolej Universiti KDU (KDU University College)	Selangor
3	Kolej Universiti Agrosains Malaysia	Melaka
4	Kolej Universiti Bestari (University College Bestari)	Terengganu
5	Kolej Universiti Borneo Utara (KUBU) North Borneo University College (NBUC)	Sabah
6	Kolej Universiti Fairview	Selangor
7	Kolej Universiti Geomatika	Wilayah Persekutuan Kuala Lumpur
8	Kolej Universiti BERJAYA (BERJAYA University College)	Wilayah Persekutuan Kuala Lumpur
9	Kolej Universiti Islam Antarabangsa Selangor (KUIS)	Selangor
10	Kolej Universiti Islam Melaka (KUIM)	Melaka
11	Kolej Universiti Islam Pahang Sultan Ahmad Shah (KUIPSAS)	Pahang
12	Kolej Universiti Islam Perlis	Perlis
13	Kolej Universiti Islam Sains dan Teknologi (KUIST) (Islamic University College of Science & Technology (IUCST))	Kelantan
14	Kolej Universiti KDU Penang (KDU Penang University College)	Penang
15	Kolej Universiti KPJ Healthcare (KPJ Healthcare University College)	Negeri Sembilan
16	Kolej Universiti Lincoln	Selangor
17	Kolej Universiti Linton (Linton University College)	Negeri Sembilan
18	Kolej Universiti New Era	Selangor
19	Kolej Universiti Poly-Tech MARA Kuala Lumpur (KUPTM)	Wilayah Persekutuan Kuala Lumpur
20	Kolej Universiti Sains Perubatan Cyberjaya (CUCMS)	Selangor
21	Kolej Universiti TATI	Terengganu
22	Kolej Universiti Teknologi Antarabangsa Twintech (TWINTECH), Kampus Kelantan	Kelantan
23	Kolej Universiti Teknologi Antarabangsa Twintech, Kampus Sri Damansara	Wilayah Persekutuan Kuala Lumpur
24	Kolej Universiti Teknologi Sarawak (University College of Technology Sarawak)	Sarawak

	University College	State
25	Kolej Universiti Tunku Abdul Rahman	Wilayah Persekutuan Kuala Lumpur
26	Kolej Universiti Tunku Abdul Rahman Cawangan Sabah	Sabah
27	Kolej Universiti Tunku Abdul Rahman Kampus Cawangan Johor	Johor
28	Kolej Universiti Tunku Abdul Rahman Kampus Cawangan Perak	Perak
29	Kolej Universiti Tunku Abdul Rahman Kampus Cawangan Pulau Pinang	Penang
30	Kolej Universiti Widad (Widad University College)	Pahang
31	Kolej Universiti Yayasan Sabah (KUYS) (University College Sabah Foundation (UCSF))	Sabah
32	Kolej Universiti Selatan (Southern University College)	Johor
33	Kuala Lumpur Metropolitan University College (KLMUC)	Wilayah Persekutuan Kuala Lumpur
34	Kolej Universiti Veritas (Veritas University College)	Penang
35	Kolej Universiti Saito	Selangor
36	Kolej Universiti Komunikasi Han Chiang (Han Chiang University College Of Communication)	Penang
37	Kolej Universiti Genovasi (Genovasi University College)	Selangor
38	Kolej Universiti Antarabangsa PICOMS (PICOMS International University College (PIUC)	Wilayah Persekutuan Kuala Lumpur
39	Kolej Universiti Yayasan Pahang (University College of Yayasan Pahang)	Pahang

Table A5 Private HEI International Branch Campuses Invited to Participate

	Overseas University Branch Campus	State
1	Curtin University, Malaysia	Sarawak
2	Heriot-Watt University Malaysia (HWUM)	Wilayah Persekutuan Kuala Lumpur
3	Monash University Malaysia	Selangor
4	Newcastle University Medicine Malaysia (NUMed)	Johor
5	Swinburne University of Technology	Sarawak
6	University of Nottingham Malaysia (UNM)	Selangor
7	Universiti Xiamen Malaysia (Xiamen University Malaysia)	Selangor
8	University of Reading Malaysia	Johor
9	University of Southampton Malaysia Campus (USMC)	Johor
10	Royal College of Surgeons In Ireland And University College Dublin Malaysia Campus	Penang

Table A6 Private HEI Colleges Invited to Participate

	College	State
1	Institut Akauntan KTC (Cawangan Kluang)	Johor
2	Institut Akauntan KTC (Cawangan Muar)	Johor
3	Institut Akauntan KTC Cawangan Johor Bahru	Johor
4	Institut Akauntan KTC (Cawangan Batu Pahat)	Johor
5	Institut Citipro	Johor
6	Kolej Omega	Johor
7	Institut Sains & Teknologi Darul Takzim (INSTEDT)	Johor
8	Institut Teknologi A.N.S Johor Bahru	Johor
9	Kolej Aman Batu Pahat	Johor
10	Kolej Antarabangsa Kejururawatan dan Sains Kesihatan KPJ (Cawangan JB) (KPJ International College of Nursing and Health Sciences, Johor Bahru Branch)	Johor
11	Kolej Hospitaliti dan Pengurusan Malaysia (Malaysian College of Hospitality and Management	Johor
12	Kolej Cosmopoint Johor Bharu (Cosmopoint College Johor Bahru)	Johor
13	Kolej International Crescendo	Johor
14	Kolej MDIS Malaysia	Johor
15	Kolej Metropoint	Johor
16	Kolej Olympia Johor Bharu	Johor
17	Kolej Pengajian Islam Johor (MARSAH)	Johor
18	Kolej Poly-Tech Mara	Johor
19	Kolej Reliance Cawangan Johor	Johor
20	Kolej Yayasan Pelajaran Johor	Johor
21	Netherlands Maritime Institute of Technology (NMIT)	Johor
22	Kolej Sunway Cawangan Johor Bahru	Johor
23	Akademi Laut Malaysia Melaka (ALAM)	Melaka
24	Kolej Antarabangsa Dunia Melayu Dunia Islam	Melaka
25	Kolej Antarabangsa Putra (Putra International College)	Melaka
26	Kolej Antarabangsa Yayasan Melaka (International College of Yayasan Melaka)	Melaka
27	Kolej Cosmopoint Melaka (Cosmopoint College Melaka)	Melaka
28	Kolej Kejururawatan Dan Sains Kesihatan Oriental Nilam (Oriental Nilam College Of Nursing And Health Sciences)	Melaka
29	Kolej Newbridge (Newbridge College)	Melaka
30	Kolej Pengurusan dan Sains Melaka	Melaka
31	Kolej Perniagaan KYS (KYS Business School	Melaka
32	Kolej Perubatan Antarabangsa Melaka	Melaka

	College	State
33	Kolej Perubatan Melaka-Manipal	Melaka
34	Kolej Stamford Melaka	Melaka
35	Kolej Antarabangsa Sains dan Teknologi Melaka (Melaka International College of Science & Technology (MICOST))	Melaka
36	Institut Antarabangsa Sains Mantin (International Institute of Science Mantin)	Negeri Sembilan
37	Institut Jati	Negeri Sembilan
38	Institut Pengajian Global	Negeri Sembilan
39	Institut Teknologi Pertama	Negeri Sembilan
40	Kolej Antarabangsa Murni (Murni International College)	Negeri Sembilan
41	Kolej Antarabangsa Timur Barat (East West International College)	Negeri Sembilan
42	Kolej Antarabangsa Unifield (Unifield International College)	Negeri Sembilan
43	Kolej Cosmopoint Seremban (Cosmopoint College Seremban)	Negeri Sembilan
44	Kolej INTI Nilai (INTI College Nilai)	Negeri Sembilan
45	Kolej Koperasi Telekom Malaysia	Negeri Sembilan
46	Kolej MSU Seremban	Negeri Sembilan
47	Kolej Negeri Kampus Chedang (Kolej Negeri Chedang Campus)	Negeri Sembilan
48	Kolej Sri Ayu	Negeri Sembilan
49	Kolej TAFE	Negeri Sembilan
50	Kolej Teknologi Alpha	Negeri Sembilan
51	Kolej UNITI	Negeri Sembilan
52	Akademi City (City Academy)	Selangor
53	Akademi Pertama Rekabentuk dan Komunikasi (The One Academy of Communication Design)	Selangor
54	Akademi Seni & Muzik Yamaha	Selangor
55	Asia College of Exercise and Sport Medicine (ACESM)	Selangor
56	German Malaysian Institute (GMI)	Selangor
57	Institut EU	Selangor
58	Institut Integrasi Utama Avicenna	Selangor
59	Institut I-Systems	Selangor
60	Institut Makanan Malaysia	Selangor
61	Institut Nasional Sains Oftalmik (National Institute of Ophtalmic Sciences)	Selangor
62	Kolej Imperia (Imperia College)	Selangor
63	Institute of Physical Science, Culture & Arts (IPSCA)	Selangor
64	INTEC Education College	Selangor
65	Kolej Peninsula Shah Alam (Peninsula College Shah Alam)	Selangor

	College	State
66	Kolej Alfa	Selangor
67	Kolej Antarabangsa Akademia	Selangor
68	Kolej Antarabangsa Cybernetics	Selangor
69	Kolej Antarabangsa Inovatif	Selangor
70	Kolej Antarabangsa INTI Subang (INTI International College Subang)	Selangor
71	Kolej Antarabangsa Kirkby (Kirkby International College)	Selangor
72	Kolej Antarabangsa Megatech (Megatech International College)	Selangor
73	Kolej Antarabangsa Optima (Optima International College)	Selangor
74	Kolej Antarabangsa Putra Intelek (Putra Intelek International College)	Selangor
75	Kolej Antarabangsa Restu (Restu International College)	Selangor
76	Kolej Antarabangsa Teknologi Spektrum	Selangor
77	Kolej Antarabangsa Westminster	Selangor
78	Kolej ASA	Selangor
79	Kolej Astin (Astin College)	Selangor
80	Kolej Bayu	Selangor
81	Kolej Consist	Selangor
82	Kolej Dar Al-Hikmah	Selangor
83	Kolej Despark	Selangor
84	Kolej Dika (Dika College)	Selangor
85	Kolej DOMA (DOMA College)	Selangor
86	Kolej Epitome (Epitome College)	Selangor
87	Kolej Edufly (EDUFLY COLLEGE)	Selangor
88	Kolej Antarabangsa Excel	Selangor
89	Kolej FTMS	Selangor
90	Kolej Hafiz	Selangor
91	Kolej IACT (Pengiklanan, Komunikasi & Teknologi Antarabangsa) IACT College (International Advertising, Communication and Technology)	Selangor
92	Kolej iCOOP (iCOOP College)	Selangor
93	Kolej i-CTI	Selangor
94	Kolej Islam As-Sofa (Islamic College As-Sofa)	Selangor
95	Kolej KDU (PJ)	Selangor
96	Kolej Kejururawatan Tun Tan Cheng Lock	Selangor
97	Kolej Kesihatan Ramsay Sime Darby (Ramsay Sime Darby Healthcare College	Selangor
98	Kolej Kingsley (Kingsley College)	Selangor

	College	State
99	Kolej Life	Selangor
100	Kolej MASA	Selangor
101	Kolej MCS	Selangor
102	Kolej MSU Ampang (MSU College Ampang)	Selangor
103	Kolej MSU Shah Alam (MSU College Shah Alam)	Selangor
104	Kolej Mutiara	Selangor
105	Kolej Olympia, Cawangan Petaling Jaya	Selangor
106	Kolej Otomotif TOC (The Otomotif College)	Selangor
107	Kolej Pendidikan Perdana (KOPEDA)	Selangor
108	Kolej Penerbangan Admal	Selangor
109	Kolej Pengajian Siswazah SEGi	Selangor
110	Kolej Pengurusan Penerbangan	Selangor
111	Kolej Perdana	Selangor
112	Kolej Perkembangan Awal KanakKanak	Selangor
113	Kolej Perniagaan Bersepadu Malaysia (Malaysian Integrated Business College)	Selangor
114	Kolej Perniagaan SEED (SEED Business College)	Selangor
115	Kolej Perubatan Antarabangsa Subang Jaya, Malaysia (International Medical College Subang Jaya, Malaysia)	Selangor
116	Kolej Point (Point College)	Selangor
117	Kolej Poly-Tech MARA Bangi	Selangor
118	Kolej Portman	Selangor
119	Kolej Profesional dan Pengurusan KLIA	Selangor
120	Kolej Regent (Regent College)	Selangor
121	Kolej SEGi Kota Damansara	Selangor
122	Kolej SEGi Seri Kembangan	Selangor
123	Kolej SEGi Subang Jaya	Selangor
124	Kolej Sunway (Sunway College)	Selangor
125	Kolej Suria	Selangor
126	Kolej TAJ	Selangor
127	Kolej Taylor's Subang Jaya (Taylor's College)	Selangor
128	Kolej Teknologi Asia (Asia College of Technology)	Selangor
129	Kolej Teknologi dan Senireka RENG (RENG College of Technology and Design	Selangor
130	Kolej Teknologi Darulnaim Cawangan Kuala Lumpur	Selangor
131	Kolej Teknologi MEA	Selangor
132	Kolej Teknologi Terain (Tech Terrain College)	Selangor

	College	State
133	Kolej Teknologi Timur PJ	Selangor
134	Kolej Teknologi Timu	Selangor
135	Kolej Terra (Terra College)	Selangor
136	Kolej UCSI (UCSI College)	Selangor
137	Kolej UNITAR (UNITAR College)	Selangor
138	Kolej Vision	Selangor
139	Kolej WIT	Selangor
140	Kolej Yayasan UEM	Selangor
141	Limkokwing Executive Leadership College	Selangor
142	SCM Professional College	Selangor
143	Kolej Teknologi dan Perniagaan NAZA (NAZA College of Technology and Business)	Selangor
144	Les' Copaque Animation Academy	Selangor
145	Kolej Taylor's (Taylor's College)	Selangor
146	Akademi Antarabangsa Malvern (Malvern International Academy)	Wilayah Persekutuan Kuala Lumpur
147	Akademi Kejururawatan Tung Shin	Wilayah Persekutuan Kuala Lumpur
148	Akademi Seni Lukis Dasein (Dasein Academy of Art)	Wilayah Persekutuan Kuala Lumpur
149	Kolej Antarabangsa Yes	Wilayah Persekutuan Kuala Lumpur
150	Clara International Aesthetic College	Wilayah Persekutuan Kuala Lumpur
151	HELP Academy	Wilayah Persekutuan Kuala Lumpur
152	Institut CECE	Wilayah Persekutuan Kuala Lumpur
153	Institut Pengurusan dan Teknologi Antarabangsa (International Institute of Management and Technology)	Wilayah Persekutuan Kuala Lumpur
154	Institut Profesional Axismatics	Wilayah Persekutuan Kuala Lumpur
155	Baitulmal Professional College Kuala Lumpur	Wilayah Persekutuan Kuala Lumpur
156	Institut Seni Lukis Malaysia	Wilayah Persekutuan Kuala Lumpur
157	Institut Teknologi DSH (DSH Institute of Technology)	Wilayah Persekutuan Kuala Lumpur
158	Institut Teknologi Maklumat Asia Pasifik (APIIT)	Wilayah Persekutuan Kuala Lumpur

	College	State
159	Kolej Universal (Universal College)	Wilayah Persekutuan Kuala Lumpur
160	Kolej Adroit	Wilayah Persekutuan Kuala Lumpur
161	Kolej Antarabangsa Cyberlynx	Wilayah Persekutuan Kuala Lumpur
162	Kolej Antarabangsa Elite	Wilayah Persekutuan Kuala Lumpur
163	Kolej Antarabangsa Goon (Goon International College)	Wilayah Persekutuan Kuala Lumpur
164	Kolej Antarabangsa Greencity	Wilayah Persekutuan Kuala Lumpur
165	Mahsa Avenue International College	Wilayah Persekutuan Kuala Lumpur
166	Kolej Antarabangsa Pengurusan Hotel YTL	Wilayah Persekutuan Kuala Lumpur
167	Kolej Antarabangsa Perniagaan dan Pengurusan (Business and Management International College)	Wilayah Persekutuan Kuala Lumpur
168	Kolej Antarabangsa Terbuka (International Open College)	Wilayah Persekutuan Kuala Lumpur
169	Kolej Antarabangsa Travex	Wilayah Persekutuan Kuala Lumpur
170	Kolej Antarabangsa Victoria Victoria International College	Wilayah Persekutuan Kuala Lumpur
171	Kolej Antarabangsa Windfield	Wilayah Persekutuan Kuala Lumpur
172	Kolej Antarabangsa YPC YPC International College	Wilayah Persekutuan Kuala Lumpur
173	Kolej Antrabangsa INTI Kuala Lumpur (INTI International College Kuala Lumpur)	Wilayah Persekutuan Kuala Lumpur
174	Kolej Ausffield (Ausffield College)	Wilayah Persekutuan Kuala Lumpur
175	Kolej Kings (Kings College)	Wilayah Persekutuan Kuala Lumpur
176	Kolej Bersepadu Nasional (National Integrated College)	Wilayah Persekutuan Kuala Lumpur
177	Kolej Binary (City Campus)	Wilayah Persekutuan Kuala Lumpur
178	Kolej Brickfields Asia (Brickfields Asia College BAC)	Wilayah Persekutuan Kuala Lumpur
179	Kolej Edu Oasis	Wilayah Persekutuan Kuala Lumpur

	College	State
180	Kolej Erican	Wilayah Persekutuan Kuala Lumpur
181	Kolej Gemilang	Wilayah Persekutuan Kuala Lumpur
182	Kolej ICAN (ICAN College)	Wilayah Persekutuan Kuala Lumpur
183	Kolej IJN	Wilayah Persekutuan Kuala Lumpur
184	Kolej Islam Antarabangsa	Wilayah Persekutuan Kuala Lumpur
185	Kolej Kemahiran Minda Isbauk (Isbauk Thinking Skills College)	Wilayah Persekutuan Kuala Lumpur
186	Kolej Oneworld Hanxin (Oneworld Hanxin College)	Wilayah Persekutuan Kuala Lumpur
187	Kolej Mahsa	Wilayah Persekutuan Kuala Lumpur
188	Kolej Mantissa	Wilayah Persekutuan Kuala Lumpur
189	Kolej Mentari (Mentari College)	Wilayah Persekutuan Kuala Lumpur
190	Kolej Methodist Kuala Lumpur	Wilayah Persekutuan Kuala Lumpur
191	Kolej Mont Royale (Mont Royale College)	Wilayah Persekutuan Kuala Lumpur
192	Kolej IHM	Wilayah Persekutuan Kuala Lumpur
193	Kolej Muzik Antarabangsa (ICOM)	Wilayah Persekutuan Kuala Lumpur
194	Kolej Nirwana	Wilayah Persekutuan Kuala Lumpur
195	Kolej Olympia Kuala Lumpur	Wilayah Persekutuan Kuala Lumpur
196	Kolej Optoprene	Wilayah Persekutuan Kuala Lumpur
197	Advance Tertiary College (ATC)	Wilayah Persekutuan Kuala Lumpur
198	Kolej Pengajian Tinggi Raffles (Raffles College of Higher Education)	Wilayah Persekutuan Kuala Lumpur
199	Kolej Pintar	Wilayah Persekutuan Kuala Lumpur
200	Kolej Premier (Premier College)	Wilayah Persekutuan Kuala Lumpur

	College	State
201	Kolej Presiden	Wilayah Persekutuan Kuala Lumpur
202	Kolej MSU Sentral (MSU College Sentral)	Wilayah Persekutuan Kuala Lumpur
203	Kolej Queen (Queens College)	Wilayah Persekutuan Kuala Lumpur
204	Kolej LITHAN	Wilayah Persekutuan Kuala Lumpur
205	Kolej Sains dan Teknologi Seni Kreatif (Creative Art Science and Technology College)	Wilayah Persekutuan Kuala Lumpur
206	Kolej Sains Geospatial dan Teknologi (Geospatial Science and Technology College	Wilayah Persekutuan Kuala Lumpur
207	Kolej SCICOM – Pengurusan Perkhidmatan Global (SCICOM College of Global Service Management) (SCIGSM)	Wilayah Persekutuan Kuala Lumpur
208	Kolej SEGi Kuala Lumpur (SEGi College Kuala Lumpur)	Wilayah Persekutuan Kuala Lumpur
209	Kolej Seni dan Teknologi HELP (HELP College of Arts and Technology)	Wilayah Persekutuan Kuala Lumpur
210	Kolej Seni Kreatif Snips (Snips College of Creative Arts)	Wilayah Persekutuan Kuala Lumpur
211	Kolej Seri Stamford (Seri Stamford College)	Wilayah Persekutuan Kuala Lumpur
212	Kolej Space	Wilayah Persekutuan Kuala Lumpur
213	Kolej Sri	Wilayah Persekutuan Kuala Lumpur
214	Kolej Newton	Wilayah Persekutuan Kuala Lumpur
215	Kolej Teknologi Antarabangsa Cybernetics	Wilayah Persekutuan Kuala Lumpur
216	Kolej TMC	Wilayah Persekutuan Kuala Lumpur
217	Kolej Unikop	Wilayah Persekutuan Kuala Lumpur
218	Kolej WIM (WIM College)	Wilayah Persekutuan Kuala Lumpur
219	Kolej Yayasan Melaka Cawangan Kuala Lumpur (College Of Yayasan Melaka Kuala Lumpur Branch)	Wilayah Persekutuan Kuala Lumpur
220	Ocean Institute of Audio Technology	Wilayah Persekutuan Kuala Lumpur
221	Reliance College	Wilayah Persekutuan Kuala Lumpur

	College	State
222	Kolej SMART (Smart College)	Wilayah Persekutuan Kuala Lumpur
223	Kolej Jeneva (Jeneva College)	Wilayah Persekutuan Kuala Lumpur
224	Kolej IEWM	Wilayah Persekutuan Kuala Lumpur
225	Kolej Antarabangsa KOMPAS	Perak
226	Kolej Antarabangsa TAJ (TAJ International College)	Perak
227	Kolej Cosmopoint Ipoh (Cosmopoint College Ipoh)	Perak
228	Kolej Felcra (Felcra College)	Perak
229	Kolej Keris (Keris College)	Perak
230	Kolej Lake View (Lake View College)	Perak
231	Kolej Maxwell	Perak
232	Kolej Menara Jaya	Perak
233	Kolej Olympia Cawangan Ipoh	Perak
234	Kolej Pengurusan dan Sains Taiping	Perak
235	Kolej Perkembangan Awal KanakKanak Bukit Merah	Perak
236	Kolej PIA (PIA College)	Perak
237	Kolej Poly-Tech Mara Ipoh	Perak
238	Kolej Sunway Ipoh (Sunway College Ipoh)	Perak
239	Kolej Teknologi Perak (Perak College of Technology)	Perak
240	Sekolah Kejururawatan Hospital Fatimah	Perak
241	Institut Teknologi ANS	Kedah
242	Kolej Cosmopoint Sungai Petani (Cosmopoint College Sungai Petani)	Kedah
243	Kolej Meritus (Meritus College)	Kedah
244	Kolej Poly-Tech Mara Alor Setar	Kedah
245	Kolej MSU Sg Petani	Kedah
246	Kolej SC (SC College)	Kedah
247	Institut Teknologi Dan Pengurusan Lebuh Victoria	Penang
248	Kemayan AdvanceTertiary College (Cawangan Pulau Pinang)	Penang
249	Kolej Antarabangsa Excelpolitan	Penang
250	Kolej Antarabangsa Kejururawatan dan Sains Kesihatan KPJ Cawangan Pulau Pinang	Penang
251	Kolej Antarabangsa Stradford (Stradford International College)	Penang
252	Kolej Atlas City (Atlas City College)	Penang
253	Kolej Cosmopoint Pulau Pinang	Penang

	College	State
254	Kolej Disted	Penang
255	Kolej Equator (Equator College)	Penang
256	Kolej Integrasi Perkembangan Kemahiran (IPK)	Penang
257	Kolej INTI Antarabangsa Pulau Pinang (INTI International College Penang)	Penang
258	Kolej Islam Teknologi Antarabangsa (KITAB)	Penang
259	Kolej Peninsula Georgetown (Peninsula College Georgetown)	Penang
260	Kolej Kejururawatan dan Sains Kesihatan Adventist (Adventist College of Nursing and Health Sciences)	Penang
261	Kolej Kejururawatan Lam Wah Ee	Penang
262	Kolej MSU Penang (MSU College Penang)	Penang
263	Kolej Olympia Cawangan Pulau Pinang	Penang
264	Kolej Pergigian Antarabangsa Pulau Pinang	Penang
265	Kolej Presiden Pulau Pinang	Penang
266	Kolej Reliance Caw. Pulau Pinang	Penang
267	Kolej SEGi Pulau Pinang	Penang
268	Kolej Sentral Pulau Pinang (Sentral College Penang)	Penang
269	Kolej Teknologi Pulau	Penang
270	Pusat Pembangunan Kemahiran Pulau Pinang (PSDC)	Penang
271	The One Academy Penang	Penang
272	Institut Pengajian Tinggi Islam Perlis (IPTIP)	Perlis
273	Kolej Antarabangsa Teknologi dan Profesional (International College of Technology & Professional)	Perlis
274	Kolej Cosmopoint Kuantan (Cosmopoint College Kuantan)	Pahang
275	Kolej Imperia Hospitaliti dan Pelancongan (Imperia College of Hospitality and Tourism)	Pahang
276	Kolej Pacific Kuantan	Pahang
277	Kolej Poly-Tech MARA Kuantan	Pahang
278	Kolej PSDC	Pahang
279	Kolej Sentral	Pahang
280	Kolej Widad (Widad College)	Pahang
281	Kolej Yayasan Pahang (Indera Mahkota)	Pahang
282	Kolej Risda Pahang	Pahang
283	Institut Teknologi Petroleum Petronas (INSTEP)	Terengganu
284	Kolej Al-Quran Terengganu	Terengganu
285	Kolej Ketengah	Terengganu
286	Kolej Cosmopoint Kuala Terengganu	Terengganu

	College	State
287	Kolej Teknologi Dan Inovasi KRIM	Terengganu
288	Kolej TESDEC	Terengganu
289	Kolej MSU Terengganu	Terengganu
290	RANACO Education and Training Institute (RETI)	Terengganu
291	Kolej Yayasan Islam Terengganu	Terengganu
292	Institut Teknologi A.N.S Kota Bharu	Kelantan
293	Kolej Asia Metropolitan Kota Bharu (Asia Metropolitan College Kota Bharu)	Kelantan
294	Kolej Cosmopoint Kota Bharu (Cosmopoint College Kota Bharu)	Kelantan
295	Kolej Islam Antarabangsa Sultan Ismail Petra (KIAS)	Kelantan
296	Kolej Islam Sains Dan Teknologi	Kelantan
297	Kolej Uniti Kota Bharu	Kelantan
298	Kolej MSU Kota Bharu (MSU College Kota Bharu)	Kelantan
299	Kolej Poly-Tech Mara KESEDAR	Kelantan
300	Kolej Poly-Tech MARA Kota Bharu	Kelantan
301	Kolej Teknologi Darulnaim	Kelantan
302	AMC College (Kolej AMC)	Sabah
303	Institut Sains dan Pengurusan	Sabah
304	Institut Seni Sabah	Sabah
305	Institut Sinaran	Sabah
306	Kinabalu Commercial College	Sabah
307	Kolej Antarabangsa Almacrest	Sabah
308	Kolej Antarabangsa Sains Kesihatan Aseana	Sabah
309	Kolej Asia Metropolitan Kota Kinabalu (Asia Metropolitan College Kota Kinabalu)	Sabah
310	Kolej ATI	Sabah
311	Kolej Cosmopoint Kota Kinabalu (Cosmopoint College Kota Kinabalu)	Sabah
312	Kolej Eastern	Sabah
313	Kolej Geomatika Cawangan Keningau	Sabah
314	Kolej INTI Sabah	Sabah
315	Kolej I-Systems Kota Kinabalu	Sabah
316	Kolej Jesselton (Jesselton College)	Sabah
317	Kolej Kiara (Kiara College)	Sabah
318	Kolej MAHSA Kampus Sabah	Sabah

	College	State
319	Kolej MSU Sabah (MSU College Sabah)	Sabah
320	Kolej Poly-Tech MARA Cawangan Semporna Sabah	Sabah
321	Kolej SIDMA	Sabah
322	Kolej Teknikal Yayasan Sabah (Sabah Foundation Technical College)	Sabah
323	Kolej Pengurusan Perniagaan Kotaraya (City College of Business Management)	Sabah
324	Akademi Maritim Sarawak	Sarawak
325	Institut Methodist Pilley	Sarawak
326	Institut Teknologi Kreatif Limkokwing Cawangan Sarawak	Sarawak
327	Institut Teknologi Maklumat Nusantara	Sarawak
328	Institut Teknologi RIAM	Sarawak
329	Kolej Antarabangsa Fajar	Sarawak
330	Kolej Antarabangsa FAME (FAME International College)	Sarawak
331	Kolej Antarabangsa Teknologi Lanjutan Sarawak (ICATS) Cawangan Miri	Sarawak
332	Kolej Antarabangsa Teknologi Lanjutan Sarawak (International College Advanced Technology Sarawak)	Sarawak
333	Kolej Asia Metropolitan Kuching (Asia Metropolitan College Kuching)	Sarawak
334	Kolej Cosmopoint Kuching	Sarawak
335	Kolej Eksekutif (Executive College)	Sarawak
336	Kolej IBS	Sarawak
337	Kolej I-Systems Kuching	Sarawak
338	Kolej I-Systems Miri	Sarawak
339	Kolej ITA	Sarawak
340	Kolej Laila Taib	Sarawak
341	Kolej MSU Sarawak (MSU College Sarawak)	Sarawak
342	Kolej SATT	Sarawak
343	Kolej Sedamai	Sarawak
344	Kolej SEGi Sarawak	Sarawak
345	Kolej SIDMA Sarawak (SIDMA College Sarawak)	Sarawak
346	Kolej Sunway Kuching (Sunway College Kuching	Sarawak
347	Kolej Teknologi Sarawak	Sarawak

Appendix D: The 61 HEIs Who Participated in the Study

Table A7 Participating HEIs

No.	HEI Name	International Staff	Local Staff	International Student	Local Student	Alumni
1	USM	1	16	34	207	DID NOT CAPTURE
2	UNIMAP	0	9	0	2	
3	UTP	0	1	0	1	
4	UTM	0	64	69	137	
5	UUM	2	69	102	9	
6	University of Reading Malaysia	4	14	7	101	
7	KDU University and College	4	35	16	78	
8	SEGi University	0	3	17	38	
9	SEGi College	0	0	2	0	
10	Limkokwing University	0	0	27	28	
11	Sunway University	8	13	69	178	
12	Sunway College	2	9	27	28	
13	Alfa College	0	5	80	35	
14	UTEM	1	22	13	49	
15	Quest International University Perak	1	15	9	112	
16	BAC	0	0	0	3	
17	City University	0	1	3	4	
18	HELP University	0	0	1	7	
19	INTI International College	0	0	0	4	
20	MSU	0	1	0	2	
21	Monash University Malaysia	0	2	0	1	
22	Newbridge College	0	0	0	1	
23	OUM	0	0	0	1	
24	Perdana University	0	0	1	1	
25	Politeknik Ungku Omar	0	0	0	2	
26	Raffles University	3	6	3	14	
27	Southern University College	0	0	0	1	
28	TARUC	0	1	0	1	
29	UCSI	0	3	16	27	
30	UIA	1	3	21	3	

No.	HEI Name	International Staff	Local Staff	International Student	Local Student	Alumni
31	UITM	0	1	0	10	
32	UKM	0	2	3	3	
33	UMS	0	1	6	8	
34	UMK	0	0	2	10	
35	UM	1	5	103	6	
36	UNIMAS	0	16	3	10	
37	UNITEN	0	0	1	1	
38	University Nottingham of Malaysia	0	0	0	3	
39	UPM	3	3	18	60	
40	Infrastructure University Kuala Lumpur	0	0	1	0	
41	MMU	0	0	1	0	DID
42	UniRazak	0	0	1	0	
43	UNISZA	0	0	1	0	
44	UTHM	0	0	1	0	NOT
45	UPSI	0	0	56	1	
46	UTAR	0	4	0	5	
47	Wawasan Open University	0	3	0	6	CAPTURE
48	Xiamen University Malaysia	0	5	0	9	
49	UPNM	0	0	0	3	
50	KPM Damansara	0	0	0	2	
51	LUCT College	0	0	0	5	
52	International University of Malaya-Wales	1	8	0	0	
53	Kolej Vokasional	0	1	0	0	
54	Asia Pacific University	0	1	0	0	
55	First City University College	0	1	0	0	
56	Kuala Lumpur Metropolitan University College	0	1	0	0	
57	Newton College	0	1	0	0	
58	Sri College	0	1	0	0	
59	IIUM	1	6	0	0	
60	Swinburne Kuching	0	5	22	15	
61	Curtin University Malaysia	0	1	2	0	
	Total	**33**	**358**	**738**	**1,240**	**69**
					Grand Total	**2,438**

Appendix E: Determining Sample Size from a Given Population

Table A8 Krejcie and Morgan Table

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	217
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	232	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	271	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note: *N* is population size
S is sample size

Table A9 Indicators for the Krejcie and Morgan Table[(i)], Stakeholders they Apply to, and Data Sources

Indicator	Stakeholder and Sources of Data for References
	1.3 million Malaysian youths are pursuing tertiary education[(ii)] International students at HEI: 131,514 as of December 2018[(iii)]
	International staff working in HEI (2018): 4,462[(iv)]
	Malaysian staff working in HEI: 66,637[(v)]

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(i) Krejcie, R.V., and Morgan, D.W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607–610.

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(iii) Data sources:
- (a) 2002 Public HEI data:
  Public Higher Education Institution Data 2002-2007. (2007). Putrajaya: Ministry of Education Malaysia. https://www.MoE.gov.my/en/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2002-2007/2347-data-institusi-pengajian-tinggi-awam-ipta-2002-2007-pdf/file.
- (b) 2002 Private HEI data:
  Private Higher Education Institution Data 2002-2007. (2008). Putrajaya: Ministry of Education Malaysia. https://www.MoE.gov.my/en/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2002-2007/2348-data-institusi-pengajian-tinggi-swasta-ipts-2002-2007-pdf/file.
- (c) 2018 data:
  Higher Education Statistics 2018. (2019). Putrajaya: Ministry of Education Malaysia. https://www.MoE.gov.my/en/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2018-10

(iv) Ministry of Education (MoE), Homepage, 2013–2018.

(v) Ainer, C. D., Subramaniam, C., & Arokiasamy, L. (2018). Determinants of turnover intention in the private universities in Malaysia: A conceptual paper. In SHS Web of Conferences (Vol. 56, p. 03004). EDP Sciences.

Appendix F: Information Sheet Given to Participants Prior to Survey

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA SURVEY: PARTICIPANT INFORMATION SHEET

1 Objective

The purpose of this form is to provide you with information that may affect your decision to participate or not in this research study. Please read the information below and seek for clarification which you may have prior to deciding. This form will be used to record your permission if you decide to take part in this.

2 Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 10–15 minutes to complete. If you have any questions, please contact the following team members.

Note: This project is awarded and commissioned by the Ministry of Education Malaysia to the International Institute of Public Policy and Management (INPUMA), University of Malaya [Ruj: KPT.600-2/1/7 (19)]

Lead consultant

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Dr Ooi Pei Boon, peiboono@sunway.edu.my (Sunway University)
Thank you.

3 How will my privacy and confidentiality be protected if I participate in this research study?

Your privacy and the confidentiality of your data will be protected by the researcher. Your answers will be stored electronically in a password-protected file that will not include any personal information about you. This means that your answers cannot be traced back to any participant.

4 Do I have to participate?

No, your participation in this study is voluntary. This research study may take place during regular work hour and you may decline to participate or to withdraw from participation at any time.

Withdrawal or refusing to participate will not affect your relationship with the school authorities in any way. You can agree to be in the study now and change your mind later without any penalty.

5 What if I do not want to participate?

If you do not want to participate - you will not be included in the study and there will be no penalty. If you initially agree to be in the study, you can change your mind later without any penalty.

Appendix G: Structural Modelling

Predictive Factors that Contributed to Internationalisation Experience Satisfaction (IES): Local and International Students

1.0 Participant Demographics

A total of 1,240 local students and 738 international students took part in this study and their demographics are presented as below:

Table A10 Participant Demographic Information (Local and International Students)

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
Age		Mean: 21.45, SD: 3.80, Min: 18, Max: 60		Mean: 24.65, SD: 6.58, Min: 17, Max: 54	
Gender	Male	424	34.2	455	61.7
	Female	816	65.8	283	38.3
Ethnicity	Malay	417	33.6	NA	NA
	Chinese	582	46.9	NA	NA
	Indian	184	14.8	NA	NA
	Others	57	4.6	NA	NA
Country of Origin	Indonesia	NA	NA	123	NA
	Nigeria	NA	NA	104	NA
	China	NA	NA	56	NA
	Pakistan	NA	NA	53	NA
	Yemen	NA	NA	52	NA
	Bangladesh	NA	NA	46	NA
	Egypt	NA	NA	24	NA
	India	NA	NA	23	NA
	Iraq	NA	NA	17	NA
	Afghanistan	NA	NA	16	NA
	Korea	NA	NA	15	NA
	Sri Lanka	NA	NA	14	NA
	Palestine, Jordan, Somalia, Iran	NA	NA	11	NA
	Maldives, Japan	NA	NA	10	NA
	Tanzania	NA	NA	9	NA
	Philippines, Sudan	NA	NA	8	NA
	Ghana	NA	NA	7	NA
	UK	NA	NA	6	NA

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
Country of Origin	Libya, Canada, Syria, Brunei, Zambia, Vietnam	NA	NA	5	NA
	Saudi, Singapore, Kenya, Kazakhstan, France	NA	NA	4	NA
	USA, Ethiopia, Taiwan, Algeria, Oman, Egypt	NA	NA	3	NA
	Thailand, Myanmar, Seychelles, Bahrain, Denmark, Albania, Uzbekistan, Senegal	NA	NA	2	NA
	Bhutan, Mauritania, Africa, Kashmir, Sweden, Kyrgyzstan, Djibouti, Belgium, Swaziland	NA	NA	1	NA
Continents	Africa	NA	NA	201	27.2
	Asia	NA	NA	509	69.0
	Europe	NA	NA	24	3.3
	North America	NA	NA	4	0.5
	South America	NA	NA	0	0.0
	Oceania	NA	NA	0	0.0
Institution Categorisation	Public HEI	452	42.1	427	57.9
	Private HEI	718	57.9	311	42.1
Institution	Public University	518	41.8	428	58.0
	Private University	558	45.0	201	27.2
	University College	93	7.5	16	2.2
	College	71	5.7	93	12.6
Education Categorisation	Undergraduate	1167	94.1	443	60.0
	Postgraduate	73	5.9	295	40.0
Current Education Level	Foundation/ Matriculation/A-Levels	93	7.5	48	6.5
	Diploma	113	9.1	31	4.2
	Advanced Diploma	0	0	6	0.8
	Bachelor Degree	958	77.3	355	48.1
	Master	41	3.3	176	23.8
	PhD	35	2.8	119	16.1
	Others	0	0	3	0.4

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
How did you know about your institution?	Online/Website	NA	30.12	NA	27.76
	Recommendation from friends, relatives, etc.	NA	32.83	NA	44.85
	Education fair	NA	22.87	NA	9.42
	Recruitment agent	NA	2.99	NA	9.67
	Campaign/promotion carried out by MOE	NA	7.86	NA	2.89
	Others	NA	3.33	NA	5.41
After the end of my studies, I would like to ...	Return to my home country	NA	NA	334	45.3
	Remain in Malaysia	NA	NA	134	18.2
	Move on to another country	NA	NA	232	31.4
	Others	NA	NA	38	5.1

2.0 Instrument

Multi-item scales were used to measure all six policy areas (student mobility; staff mobility; academic programmes; research and development; governance and autonomy; social integration and community engagement) together with internationalisation experience satisfaction (IES).

A 5-point Likert scale (1 = *strongly disagree/strongly satisfied to* 5 = *strongly agree/ strongly dissatisfied*) was used to measure the level of respondents' agreeableness/satisfaction on the statement posed to them. A questionnaire was developed from past studies, especially the 2011 HEI internationalisation Policy and modified to suit the context of the study.

Each of the six policy areas are being measured by general variables, attitude, satisfaction and an open-ended question (**Table A11**).

Table A11 Design of Instrument (Local and International Students)

Policy Area	Local Students					International Students				
	G	A	S	O	Total	G	A	S	O	Total
Student Mobility	5	3	5	1	14	6	3	7	1	17
Staff Mobility	5	3	3	1	12	4	3	3	1	11
Academic Programme	3	3	3	1	10	3	3	3	1	10
Research & Development	3	3	3	1	10	3	3	3	1	10
Governance & Autonomy	3	3	3	1	10	3	3	3	1	10
Social Integration & Community Engagement	4	3	3	1	11	3	3	3	1	10
Total					**67**					**68**

Note: G: General variable; A: Attitude; S: Satisfaction; O: Open-ended question

3.0 Data Analysis

Partial least squares (PLS) analysis was employed by using the SmartPLS 3.0 software (Ringle, Wende & Becker, 2015). The measurement model (validity and reliability of the measures) was first tested (Anderson & Gerbing,1988), followed by an examination of the structural model (testing the hypothesised relationship) (Hair, Hult, Ringle & Sarstedt, 2014; Ramayah, Yeap & Ignatius, 2013). Lastly, to test the significance of the path coefficients and the loadings, a bootstrapping method (resample of 500) was used (Hair et al., 2014).

4.0 Results

4.1 Measurement Model

In this research, a total of seven latent constructs were studied. Six constructs (student mobility, staff mobility, academic programme, research and development, governance and autonomy and social integration and community engagement) were assumed to cause the internationalisation experience satisfaction (IES) indicators to vary and there were tested under second order construct.

Each of the six constructs was designed with two latent dimensions – general variable and attitude (**Table A11**). These factors were also known as the latent dimensions and identified as reflective indicators of their second order of each construct. In a model, PLS requires manifest variables for all latent constructs. Therefore, it is not reliable to include higher order constructs directly in the model. Higher order constructs in PLS are modelled using the two-stage approach involving two stages measurements (Hair et al., 2014).

Only first order constructs were tested in the model at the first stage with their manifest indicators. On the other hand, second order constructs of the model were introduced in the second stage. The latent variable scores computed for first order dimensions in the first stage were used as their manifest variables.

The convergent validity and discriminant validity were used to examine the measurement model. As suggested by Hair et al. (2014) factor loading, average variance extract (AVE) and composite reliability (CR) are to be considered in determining convergent validity. The results showed that all the items loading was higher than 0.5, the AVE were higher than 0.5 and the CR were above 0.6 (**Table A12** and **Table A13**).

Table A12 Measurement Model (Local Students)

First-order Construct	Second-order Construct	Item	Loading	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
IE Satisfaction	Student mobility	Attitude General variable	0.743 0.896	0.678	0.806	–
	Staff mobility	Attitude General variable	0.680 0.921	0.655	0.788	–
	Academic programme	Attitude General variable	0.722 0.928	0.691	0.815	–
	Research & development	Attitude General variable	0.782 0.885	0.697	0.821	–
	Governance & autonomy	Attitude General variable	0.869 0.918	0.799	0.888	–
	Social integration & Community engagement	Attitude General variable	0.912 0.910	0.830	0.788	–
		C9	0.631	0.503	0.924	0.909
		C11	0.684			
		D7	0.626			
		E7	0.715			
		E8	0.709			
		E9	0.738			
		F7	0.772			
		F8	0.730			
		F9	0.719			
		G8	0.768			
		G9	0.714			
		G10	0.688			

Table A13 Measurement Model (International Students)

First-order Construct	Second-order Construct	Item	Loading	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
IE Satisfaction	Student mobility	Attitude General variable	0.905 0.888	0.804	0.891	–
	Staff mobility	Attitude General variable	0.511 0.971	0.602	0.734	–
	Academic programme	Attitude General variable	0.619 0.964	0.656	0.785	–
	Research & development	Attitude General variable	0.933 0.745	0.713	0.831	–
	Governance & autonomy	Attitude General variable	0.956 0.739	0.730	0.785	–
	Social integration & Community engagement	Attitude General variable	0.895 0.856	0.767	0.868	–
		B7	0.678	0.506	0.842	0.939
		B7	0.717			
		B7	0.658			
		B7	0.712			
		C8	0.676			
		C9	0.714			
		C10	0.682			
		D7	0.683			
		E7	0.719			
		E8	0.739			
		E9	0.717			
		F7	0.748			
		F8	0.742			
		F9	0.772			
		G7	0.746			
		G8	0.732			
		G9	0.637			

In assessing discriminant validity (i.e. the extent the items distinguish constructs or examine different concepts), the Fornell and Larcker (1981) criterion has been utilised in comparing the correlations between constructs and the square root of the average variance extracted for that construct. **Table A14** and **Table A15** showed the results of discriminant validity in the study. The measures were found to be discriminant in view that all values in diagonals were more than the corresponding row and column.

For **Table A14**, the square root of the average variance extracted for that construct IES was lower than Research & Development and Social Integration and Community Engagement where there is a high chance where IES is highly associated with the two constructs. Thus, there is a need to reword and further distinct the questions in the future studies.

4.2 Structural Model

To assess the structural model, R^2, beta, t-values via a bootstrapping procedure with a resample of 500, the effect sizes (f^2) as suggested by Hair Jr. et al. (2014) was performed.

Following the Cohen (1988) guideline, the effect size of 0.02, 0.15 and 0.35, respectively, represent small, medium and large effects.

Figure A4 Path Analysis (Local Students)

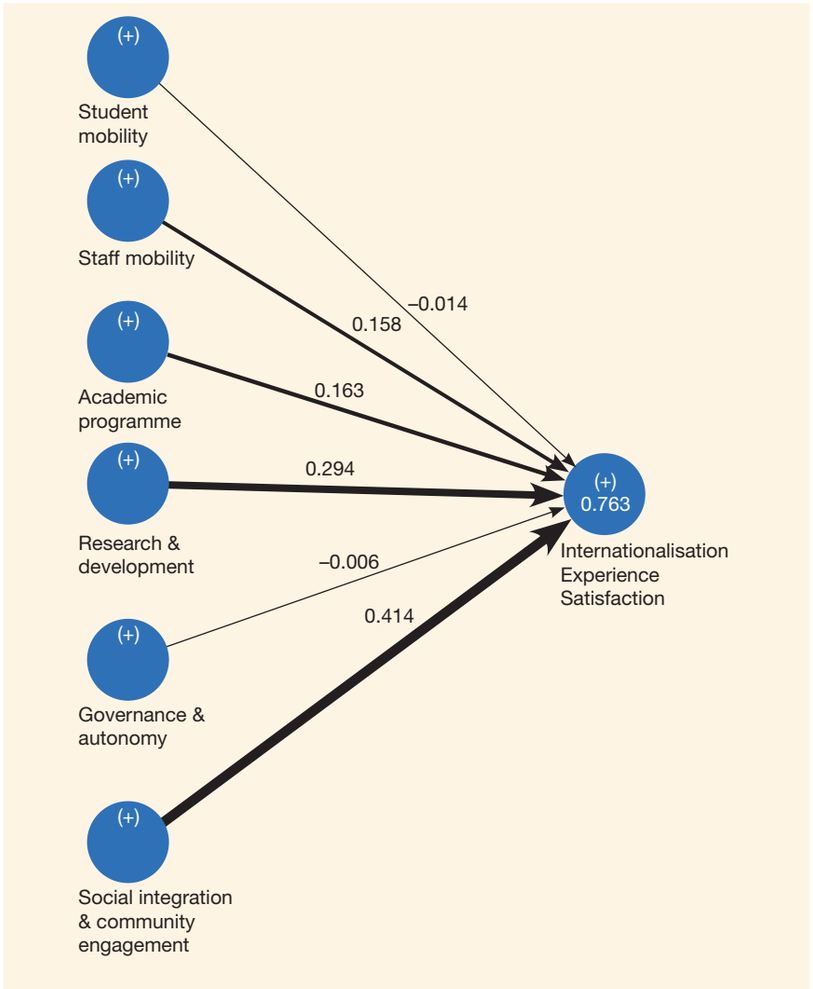

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Table A14 Discriminant Validity (Local Students)

	Academic Programme	Governance & Autonomy	IES	Research & Development	Social Integration & Community Engagement	Staff Mobility	Student Mobility
Academic programme	0.831						
Governance & autonomy	0.612	0.894					
IES	0.699	0.627	0.709				
Research & development	0.623	0.638	0.759	0.835			
Social integration & community engagement	0.630	0.624	0.795	0.668	0.911		
Staff mobility	0.663	0.609	0.681	0.624	0.589	0.809	
Student mobility	0.578	0.583	0.516	0.509	0.479	0.581	0.823

Table A15 Discriminant Validity (International Students)

	Academic Programme	Governance & Autonomy	IES	Research & Development	Social Integration & Community Engagement	Staff Mobility	Student Mobility
Academic programme	0.810						
Governance & autonomy	0.689	0.855					
IES	0.690	0.657	0.711				
Research & development	0.642	0.627	0.692	0.844			
Social integration & community engagement	0.575	0.619	0.702	0.582	0.876		
Staff mobility	0.691	0.688	0.705	0.587	0.558	0.776	
Student mobility	0.588	0.592	0.720	0.528	0.556	0.595	0.897

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Table A16 Structural Model (Local Students)

	Beta	SE	T Value	Decision	R^2	f^2
Academic programme → IES	0.163	0.024	6.686*	Supported	0.763	0.047
Governance & autonomy → IES	–0.006	0.024	0.247	Not supported		0.000
Research & development → IES	0.294	0.026	11.193*	Supported		**0.154++**
Social integration & community engagement → IES	0.414	0.024	17.128*	Supported		**0.320++**
Staff mobility → IES	0.158	0.022	7.080*	Supported		0.046
Student mobility → IES	–0.014	0.019	0.705	Not supported		0.000

*$p < 0.05$; ++ Medium Effect Size

Figure A5 Path Analysis (International Students)

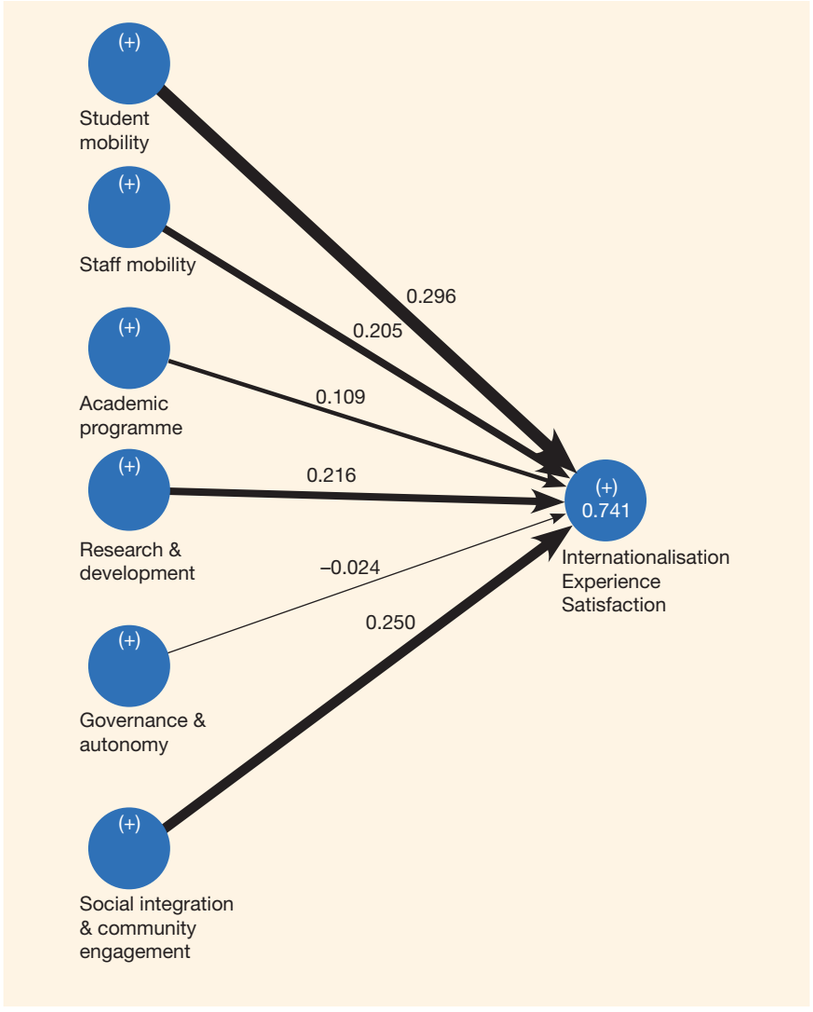

Table A17 Structural Model (International Students)

	Beta	SE	T Value	Decision	R^2	f^2
Academic programme → IES	0.109	0.034	3.182*	Supported	0.741	0.018
Governance & autonomy → IES	–0.024	0.032	0.745	Not supported		0.001
Research & development → IES	0.216	0.033	6.519*	Supported		0.087
Social integration & community engagement → IES	0.250	0.03	8.237*	Supported		**0.124+**
Staff mobility → IES	0.205	0.036	5.761*	Supported		0.066
Student mobility → IES	0.296	0.031	9.64*	Supported		**0.179++**

*$p < 0.05$; + Small Effect Size; ++ Medium Effect Size

4.3 Conclusion

Four out of six predictors contributed to 76.3% of variance in internationalisation experience satisfaction (IES) among local students. Of the four predictors, social integration and community engagement ($f^2 = 0.320$) and research and development ($f^2 = 0.154$), contributed most to the R^2 as evidenced by reported effect size (f^2).

Five out of six predictors contributed to 74.1% of variance in internationalisation experience satisfaction (IES) among international students. Of the five predictors, student mobility ($f^2 = 0.179$) and social integration and community engagement ($f^2 = 0.124$) contributed most to the R^2 as evidenced by reported effect size (f^2).

Predictive Factors that Contributed to Internationalisation Experiences Satisfaction (IES): Local and International Staff

1.0 Participant Demographics

In total, 358 local staff and 33 international staff took part in the study and their demographic is as below:

Table A18 Participant Demographic Information (Local and International Staff)

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
Age		Mean: 37.95, SD: 9.00, Min: 20, Max: 70		Mean: 42.85, SD: 12.57, Min: 22, Max: 69	
Job Tenure		Mean: 10.23, SD: 10.23, Min: 1, Max: 34		Mean: 5.7, SD: 6.21, Min: 1, Max: 29	
Gender	Male	139	38.8	22	66.7
	Female	219	61.2	11	33.3

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
Ethnicity	Malay	247	69.0	NA	NA
	Chinese	58	16.2	NA	NA
	Indian	35	9.8	NA	NA
	Others	18	5.0	NA	NA
Country of Origin	Canada	NA	NA	4	NA
	India	NA	NA	3	NA
	Bangladesh, Philippines, Indonesia, British, Africa, United Kingdom, Australia, Egypt	NA	NA	2 each	NA
	Nigeria, Pakistan, Iran, Sudan, Albania, Serbia, Belgium, French, America, Russian	NA	NA	1 each	NA
Country of Origin	Libya, Canada, Syria, Brunei, Zambia, Vietnam	NA	NA	5	NA
	Saudi, Singapore, Kenya, Kazakhstan, France	NA	NA	4	NA
	USA, Ethiopia, Taiwan, Algeria, Oman, Egypt	NA	NA	3	NA
	Thailand, Myanmar, Seychelles, Bahrain, Denmark, Albania, Uzbekistan, Senegal	NA	NA	2	NA
	Bhutan, Mauritania, Africa, Kashmir, Sweden, Kyrgyzstan, Djibouti, Belgium, Swaziland	NA	NA	1	NA
Continents	Africa	NA	NA	3	9.1
	Asia	NA	NA	15	45.5
	Europe	NA	NA	11	33.3
	North America	NA	NA	1	3.0
	South America	NA	NA	1	3.0
	Oceania	NA	NA	2	6.1
Institution Categorisation	Public HEI	218	60.9	10	30.3
	Private HEI	140	39.1	23	69.7

Demographic Factor	Category	Local Students		International Students	
		Frequency (N = 1,240)	Percentage %	Frequency (N = 738)	Percentage %
Institution	Public University	217	60.6	10	30.3
	Private University	79	22.1	17	51.5
	University	38	10.6	4	12.1
	College	24	6.7	2	6.1
I am ...	Academic Staff	163	45.5	27	81.8
	Administration Staff	195	54.5	6	18.2
Highest Education Level	SPM	45	12.6	NA	NA
	STPM/Diploma	66	18.4	3	9.1
	Bachelor Degree	67	18.7	5	15.1
	Master	94	26.3	10	30.3
	PhD	86	24.0	15	45.5
How did you apply for employment in your current institution?	Self	NA	NA	26	78.8
	Via agent	NA	NA	1	3.0
	Others	NA	NA	6	18.2
After the end of my contract, I would like to ...	Return to my home country	NA	NA	10	30.3
	Remain in Malaysia	NA	NA	18	54.5
	Move on to another country	NA	NA	3	15.2
Programmes your students participated in when studying abroad	Study abroad programme	NA	48.44	NA	61.54
	International internships	NA	27.34	NA	17.94
	Research abroad	NA	16.79	NA	10.26
	Others	NA	7.43	NA	10.26
Programmes or support services available at your institution	Academic support service	NA	35.67	NA	30.67
	Orientation to Malaysia and the local community	NA	28.80	NA	32.00
	Assistance in finding housing	NA	18.06	NA	24.00
	International alumni services	NA	16.87	NA	12.00
	Others	NA	0.60	NA	1.33

2.0 Instrument

Multi-item scales were used to measure all six policy areas (student mobility; staff mobility; academic programmes; research and development; governance and autonomy; social integration and community engagement) together with internationalisation experience satisfaction (IES).

A 5-point Likert scale (1 = *strongly disagree/strongly satisficed to* 5 = *strongly agree/strongly dissatisfied*) was used to measure the level of respondents' agreeableness/satisfaction on the statement posed to them. A questionnaire was developed from past studies, especially the 2011 HEI internationalisation Policy and modified to suit the context of the study.

Each of the six policy areas are being measured by general variables, attitude and satisfaction with an open-ended question (**Table A19**).

Table A19 Design of Instrument (Local and International Staff)

Policy Area	Local Staff					International Staff				
	G	A	S	O	Total	G	A	S	O	Total
Student Mobility	6	3	3	1	13	5	3	3	1	12
Staff Mobility	4	3	3	1	11	6	3	6	1	16
Academic Programme	4	3	3	1	11	4	3	3	1	11
Research & Development	4	3	3	1	11	4	3	3	1	11
Governance & Autonomy	3	3	3	1	10	3	3	3	1	10
Social Integration & Community Engagement	3	3	3	1	10	3	3	3	1	10
Total					**66**					**70**

Note: G: General variable; A: Attitude; S: Satisfaction; O: Open-ended question

3.0 Data Analysis

Partial least squares (PLS) analysis was employed by using the SmartPLS 3.0 software (Ringle, Wende & Becker, 2015). The measurement model (validity and reliability of the measures) was first tested (Anderson & Gerbing,1988), followed by an examination of the structural model (testing the hypothesised relationship) (Hair, Hult, Ringle & Sarstedt, 2014; Ramayah, Yeap & Ignatius, 2013). Lastly, to test the significance of the path coefficients and the loadings, a bootstrapping method (resample of 500) was used (Hair et al., 2014).

4.0 Results

4.1 Measurement Model

In this research, a total of seven latent constructs were studied. Six constructs (student mobility, staff mobility, academic programme, research and development, governance & autonomy and social integration and community engagement) constructs were assumed to cause the internationalisation experience satisfaction (IES) indicators to vary and there were tested under second order construct.

Each of the six constructs was designed with two latent dimensions – general variable and attitude (**Table A19**). These factors were also known as the latent dimensions and identified as reflective indicators of their second order of each construct. In a model, PLS requires manifest variables for all latent constructs. Therefore, it is not reliable to include higher order constructs directly in the model. Higher order constructs in PLS are modelled using the two-stage approach involving two stages measurements (Hair et al., 2014).

Only first order constructs were tested in the model at the first stage with their manifest indicators. On the other hand, second order constructs of the model were introduced in the second stage. The latent variable scores computed for first order dimensions in the first stage were used as their manifest variables.

The convergent validity and discriminant validity were used to examine the measurement model. As suggested by Hair et al. (2014) factor loading, average variance extract (AVE) and composite reliability (CR) are to be considered in determining convergent validity. The results showed that all the items loading was higher than 0.5, the AVE were higher than 0.5 and the CR were above 0.6 (**Table A20** and **Table A21**). For items loading less than 0.5 but CR is higher than 0.6 then the convergent validity of the construct is still adequate (Fornell & Larcker, 1981).

In assessing discriminant validity (i.e. the extent the items distinguish constructs or examine different concepts), the Fornell and Larcker (1981) criterion has been utilised in comparing the correlations between constructs and the square root of the average variance extracted for that construct. **Table A22** and **Table A23** showed the results of discriminant validity in the study. The measures were found to be discriminant in view that all values in diagonals were more than the corresponding row and column.

4.2 Structural Model

To assess the structural model, R^2, beta, t-values via a bootstrapping procedure with a resample of 500, the effect sizes (f^2) as suggested by Hair Jr et al. (2014) was performed.

Following the Cohen (1988) guideline, the effect size of 0.02, 0.15 and 0.35, respectively, represent small, medium and large effects.

Table A20 Measurement Model (Local Staff)

First-order Construct	Second-order Construct	Item	Loading	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
IE Satisfaction	Student mobility	Attitude General variable	0.254 0.999	0.531	0.626	–
	Staff mobility	Attitude General variable	0.712 0.940	0.695	0.817	–
	Academic programme	Attitude General variable	0.961 0.707	0.712	0.828	–
	Research & development	Attitude General variable	0.806 0.930	0.757	0.861	–
	Governance & autonomy	Attitude General variable	0.752 0.946	0.730	0.842	–
	Social integration & Community engagement	Attitude General variable	0.688 0.934	0.672	0.800	–
		B08	0.654	0.516	0.944	0.936
		B09	0.693			
		B10	0.693			
		C09	0.591			
		C10	0.763			
		D09	0.540			
		D10	0.751			
		E08	0.754			
		E09	0.755			
		E10	0.749			
		F07	0.802			
		F08	0.713			
		F09	0.758			
		G07	0.752			
		G08	0.760			
		G09	0.712			

Table A21 Measurement Model (International Staff)

First-order Construct	Second-order Construct	Item	Loading	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
IE Satisfaction	Student mobility	Attitude General variable	0.900 0.341	0.548	0.662	–
	Staff mobility	Attitude General variable	0.931 0.916	0.853	0.921	–
	Academic programme	Attitude General variable	0.792 0.967	0.781	0.876	–
	Research & development	Attitude General variable	0.780 0.946	0.751	0.857	–
	Governance & autonomy	Attitude General variable	0.876 0.979	0.862	0.926	–
	Social integration & Community engagement	Attitude General variable	0.984 0.371	0.553	0.672	–
		B8	0.741	0.593	0.947	0.940
		B9	0.506			
		B10	0.735			
		C8	0.697			
		C10	0.626			
		C10	0.876			
		C10	0.628			
		C10	0.771			
		C10	0.696			
		E8	0.647			
		E9	0.633			
		E10	0.702			
		F7	0.762			
		F8	0.638			
		F9	0.740			
		G7	0.792			
		G8	0.832			
		G9	0.649			

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Table A22 Discriminant Validity (Local Staff)

	Academic Programme	Governance & Autonomy	IES	Research & Development	Social Integration & Community Engagement	Staff Mobility	Student Mobility
Academic programme	**0.844**						
Governance & autonomy	0.606	**0.854**					
IES	0.504	0.516	**0.718**				
Research & development	0.513	0.563	0.698	**0.870**			
Social integration & community engagement	0.571	0.632	0.701	0.617	**0.820**		
Staff mobility	0.620	0.573	0.698	0.622	0.593	**0.833**	
Student mobility	0.524	0.497	0.581	0.457	0.476	0.566	**0.729**

Table A23 Discriminant Validity (International Staff)

	Academic Programme	Governance & Autonomy	IES	Research & Development	Social Integration & Community Engagement	Staff Mobility	Student Mobility
Academic programme	**0.884**						
Governance & autonomy	0.830	**0.928**					
IES	0.544	0.340	**0.789**				
Research & development	0.489	0.393	0.711	**0.867**			
Social integration & community engagement	0.436	0.369	0.770	0.711	**0.743**		
Staff mobility	0.628	0.380	0.693	0.318	0.403	**0.923**	
Student mobility	0.720	0.654	0.733	0.674	0.593	0.624	**0.740**

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Figure A6 Path Analysis (Local Staff)

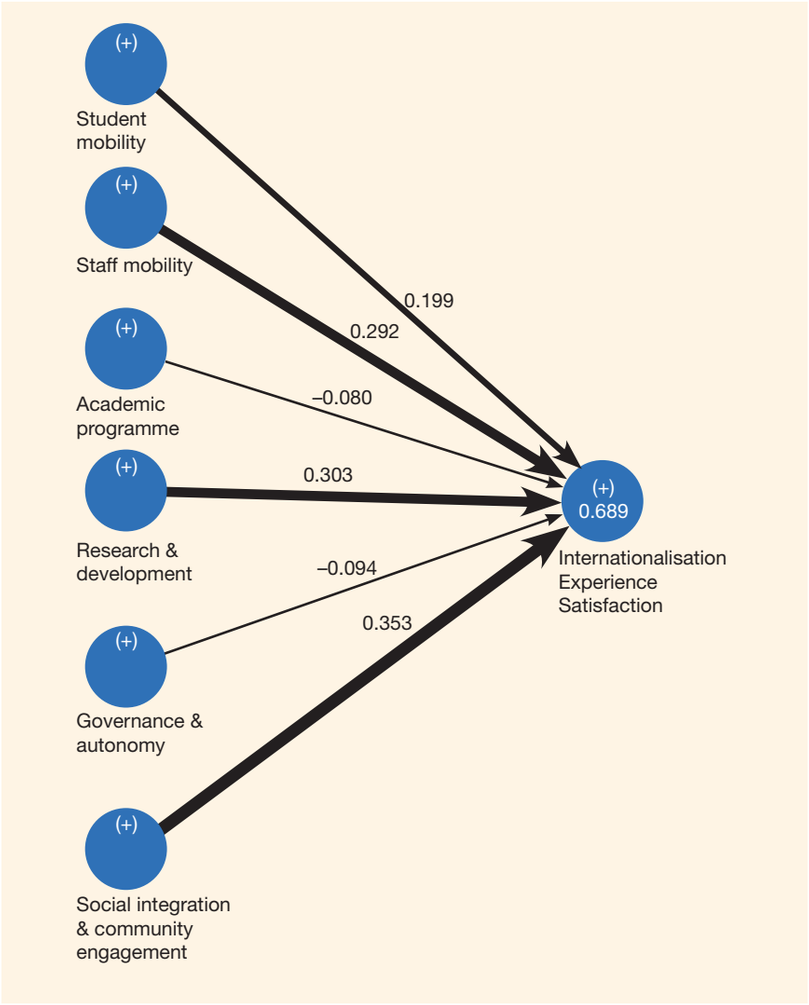

Table A24 Structural Model (Local Staff)

	Beta	SE	T Value	Decision	R^2	f^2
Academic programme → IES	–0.08	0.053	1.496	Not supported	0.689	0.010
Governance & autonomy → IES	–0.094	0.052	1.831*	Supported		0.014
Research & development → IES	0.303	0.048	6.283*	Supported		**0.147+**
Social integration & community engagement → IES	0.353	0.047	7.498*	Supported		**0.184++**
Staff mobility → IES	0.292	0.058	5.009*	Supported		0.118
Student mobility → IES	0.199	0.051	3.921*	Supported		0.077

*$p < 0.05$; + Small Effect Size; ++ Medium Effect Size

Figure A7 Path Analysis (International Staff)

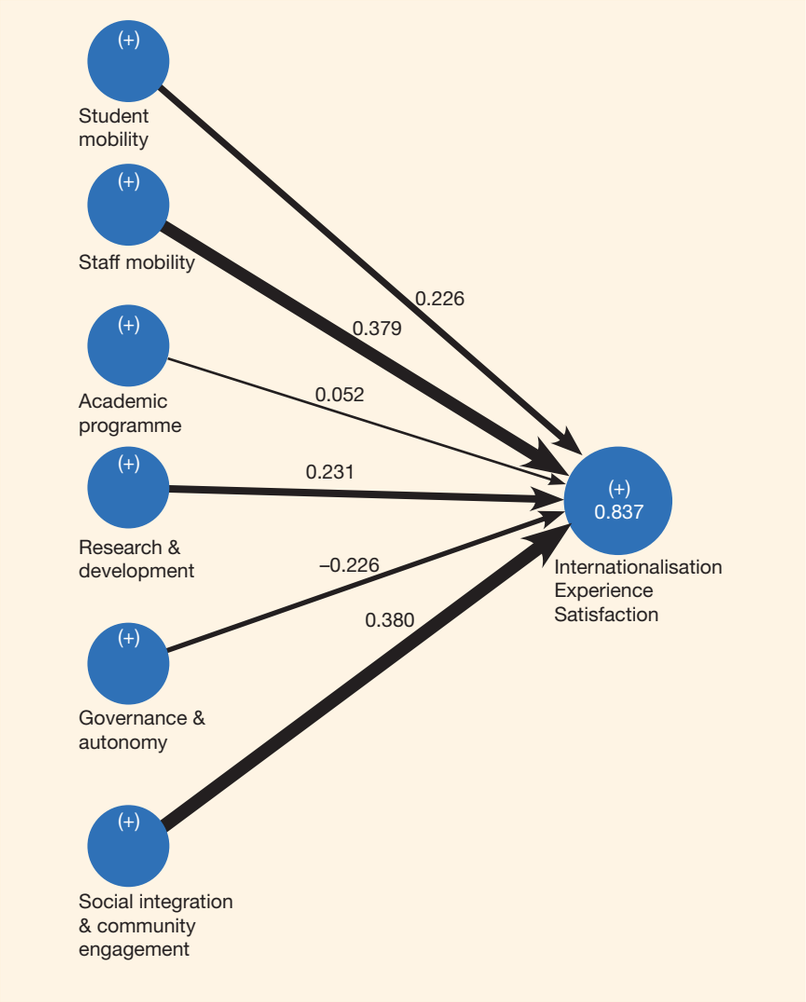

Table A25 Structural Model (International Staff)

	Beta	SE	T Value	Decision	R^2	f^2
Academic programme → IES	0.052	0.264	0.197	Not supported	0.837	0.003
Governance & autonomy → IES	–0.226	0.204	1.107	Not supported		0.076
Research & development → IES	0.231	0.147	1.569	Not supported		0.114
Social integration & community engagement → IES	0.380	0.119	3.184*	Supported		**0.400+++**
Staff mobility → IES	0.379	0.152	2.495*	Supported		**0.363+++**
Student mobility → IES	0.226	0.18	1.258	Not supported		0.082

*$p < 0.05$; +++ Large Effect Size

4.3 Conclusion

For local staff, five out of six predictors contributed to 68.9% of variance in internationalisation experience satisfaction (IES) among local staff. Of the five predictors, social integration and community engagement (f^2 = 0.184) and Research & development (f^2 = 0.147) contributed most to the R^2 as evidenced by reported effect size (f^2).

For international staff, two out of six predictors contributed to 83.7% of variance in internationalisation experience satisfaction (IES) among international staff. Of the two predictors, social integration and community engagement (f^2 = 0.400) and staff mobility (f^2 = 0.363) contributed most to the R^2 as evidenced by reported effect size (f^2).

Predictive Factors that Contributed to Internationalisation Experiences Satisfaction (IES): Alumni

1.0 Participant Demographics

In total, 69 alumni took part in the Study and their demographics are as below:

Table A26 Participant Demographic Information (Alumni)

Demographic Factor	Category	Alumni	
		Frequency (N = 69)	Percentage %
Age		Mean: 30.16, SD: 9.73, Min: 22, Max: 63	
Gender	Male	33	47.8
	Female	36	52.2
Status	Malaysian	61	88.4
	Non-Malaysian	8	11.6
Institution Categorisation	Public HEI	48	69.6
	Private HEI	21	30.4
Academic Categorisation	Undergraduate	41	59.4
	Postgraduate	28	40.6
After the end of my studies, I would like to ...	Return to my home country	NA	78.3
	Remain in Malaysia	NA	20.3
	Move on to another country	NA	1.4
How did you know about your institution?	Online/Institution website	NA	21.95
	Recommendation from friends, relatives, etc.	NA	8.55
	Education fair	NA	25.60
	Recruitment agent	NA	25.60
	Campaign or promotion carried out by Malaysian Government/Ministry of Education of Malaysia	NA	12.20
	Others	NA	6.10

2.0 Instrument

Multi-item scales were used to measure all six clusters (student mobility, staff mobility, academic programme, research and development, governance & autonomy and social integration and community engagement) together with internationalisation experience satisfaction (IES).

A 5-point Likert scale (1 = *strongly disagree/strongly satisficed to* 5 = *strongly agree/strongly dissatisfied*) was used to measure the level of respondents' agreeableness/satisfaction on the statement posed to them. A questionnaire was developed from past studies, especially the 2011 HEI internationalisation Policy and modified to suit the context of the study.

Each of the six clusters are being measured by general variables, attitude and satisfaction with an open-ended question (**Table A27**).

Table A27 Design of Instrument (Alumni)

Cluster	Local Staff				
	G	A	S	O	Total
Student Mobility	6	3	7	1	17
Staff Mobility	4	3	3	1	11
Academic Programme	3	3	3	1	10
Research & Development	3	3	3	1	10
Governance & Autonomy	3	3	3	1	10
Social Integration & Community Engagement	3	3	3	1	10
Total					**68**

Note: G: General variable; A: Attitude; S: Satisfaction; O: Open-ended question

3.0 Data Analysis

Partial least squares (PLS) analysis was employed by using the SmartPLS 3.0 software (Ringle, Wende & Becker, 2015). The measurement model (validity and reliability of the measures) was first tested (Anderson & Gerbing,1988), followed by an examination of the structural model (testing the hypothesised relationship) (Hair, Hult, Ringle & Sarstedt, 2014; Ramayah, Yeap & Ignatius, 2013). Lastly, to test the significance of the path coefficients and the loadings, a bootstrapping method (resample of 500) was used (Hair et al., 2014).

4.0 Results

4.1 Measurement Model

In this research, a total of seven latent constructs were studied. Six constructs (student mobility, staff mobility, academic programme, research & development, governance & autonomy and social integration and community engagement) constructs were assumed to cause the internationalisation experience satisfaction (IES) indicators to vary and there were tested under second order construct.

Each of the six constructs was designed with two latent dimensions – general variable and attitude (**Table A27**). These factors were also known as the latent dimensions and identified as reflective indicators of their second order of each construct. In a model, PLS requires manifest variables for all latent constructs. Therefore, it is not reliable to include higher order constructs directly in the model. Higher order constructs in PLS are modelled using the two-stage approach involving two stages measurements (Hair et al., 2014).

Only first order constructs were tested in the model at the first stage with their manifest indicators. On the other hand, second order constructs of the model were introduced in the second stage. The latent variable scores computed for first order dimensions in the first stage were used as their manifest variables.

Table A28 Measurement Model (Alumni)

First-order Construct	Second-order Construct	Item	Loading	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
IE Satisfaction	Student mobility	Attitude General variable	0.827 0.867	0.718	0.836	–
	Staff mobility	Attitude General variable	0.570 0.932	0.598	0.736	–
	Academic programme	Attitude General variable	0.355 0.995	0.558	0.673	–
	Research & development	Attitude General variable	0.507 0.943	0.510	0.711	–
	Governance & autonomy	Attitude General variable	0.790 0.853	0.676	0.807	–
	Social integration & Community engagement	Attitude General variable	0.750 0.859	0.650	0.787	–
			B6 B6 B6 B6 C9 C10 D9 E7 E8 E9 F9 G7 G8 G9	0.672 0.838 0.533 0.729 0.683 0.556 0.713 0.636 0.856 0.748 0.698 0.764 0.795 0.699	0.807	0.924

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Table A29 Discriminant Validity (Alumni)

	Academic Programme	Governance & Autonomy	IES	Research & Development	Social Integration & Community Engagement	Staff Mobility	Student Mobility
Academic programme	**0.747**						
Governance & autonomy	0.575	**0.822**					
IES	0.577	0.655	**0.714**				
Research & development	0.534	0.596	0.773	**0.757**			
Social integration & community engagement	0.529	0.642	0.635	0.463	**0.806**		
Staff mobility	0.559	0.617	0.595	0.587	0.589	**0.772**	
Student mobility	0.449	0.565	0.704	0.624	0.617	0.586	**0.847**

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The convergent validity and discriminant validity were used to examine the measurement model. As suggested by Hair et al. (2014) factor loading, average variance extract (AVE) and composite reliability (CR) are to be considered in determining convergent validity. The results showed that all the items loading was higher than 0.5, the AVE were higher than 0.5 and the CR were above 0.6 (**Table A28**). For items loading less than 0.5 but CR is higher than 0.6 then the convergent validity of the construct is still adequate (Fornell & Larcker, 1981).

4.2 Structural Model

To assess the structural model, R^2, beta, t-values via a bootstrapping procedure with a resample of 500, the effect sizes (f^2) as suggested by Hair Jr et al. (2014) was performed.

Following the Cohen (1988) guideline, the effect size of 0.02, 0.15 and 0.35, respectively, represent small, medium and large effects.

Figure A8 Path Analysis (Alumni)

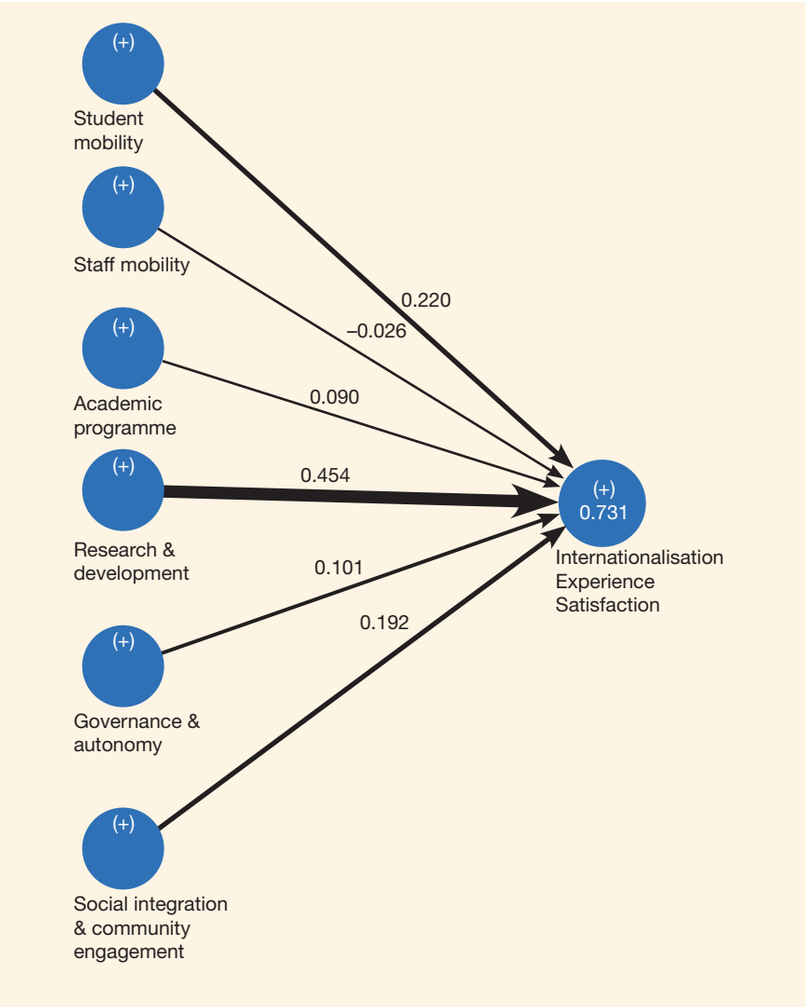

Table A30 Structural Model (Alumni)

	Beta	SE	T Value	Decision	R^2	f^2
Academic programme → IES	0.09	0.119	0.758	Not supported	0.731	0.017
Governance & autonomy → IES	0.101	0.109	0.923	Not supported		0.016
Research & development → IES	0.454	0.104	4.373*	Supported		**0.360+++**
Social integration & community engagement → IES	0.192	0.116	1.655*	Supported		**0.062+**
Staff mobility → IES	–0.026	0.092	0.282	Not supported		0.001
Student mobility → IES	0.220	0.117	1.889*	Supported		**0.082+**

*$p < 0.05$; + Small Effect Size; +++ Large Effect Size

4.3 Conclusion

For alumni, three out of six predictors contributed to 73.1% of variance in internationalisation experience satisfaction (IES) among international staff. Of the three predictors, research and development ($f^2 = 0.360$), social integration and community engagement ($f^2 = 0.062$), and student mobility ($f^2 = 0.082$) contributed most to the R^2 as evidenced by reported effect size (f^2).

References for Appendix G

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Appendix H: Scorecard on the Internationalisation of Higher Education

Table A31 Sample HE Internationalisation Scorecard

Category	Sub-Category	Indicator
Student Mobility	**Outbound mobility**	Proportion of local students in the total enrolment who are on short-term exchange programmes abroad/have international study experience
	Inbound mobility	Proportion of international students in the total enrolment who are pursuing a degree from the institution
		Proportion of international students in the total enrolment who are on short-term exchange programmes
Staff Mobility	**International profile of faculty**	International Faculty members as proportion of total academic staff
	Inbound staff mobility	Number of foreign staff in the institution who are visiting, on sabbaticals or on exchange programmes (including research) during the year under review
	International perspective of faculty	Proportion of staff who received their highest academic qualification in an institution abroad
	Outbound staff mobility	Proportion of local staff who have been abroad for visits, sabbaticals or exchange programmes (including research) during the year under review
Academic Programmes	**Courses with an international component**	Number of collaborative joint-degree programmes with foreign HEIs
		Number of courses involving partners from other countries
	Promoting accreditation of academic programmes	Number of internationally accredited academic programmes as proportion of total academic programmes
	Students participation in international studies	Number of students registered in foreign language courses or courses with international focus (e.g. area studies) as proportion of total student enrolment
Governance and Autonomy	**International Representation**	Number of foreign academic personnel engaged in research, academic, strategic or advisory committees
		Number of local academic staff engaged in international committees or editorial boards of international journals or overseas consultancies
	Commitment for internationalisation	Dedicated unit for internationalisation matters
		At least 50% of university international office staff have participated in sensitivity courses;
		Separate budget for matters pertaining to internationalisation
		Number of scholarships available for international students

Category	Sub-Category	Indicator
		Number of scholarships available to support local students abroad
		Funding support for international research projects
	Infrastructure, Linkages and facilities	Percentage of library collection in other languages
		Number of Chairs established by foreign bodies
		Number of Chairs established abroad
		Establish overseas branch campuses or centres
		Participation in international networks
		Active MOUs over the past 3 years
	Strategy and System	Monitoring process of internationalisation through specific mechanisms/structures
		Developed strategic plan for internationalisation
		Annual report on internationalisation efforts/activities
Research & Development	**Funding for R&D from foreign sources**	Amount of R&D funding from foreign sources (including local MNCs) as a proportion of total R&D budget
	International Co-Authorship	Share of total publication output with international co-authors
	International Researchers	Number of foreign researchers including post-docs engaged in R&D
	International Research Collaboration	Number of collaborative research projects with foreign institutions as proportion of total number of research projects
	Internationally focused research centres	Number of research centres operated with international partners
Social Integration and Community Engagement	**Support for language proficiency**	English language classes arranged; Bahasa Malaysia classes provided
	Support for Academic and Environmental adaptation	Separate orientation programme organised for foreign students
		Local students appointed to mentor or assist designated foreign students at faculty or hostel
	Promotion of local engagement	Specific programmes to promote homestays or similar kind of activities
		Participation in local events whether academic or cultural
		Promotion of internships
	Enriching student experience	Organisation of international cultural activities
		Organisation of visits to local places of interest for international students

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Appendix I: Key Takeaways, Recommendations and Action Plans

Table A32 Key Takeaways, Recommendations, and Action Plans

Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
(1) Strenghten Governance Framework	Establish an Inter-Ministerial Committee on Internationalisation of Higher Education chaired jointly by MOHE and MHA to ensure committed leadership and strong policy direction. (a) Establish a clear concept of internationalisation for the related govt agencies which shows how this concept will add to revenue and the economy.	For (a) (i) Establish Task Force comprising of different government agencies to establish a clear concept of internationalisation that will be embraced by all agencies with clear roles and responsibilities of how internationalisation strategies are to be implemented and supported. MOHE to initiate preliminary discussion with MHA, MoFA and other key agencies on this proposal before presenting it to Cabinet.	MOHE, MHA, MoFA	MOTAC, MOF, EPU	Medium Term	(a) Increase in clarity of roles and responsibilities (b) Less communication blocks and improved processes (c) Increase in satisfaction from HEIs and international students with government support (d) Faster processing of visa and immigration processes and related procedures
	(b) Design integrated policies for Ministries and set KPIs for the related government agencies with regard to internationalisation.	For (b) (i) Monitoring of all internationalisation outcomes by this inter-ministerial committee to ensure effectiveness and efficiency of outcomes.	MOHE, MHA, MoFA	MOTAC, MOF, EPU	Long Term	

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes

	(c) Revise governance framework to promote internationalisation of Academic Programmes that are aligned with internationalisation trends.
	(d) Review Act 555 to enable/support Private HEIs in their internationalisation efforts.
		For (c)
		(i) HEIs to continually review their academic offerings to ensure relevance as well as in alignment with end-user demand and international trends.
		For (d)
		(i) Establish task force to review this Act.
			All HEIs
			MOHE
				Selected Private HEIs	Ongoing
					Medium Term	

(2) Deliver forward-looking and responsive visa services	(a) Review current visa and international student management processes. (b) Enhance management of during study work opportunities - Facilitated by Student & Alumni offices and International Office.	In light of the 32 Initiatives approved by Cabinet in 2019: (i) Establish task force to monitor, track and review initiatives periodically. (ii) Create engagement platforms between stakeholders to share information, best practices, and as a consultative platform (iii) Review current policies on internships and work sectors, and move towards liberalising this. Map against existing internship landscape and part-time work sector.	MOHE/ EMGS	MHA/JIM/ Private HEIs & Public HEIs	Short Term Short Term Medium Term	(a) Increase in international students. (b) Greater satisfaction levels among international students. (c) Economic contribution by international students in part-time workforce. (d) Better image for Malaysia as an international education destination.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes

(3) Expand during and post study work opportunities	Improve during-study and post-study work opportunities for international students through the following measures:
	(a) Create international work and migration pathways, mapped against economic growth and national development with social impact.
	(b) Enhance management of internship and alumni (post-graduation) services – Facilitated by Student & Alumni offices and International Office
		For (a)
		(i) Establish Task Force to look into post-graduation work and migration opportunities as well as their impact on Malaysia's growth and development.
		(ii) Develop guidelines on retaining international talent, mapped against potential contribution to national growth and development.
		(iii) Formulation of during and post-graduation work opportunities, i.e. visas, specified sectors of high value, etc.
		(iv) Develop guidelines on gig-economy work for international students.
		
		For (b)
		(i) All HEIs to continually monitor, evaluate and enhance their existing internship programmes
			MOHE	EPU, MHA, MOHR, MCMC, MoFA
				Talent Corp
				
				Selected HEIs' Human Resource Departments
				
				MOHE
					Short Term
					
					Long Term
					
					Long Term
					
					Medium Term
					
					Ongoing
						(a) More international talent stay in Malaysia for work.
						(b) Increase in contribution by international talent to Malaysian economy and GDP.
						(c) Malaysian labour gaps and skill shortages plugged.
						(d) Creation of more jobs by international talent.
						(e) Increase in international students.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
(4) Enhance Intercultural Competencies	Strengthen support of social integration and community engagement of international students and staff in HEIs through following measures: (a) Design and conduct intercultural competency training for local staff (academic and support) and students. (b) Execute strategies for heightening awareness and appreciation of internationalisation for communities.	(i) Establish Task Force to design suitable intercultural training curriculum for different stakeholders (Academic Staff, Support Staff, Students). (ii) Train key members of each HEI and provide materials for training of all staff and students of HEIs with international students/staff. (iii) Engage in positive media coverage to heighten awareness and appreciation of internationalisation. (iv) Enhance acceptance of internationalisation at a community level through strategies like foster parent programmes, community mentorship and discount cards. (v) Quarterly eco-tours around Malaysia. (vi) Initiate review exercise in early 2025.	MOHE MOHE MOHE MOHE, Tourism City Council, Ministry of Rural Development	AKEPT HEIs AKEPT HEIs KKMM HEIs	Short Term Medium Term Medium Term Medium Term	(a) Strengthened support of social integration and community engagement of international students and staff in HEIs. (b) Improved international student and staff experience in the community at large.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
(5) Launch International Student Care Guidelines (Pastoral Care)	Strengthen support of social integration and community engagement of international students and staff in HEIs through following measures: (a) Design a Code of Practice with national level guidelines on minimum support to be provided to international students. (b) Require all HEIs with international students to adhere to the guidelines set.	(i) Establish Task Force to design suitable Code of Practice with student care guidelines in a wide range of areas (academic support, housing support, visa support, pastoral care etc.). (ii) Support HEIs as they implement the support measures indicated in the Code of Practice. (iii) Monitor and evaluate adherence of HEIs to the Code of Practice. (iv) Identify community/ communities to be the benchmark/ model community for international student integration. (v) Explore declaring "International Student Year" similar to "Visit Malaysia" as a key campaign. (analogous to British Council's Education is Great campaign).	MOHE MOHE MOHE MOHE	HEIs HEIs HEIs EMGS, MOTAC	Short Term Medium Term Long Term Long Term Long term	(a) Supportive and responsive systems within each HEI to care for overall welfare of international students. (b) Effective monitoring and complaints system to ensure national standards of international student care are met, and HEIs are kept accountable. (c) High-visibility branding campaign that spreads the word of Malaysia's. internationalisation efforts

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
(6) Initiate Alumni Engagement Strategy	Formulate national level alumni engagement strategy that: (a) Recognises the diplomatic importance of alumni to Malaysia. (b) Recognises the economic benefits that can be forged through industry and business links. (c) Forges connections with alumni towards recommending their youth to study in Malaysia. (d) Gives alumni a reason to want to contribute to their alma maters and by extension, Malaysia as a whole.	(i) Identify responsible entity to champion the engagement strategy and draw up the strategy. (ii) Work with HEIs to identify successful alumni from around the world and to categorise accordingly – diplomatic, business, recruitment, endowment/waqf – and to engage. (iii) Formulate strategy that contains: • Global best practices • Profiles of successful alumni • Platforms for engagement (i.e. Minister meeting alumni) (iv) Provide training for HEIs on how to execute and track strategy. (v) Create alumni engagement platform (i.e. MyAlumni that was envisioned in the Malaysia Education Blueprint 2015-2025 (Higher Education) but not followed through).	MOHE/ EMGS MOHE/ EMGS MOHE/ EMGS MOHE EMGS	 MoFA/MITI/ MOTAC AKEPT 	Short Term Medium Term Medium Term Long Term Long Term	(a) Increase in alumni engagement across diplomatic and business channels. (b) Increase in international student numbers from nations where alumni have been engaged with. (c) Increase in endowment/ waqf funds. (d) A platform for continuous alumni engagement.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
		(vi) Create alumni engagement matrix/ criteria for HEI excellence assessment instruments (i.e. SETARA/MyQuest).	MOHE		Long Term	

(7) Promote Internationalisation of TVET	Strengthen support of selected TVET institutions towards internationalisation of TVET through the following measures:
	(a) Allocate adequate resources to ensure that TVET institutions (e.g. Polytechnics) are equipped with facilities, accommodation and expertise for internationalisation.
	(b) Promote Malaysia as a destination for international TVET qualifications.
		For (a)
		(i) Create TVET Internationalisation policy strategy.
		(ii) Ensure adequate allocation within Ministry/JPPKK budget to support facilities, accommodation and expertise for internationalisation (and preparedness to received international students).
		For (b)
		(i) Ensure TVET offerings have the appropriate accreditation/ MQA qualifications which are of international standard and will enable international students to avail themselves to global TVET employment opportunities.
			MOHE/ JPPKK/ EMGS
			
			MOHE/ EMGS
			
			JPPKK
				PMO/ MoHR
				
				MQA
					Short Term
					
					Medium Term
					
					Long Term
						(a) Increase in international student mobility in the TVET space for full-time programmes, professional certification, and short-term mobility programmes.
						(b) An improved perception of TVET as not just 'second class' but rather, worthy of 'international' stature.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
		(ii) Ensure relevant TVET programmes are offered by Polytechnics. (iii) Aggressively promote Polytechnics as a destination for international students wanting TVET based skills.	JPPKK JPPKK	EMGS/ KKMM	Medium Term Medium Term	
(8) Launch Branding & Marketing Campaigns	(a) Review the Education Malaysia brand to reconceptualise what the brand stands for and how it is differentiated for different target groups. (b) Have a predominant coordinating body in MOHE that monitors the conduct of this branding campaign through marketing activities to ensure consistency of applications (e.g. education fairs, searchable database of Malaysian educational programmes); professional	(i) Work with all HEIs, public and private, to promote consistency and cohesiveness in the brand: for example, one attribute such as quality that is the over-arching theme. (ii) Work with other government agencies such as Tourism Malaysia and the Ministry of Home Affairs to ensure that all government agencies are all promoting the same brand campaign and exemplifying the appropriate brand values.	MOHE, MOTAC MOHE, MOTAC	MOTAC, EPU, MoFA MOTAC, EPU, MoFA	Short Term Medium Term	(a) A better understanding of what the brand, Education Malaysia stands for and for all stakeholders to sing the same tune and promote accurately. (b) Increase in international student recruitment as the branding campaign.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
	development and certification for education agents; changes to institutional marketing and recruitment practices; development of new courses and programmes led by marketing; and student award programmes.	(iii) Work with Ministry of Foreign Affairs and Ministry of Tourism, Arts and Culture to promote educational tourism through student mobility programmes.	MOHE, MOTAC, MoFA	EPU		
(9) Coordinate Strategic Approaches – Profiling & Targeting	Strengthen support of selected HEIs in their international student and staff recruitment efforts the following measures: (a) Sharing of (big) data, research and trends of international student and staff mobility. (b) Sharing of resources and networks (i.e. agents) as well as leveraging on government resources to attend education expos and promotional efforts.	For (a) (i) To align education international student recruitment with government diplomatic and economic priorities. (ii) Conduct review of data collection, reporting and tracking processes, towards streamlining data collection and providing timely access. (iii) To release publications to position Malaysia as a thought leader.	MOHE/ EMGS	HEIs/ MOTAC/ MoFA	Medium Term Medium Term Medium Term	

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes

	(c) Identifying new recruitment strategies to cater to international student profile.
	(d) Ensuring academic programmes offered are of international value and relevant to global workforce.
		For (b)
		(i) To identify international education expos to attend and to invite/support HEIs participation.
		For (c)
		(i) To identify star professors/ academics as recruitment strategy
		(ii) To support digital marketing and other technology enabled efforts to attract international students
		For (d)
		(i) To review all HEI curriculum, set international definition and standards, and re-deploy as necessary.
					Short Term
					
					Long Term
					
					Short Term
					
					Medium Term
						(a) increase in international student numbers from targeted countries and via marketing and branding platforms.
						(b) Presence in international analysis and news portals (i.e. strong branding and visibility).
						(c) More dynamic and robust data sharing/ access (to enable various 3rd parties to analyse, digest and produce outputs).

(10) Promote Lifelong Learning Models in Tandem with 4IR/ Digitalisation	(a) Explore new learning models within the 4IR/ digitalisation space which are attractive to international students and are relevant for employment opportunities internationally.	(i) Identify new and emerging learning models that are in demand internationally – especially those related to 4IR like Artificial Intelligence, Big Data, Automation, Cloud Computing, UI/UX, etc.	MOHE	HEIs EMGS JIM MHA Industry	Short Term	(a) Increase in international student mobility coming to Malaysia to learn skills related to 4IR/ digitalisation.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
	(b) Provide financial support/scholarship to promote new learning models to attract international students.	(ii) Identify how to deliver and align these models with regulatory requirements and HEI capacity – such as MQA, EMGS, Visas etc. (iii) Provide motivation/ incentives to HEIs that offer these programmes (scholarship, access to PTPTN, etc). (iv) Ensure alignment with: • 12th Malaysia Plan – digital talent development • Master Plan – Education as an Export	EPU	MDEC	Medium Term Medium Term Long Term	(b) Generate revenue with high margins from high value programmes and shorter turnover time of international students.
(11) Promote Effective Internationalisation of R&D	Strengthen management of R&D in HEIs to promote effective internationalisation through following measures:	For item (a) (i) Establish Task Force to review MyPAIR programme including identification of core areas and countries (including ASEAN) and industry where collaborations promise returns for Malaysia.	MOHE	MOSTI, EPU, ASM, Selected HEIs	Short Term	(a) Increase in joint collaborations between HEIs and partners (both inbound and outbound). (b) Increase in mobility numbers with leading edge institutions.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
	(a) Adopt strategic approach to internationalisation of R&D through redesigned MyPAIR programme.	(ii) Promote mobility (inbound and outbound) of researchers including attachments with international industry and leading edge institutions in areas of strategic interest to Malaysia.	MOHE	MOF, IRB, MIDA, PWC	Medium Term	(c) Increase in international industry attachments. (d) increase in international research facilities in Malaysia
	(b) Incentivise MNCs in collaboration with HEIs to establish research hubs/research networks/joint research in Malaysia.	For item (b) (i) MOHE to initiate discussion with relevant agencies to examine what is presently available as well as what can be further introduced to promote such investments	AKEPT		Short Term	(e) Effective and responsive incentive system. (f) Increased number of joint research collaboration between MNCs and HEIs.
	(c) Enhance management of R&D and expand support services including grant facilitation by Research Management Centres.	For item (c) (i) Conduct regular R&D management courses for all personnel of RMCs as well as DVC (R&I) and Deputy Deans (R&I) (ii) Strengthen HEI R&D management including developing protocols for: • monitoring and evaluation;			Medium Term	(g) Improved R&D management in HEIs from end user feedback/ surveys.

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
		• access and dissemination of research grants and findings; • guidelines on intellectual property and royalty sharing; • participation of industry and external parties in R&D evaluation committees; and • ethical conduct of research.	HEIs; AKEPT; MOHE; ASM		Medium Term	(f) Increased number of joint research collaboration between MNCs and HEIs. (g) Improved R&D management in HEIs from end user feedback/ surveys. (h) Increased number of successful grants from external funding bodies. (i) Recognition for foreign faculty as PIs. (j) Increased number of research proposals for funding support from private HEIs (k) Increased number of research proposals from PG students.
		(iii) HEIs to enhance grant facilitation services (including engaging specialized grant writers) in securing international grants.	HEIs			
	(d) Revise governance framework to promote internationalisation of R&D	For item (d)				
		(i) Definition of internationalisation to also embrace linkages with MNCs operating within country.	MOHE	Selected Public and Private HEIs; MOSTI		
		(ii) To review participation of foreign research staff members as Principal Investigators in projects supported by public funding.	MOHE	Selected Public and Private HEIs	Long Term	

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Key Takeaway	Recommendation	Action Plans	Key Implementing Agencies			
			Lead Agency	Other Agencies	Timeline	Expected Outcomes
		(iii) Review selected research grant schemes for contestable funding by all research staff including international staff (all HEIs). (iv) Introduce grant scheme to support outstanding research proposals in strategic research areas from postgraduates (all HEIs).	MOHE MOHE			
(12) Develop Scorecard for Internationalisation of HEIs	Initiate a study on the development of a comprehensive scorecard on internationalisation for Malaysian HEIs.	(i) Establish Task Force to oversee this study. This Task Force will, among others: • Approve the ToR for this study • Recommend to MOHE the period of study (9–12 months) as well as consultant to undertake the study • Monitor the progress of the study • Ensure that the Consultant develop a scorecard(s) that can be used by all categories of HEIs in Malaysia	MOHE	EPU, ASM, Selected HEIs, MPC, PWC, KRI	Short Term	(a) Enhanced monitoring of performance of internationalisation activities in HEIs. (b) Transparent system to monitor performance of internationalisation activities in HEIs. (c) More focused actions on internationalisation.

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Appendix J: Survey Questionnaires

International Student Questionnaire

Official Use – 241019
No respondent:

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA: INTERNATIONAL STUDENT PERSPECTIVES

Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 20 minutes to complete. If you have any questions, please contact the following team members.

Note: This project is awarded by the Ministry of Education Malaysia to the International Institute of Public Policy and Management (INPUMA), University of Malaya [Ruj: KPT.600-2/1/7 (19)]

Lead consultant:
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Thank you.

PART A		
INSTRUCTION Please answer the following questions on yourself.		
1	Age	_____
2	Gender	☐ Male ☐ Female
3	Nationality	_____
4	Name of Institution (e.g., UPM/UCSI)	_____
5	Current education level	☐ Foundation/Matriculation/A-Levels ☐ Diploma ☐ Advanced Diploma ☐ Bachelor ☐ Master ☐ PhD ☐ Others, please specify: _____
6	Programme enrolled (e.g., Bachelor of Psychology)	_____
7	How did you know about your Institution?	Online / Institution website
		☐ Recommendation from friends, relatives, etc. ☐ Education fair ☐ Recruitment agent ☐ Campaign or promotion carried out by Malaysia Government/Ministry of Education of Malaysia ☐ Others, please specify: _____
8	(a) After the end of my studies, I would like to	☐ Return to my home country ☐ Remain in Malaysia ☐ Move on to another country ☐ Others, please specify: _____
	(b) Please explain the main reason for your answer (Question 8(a)) above	_____ _____

PART B

INSTRUCTION

The questions below pertain to how the **students perceive internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
1	Please tell me about the following process upon your acceptance/arrival at your institution.	Strongly Disagree ◄				► Strongly Agree
	(a) My institution provides me with information on accommodation before my arrival.	1	2	3	4	5
	(b) My institution provides me with the orientation programme upon my arrival.	1	2	3	4	5
	(c) My institution provides me advice on the academic system and programmes upon my arrival.	1	2	3	4	5
	(d) My institution guides me with the health check processes and procedures.	1	2	3	4	5
2	I received my student visa within the stipulated time frame.	1	2	3	4	5
3	I find the cost of living in Malaysia is manageable.	1	2	3	4	5
4	I feel safe on campus.	1	2	3	4	5
5	I feel welcomed as an international student studying in Malaysia.	1	2	3	4	5
6	I feel International students should be rewarded with special privileges after graduation (e.g. residential privileges, easy processing of work permits, etc).	1	2	3	4	5
7	I am satisfied with the following provided to an international student:	Very Dissatified ◄				► Very Satisfied
	(a) Healthcare	1	2	3	4	5
	(b) Counselling and welfare	1	2	3	4	5
	(c) Housing	1	2	3	4	5
	(d) Student visa and renewal	1	2	3	4	5
	(e) Financial support services (e.g. paying school fees, opening accounts, receiving money from abroad, etc)	1	2	3	4	5
	(f) Facilities and student amenities	1	2	3	4	5
	(g) Admission procedures	1	2	3	4	5
8	Can you please provide examples of how the Malaysia education system can improve your international student experience? _____ _____					

PART C

INSTRUCTION

The questions below pertain to how **staff impact internationalisation** in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My lecturers demonstrate high quality teaching comparable to international standards.	1	2	3	4	5
2	My lecturers use English as a medium of instruction during lectures.	1	2	3	4	5
3	The administrative staff in my institution use English for work-related communication.	1	2	3	4	5
4	The staffs in my institution are good at managing a campus environment with different nationalities.	1	2	3	4	5
5	I feel I am discriminated against when pursuing my studies in Malaysia.	1	2	3	4	5
6	I feel it is important that my institution's staffs are provided with intercultural training to manage different nationalities.	1	2	3	4	5
7	I feel it is beneficial that some of my lecturers studied abroad or are from an international background.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the English proficiency of the staffs in my institution.	1	2	3	4	5
9	I am satisfied with the teaching quality in my institution.	1	2	3	4	5
10	I am satisfied with how my lecturers engage with me.	1	2	3	4	5
11	Have you encountered any discrimination when you are in Malaysia? If yes, please state the parties (e.g. fellow students, academic staff, university support staff, community, etc.) responsible for the discrimination. Please give examples. _____ _____					

PART D

INSTRUCTION

The questions below pertain to **academic programmes** that are offered in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My lecturers regularly use international case studies and examples in my classes.	1	2	3	4	5
2	My institution makes efforts to align local academic programmes to meet standards of international accreditation bodies.	1	2	3	4	5
3	Participation in international activities by faculty members is viewed positively by my institution.	1	2	3	4	5
4	I believe it is important for my lecturers to actively review curricular content to achieve international standards.	1	2	3	4	5
5	I feel it is beneficial to recruit international experts to be my lecturers or visiting international professors to my institution.	1	2	3	4	5
6	I feel uncomfortable when my lecturers adapted international content into my courses.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with how my lecturers have incorporated international views and case studies.	1	2	3	4	5
8	I am satisfied that my institution makes an effort to ensure all course materials and assessments are available in English.	1	2	3	4	5
9	I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc).	1	2	3	4	5
10	How can the teaching and curriculum be improved in order to compete with top international institutions? _____ _____					

PART E

INSTRUCTION

The questions below pertain to the **research and development** that is carried out in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	Malaysian universities have established a good reputation for research and development.	1	2	3	4	5
2	My institution has established international agreements on research and development for student attachments.	1	2	3	4	5
3	My institution allocates adequate budget for international projects and collaborations.	1	2	3	4	5
4	I feel it important for my institution to establish research and networking activities with international universities.	1	2	3	4	5
5	I feel it beneficial for my institution to establish research and networking activities with multinational companies.	1	2	3	4	5
6	I find myself gaining more knowledge and expertise as a result of the research and development programmes with international institutions.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the international networks and funding from the government to support research projects.	1	2	3	4	5
8	I am satisfied with the progress made in research and development by my institution.	1	2	3	4	5
9	I am satisfied with the research and development opportunities given to international students.	1	2	3	4	5
10	Are there any other measures that Malaysia can take to increase international research collaborations in Malaysia? _____ _____					

PART F

INSTRUCTION

The questions below pertain to the **governance and autonomy policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution uses English as a form of communication to its students and staff (e.g. emails, announcements, etc).	1	2	3	4	5
2	My institution has a good foundation/preparatory programme to orientate new International students studying in Malaysia.	1	2	3	4	5
3	My institution has an operational office which facilitates the admission process of international students.	1	2	3	4	5
4	I feel it is important that my institution have a good policy to encourage international collaborations or projects for students.	1	2	3	4	5
5	I believe it is crucial for Malaysian institutions to provide an association/council which looks into the welfare of international students.	1	2	3	4	5
6	I feel it is important for my institution to conduct yearly surveys to evaluate the satisfaction level of international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the support my institution provides to the students participating in international projects or networking.	1	2	3	4	5
8	I am satisfied with the support the Ministry of Education provides to international students.	1	2	3	4	5
9	I am satisfied that my international friends and I are well taken care by my institution.	1	2	3	4	5
10	Do you think Malaysia treat its International students well? Please provide your reasons. _____ _____					

PART G

INSTRUCTION

The questions below pertain to the social **integration and community engagement** policy of your institution.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ◄				► Strongly Agree
1	My institution organises social and cultural integration programmes between local and international students.	1	2	3	4	5
2	My institution regularly organises events that involve several local communities and international students.	1	2	3	4	5
3	My institution promotes international student exchanges and international community service.	1	2	3	4	5
4	I feel a sense of contribution to the Malaysian community by being here.	1	2	3	4	5
5	I feel it is important for my institution to have one integrated communication plan on internationalisation (e.g. promotion, branding, etc).	1	2	3	4	5
6	I find myself benefiting in knowledge and skills when I interact with local students.	1	2	3	4	5
		Very Dissatified ◄				► Very Satisfied
7	I am satisfied with how international students have been well-integrated into Malaysian society.	1	2	3	4	5
8	I am satisfied with social integration and community engagement programmes between local and international students organised by my institution.	1	2	3	4	5
9	I am satisfied with how Malaysians understand my culture and religion.	1	2	3	4	5
10	Would you recommend other international students to study in Malaysia? Please provide your reasons. _____ _____					

Thank you for completing this questionnaire.
We appreciate your help with this important research.

International Staff Questionnaire

Official Use – 241019
No respondent:

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA: INTERNATIONAL STAFF PERSPECTIVES

Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 20 minutes to complete. If you have any questions, please contact the following team members.

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Lead consultant:
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Mr Danial Rahman, danial@openlearning.com (Open Learning)

Thank you.

PART A		
INSTRUCTION Please answer the following questions on yourself.		
1	Age	_____
2	Gender	☐ Male ☐ Female
3	Nationality	_____
4	Name of Institution (e.g., UPM/UCSI)	_____
5	I am ...	☐ Academic staff (go to question 6 and continue) ☐ Administrative staff (go to question 7 and continue)
6	I am currently teaching the _____ level.	☐ Foundation ☐ Diploma ☐ Degree ☐ Postgraduate
7	Highest education level (e.g. Bachelor, Master, PhD)	☐ SPM ☐ STPM/Diploma ☐ Diploma ☐ Degree ☐ Master ☐ PhD
8	How did you apply for employment in your current Institution?	☐ Self ☐ Via agent ☐ Others, please specify: _____
9	How many years have you worked in the Malaysia higher education institution?	_____
10	(a) After the end of my contract, I would like to	☐ Return to my home country ☐ Remain in Malaysia ☐ Move to another country
	(b) Please explain the main reason for your answer above (10a)	_____ _____

PART B

INSTRUCTION

The questions below pertain to how **students perceive internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution has good international institutional linkages for students to participate in study programmes abroad (e.g. student exchange, etc).	1	2	3	4	5
2	My institution provides institutional funding for study abroad programmes.	1	2	3	4	5
3	(a) To the best of my understanding, the number of students from my institution who participated in education abroad programme has increased.	1	2	3	4	5
	(b) Please indicate which programmes your students participated in when studying abroad (you may ticked more than 1).	☐ Study abroad programme ☐ International internships ☐ Research abroad ☐ Others, please specify: _____				
4	(a) My institution offers effective programmes or support services for international students.	1	2	3	4	5
	(b) Please indicate the programmes or support services available at your institution (you may ticked more than 1).	☐ Academic support service ☐ Orientation to Malaysia and the local community ☐ Assistance in finding housing ☐ International alumni services ☐ Others, please specify: _____				
5	I welcome opportunities for my students to study abroad for short periods.	1	2	3	4	5
6	I feel iinternational students should be rewarded with special privileges after graduation (e.g. residential privileges, easy processing of work permits, etc).	1	2	3	4	5
7	To attract top talent to study in Malaysian, Malaysia must provide scholarships for international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the study abroad programme offered by my institution to the students.	1	2	3	4	5
9	I am satisfied with the institutional funding provided by my institution for the students to join study abroad programmes.	1	2	3	4	5
10	I am satisfied with the programmes or support services offered by my institution to the international students.	1	2	3	4	5
11	It is important for Malaysia to attract top talent to support its economy. What are the measures can Malaysia take besides offering scholarships? _____ _____					

PART C

INSTRUCTION

The questions below pertain to how **staff perceive internationalisation** in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
1	Please tell me about the following process upon your acceptance / arrival at your institution	Strongly Disagree ←				→ Strongly Agree
	(a) My institution provides me with information on accommodation upon my arrival.	1	2	3	4	5
	(b) My institution provides me with the staff induction programme upon my arrival.	1	2	3	4	5
	(c) My institution guides me with the health check processes and procedures.	1	2	3	4	5
2	I find the cost of living in Malaysia is manageable.	1	2	3	4	5
3	My colleagues are good at managing the diversified student body.	1	2	3	4	5
4	My local colleagues use English for work-related communication.	1	2	3	4	5
5	I feel I am discriminated against when pursuing my career in Malaysia.	1	2	3	4	5
6	I feel it is important my local colleagues are provided with intercultural training to manage the diversified student body.	1	2	3	4	5
7	I feel welcomed as an international lecturer working in Malaysia.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the international viewpoints and mindsets of my local colleagues.	1	2	3	4	5
9	I am satisfied with how my local colleagues engage with me.	1	2	3	4	5
10	I am satisfied with the following provided to an international staff:					
	(a) Healthcare	1	2	3	4	5
	(b) Welfare	1	2	3	4	5
	(c) Housing	1	2	3	4	5
	(d) Protection of my legal and civil rights	1	2	3	4	5
	(e) Visa and renewal	1	2	3	4	5
11	Have you encountered any discrimination when you are in Malaysia? If yes, please state the parties (e.g. fellow students, academic staff, university support staff, community, etc) responsible for the discrimination. Please give examples. _____ _____					

PART D

INSTRUCTION

The questions below pertain to **academic programmes** that are offered in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution makes efforts to align local academic programmes to meet standards of international accreditation bodies.	1	2	3	4	5
2	The lecturers in my institution are actively encouraged to include international perspectives and content in their courses.	1	2	3	4	5
3	Top management in my institution have expressed a strong commitment to internationalisation.	1	2	3	4	5
4	Participation in international activities by faculty members is viewed positively by my institution.	1	2	3	4	5
5	I feel it is beneficial for the lecturers to regularly use international case studies and examples in classes.	1	2	3	4	5
6	It is important to get support from all members of my institution towards commitment to international education.	1	2	3	4	5
7	I feel it is beneficial to have more international lecturers or visiting professors in my institution.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied that my institution makes an effort to ensure all course materials and assessments are available in English.	1	2	3	4	5
9	I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc).	1	2	3	4	5
10	I am satisfied with the funding allocated from my institution for internationalisation activities.	1	2	3	4	5
11	How can the teaching and curriculum be improved in order to compete with top international institutions? _____ _____					

PART E

INSTRUCTION

The questions below pertain to the **research and development** that is carried out in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	Malaysian universities have established a good reputation for research and development.	1	2	3	4	5
2	My institution establishes research and networking activities with multinational companies.	1	2	3	4	5
3	My institution provides more funding and focus on research-based programmes.	1	2	3	4	5
4	My institution establishes research and networking activities with international universities.	1	2	3	4	5
5	I find myself gaining more knowledge and expertise as a result of the research and development programmes with international institutions.	1	2	3	4	5
6	It is important that Malaysia is seen as a research and development centre of excellence as it enhances our reputation.	1	2	3	4	5
7	I feel it beneficial that my institution establishes research and networking activities with multinational companies.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the international networks and support in funding from multinational companies to support research projects in my institution.	1	2	3	4	5
9	I am satisfied with the international networks and support in funding from the government to support research projects in my institution.	1	2	3	4	5
10	I am satisfied with the progress made in research and development by my institution.	1	2	3	4	5
11	Are there any other measures that Malaysia can take to increase international research collaboration in Malaysia? _____ _____					

PART F

INSTRUCTION

The questions below pertain to the **governance and autonomy policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution uses English as a form of communication to its students and staff (e.g. emails, announcements, etc).	1	2	3	4	5
2	My institution supports cultural exchange programmes with foreign institutions.	1	2	3	4	5
3	My institution actively seeks regional and international networks in academic programmes, research and development.	1	2	3	4	5
4	It is important that my institution has a good policy to encourage international collaborations or projects for international students.	1	2	3	4	5
5	I believe it is crucial for Malaysian institutions to provide an association/council which looks into the welfare of international students.	1	2	3	4	5
6	I feel important for my institution to conduct yearly surveys to evaluate the satisfaction level of international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the support my institution provides to students participating in international projects or networking.	1	2	3	4	5
8	I am satisfied with the support the Ministry of Education provides to students participating in international research, projects or networking.	1	2	3	4	5
9	I am satisfied that my international friends are well taken care of by my institution.	1	2	3	4	5
10	What recommendations do you have to attract more internationally recognized faculty and researchers to Malaysian universities? _____ _____					

PART G

INSTRUCTION

The questions below pertain to the **social and community engagement policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ◄				► Strongly Agree
1	My institution organises social and cultural integration programmes between local and international staff.	1	2	3	4	5
2	My institution offers language and cultural awareness programmes for my spouse and family.	1	2	3	4	5
3	My institution promotes international student exchanges and international community service.	1	2	3	4	5
4	I think it is important for my institution to have one integrated communication plan on internationalisation policy (e.g. promotion, branding, etc).	1	2	3	4	5
5	I find myself benefiting in knowledge and skills when I interact with local students.	1	2	3	4	5
6	I feel that international students and staff contribute to the Malaysian community by being here.	1	2	3	4	5
		Very Dissatified ◄				► Very Satisfied
7	I am satisfied with social integration and community engagement programmes between local and international students organized by my institution.	1	2	3	4	5
8	I am satisfied with social integration and community engagement programmes between local and international staffs organised by my institution.	1	2	3	4	5
9	I am satisfied with how foreign students and lecturers in Malaysia are well-integrated into Malaysian society.	1	2	3	4	5
10	Would you recommend other international lecturers to work in Malaysia? Please give your reasons. _____ _____					

Thank you for completing this questionnaire.
We appreciate your help with this important research.

Local Student Questionnaire (Bahasa Malaysia)

Kegunaan Pejabat – 261019
Nombor responden

TINJAUAN DASAR PENGANTARABANGSAAN PENDIDIKAN TINGGI DI MALAYSIA:
SUDUT PANDANG PELAJAR TEMPATAN

Makluman Ringkas

Terima kasih diucapkan atas penyertaan anda dalam kajian kami. Kajian ini bertujuan untuk meninjau bagaimana institusi pendidikan tinggi (IPT) di Malaysia telah meningkatkan pengantarabangsaan dari segi dasar dan pengamalannya. Oleh itu, penilaian akan dilakukan terhadap enam aspek: mobiliti pelajar, mobiliti staf, program-program akademik, penyelidikan dan pembangunan, tadbir urus dan autonomi serta integrasi sosial dan keterlibatan masyarakat.

Penyertaan anda dalam kajian ini amat penting buat kami. Penyertaan ini bersifat sukarela dan anda berhak untuk menarik diri pada bila-bila masa tanpa tindakan. Jawapan serta identiti anda akan dirahsiakan.

Sila jawab semua soalan dengan jujur. Borang soal selidik yang diberikan akan mengambil masa 20 minit sahaja untuk diselesaikan. Jika anda mempunyai sebarang soalan, sila hubungi individu yang berikut.

Nota: Projek ini di bawah Kementerian Pendidikan Malaysia dan kelolaan Institut Antarabangsa Dasar Awam dan Pengurusan (INPUMA), Universiti Malaya [Ruj: KPT.600-2/1/7 (19)]

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Terima kasih.

BAHAGIAN A		
ARAHAN Sila jawab soalan maklumat peribadi yang berikut.		
1	Umur	_____
2	Jantina	☐ Lelaki ☐ Perempuan
3	Kaum	☐ Melayu ☐ Cina ☐ India ☐ Lain-lain, sila nyatakan: _____
4	Nama Institut Pengajian (contohnya, UPM/UCSI)	_____
5	Tahap pendidikan terkini	☐ Asasi ☐ Diploma ☐ Ijazah Sarjana Muda ☐ Ijazah Sarjana/Pasca Siswazah ☐ Doktor Falsafah
6	Bidang yang diambil (contohnya, Ijazah Sarjana Muda Psikologi)	_____
7	Bagaimanakah anda mengetahui tentang institusi pengajian anda?	☐ Dalam talian/Laman sesawang rasmi ☐ Disyorkan rakan dan keluarga ☐ Pameran pendidikan ☐ Ejen pengrekrutan ☐ Promosi atau kempen anjuran Kementerian Pendidikan Malaysia ☐ Lain-lain, sila nyatakan: _____

BAHAGIAN B

ARAHAN

Soalan yang berikut berkaitan dengan **pandangan pelajar** di institusi pengajian anda terhadap **pengantarabangsaan**.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
1	Sila maklumkan tentang proses yang anda lalui setelah diterima institusi pengajian anda.	Sangat Tidak Setuju ◄——► Sangat Setuju				
	(a) Institusi pengajian saya menyampaikan maklumat penginapan sebelum saya sampai.	1	2	3	4	5
	(b) Institusi pengajian saya menyediakan program orientasi sebelum setelah saya sampai.	1	2	3	4	5
	(c) Institusi saya menyediakan khidmat nasihat berkaitan system akademik dan kursus setelah saya sampai.	1	2	3	4	5
2	Institusi pengajian saya mempunyai pautan institusi antarabangsa yang baik, untuk pelajar sertai program pengajian di luar negara. (contohnya, program pertukaran pelajar).	1	2	3	4	5
3	Institusi pengajian saya menyediakan dana untuk program pengajian di luar negara.	1	2	3	4	5
4	Saya menerima dengan baik peluang pengajian ke luar negara dalam tempoh yang singkat.	1	2	3	4	5
5	Saya berpendapat bahawa institusi pengajian saya mestilah mendanai pelajar supaya boleh menyertai program luar negara.	1	2	3	4	5
6	Saya berpendapat bahawa penerimaan pelajar antarabangsa di Malaysia mendatangkan manfaat.	1	2	3	4	5
7	Saya berpuas hati dengan kemudahan yang disediakan seperti:	Sangat Tidak Berpuas Hati ◄——► Sangat Berpuas Hati				
	(a) Penjagaan kesihatan	1	2	3	4	5
	(b) Kaunseling dan kebajikan	1	2	3	4	5
	(c) Perkhidmatan sokongan kewangan (cth: pembayaran yuran pengajian, pembukaan akaun)	1	2	3	4	5
	(d) Prosedur kemasukan	1	2	3	4	5
	(e) Fasiliti dan kemudahan pelajar (cth: bilik darjah yang berkualiti)	1	2	3	4	5
8	Menarik pelajar yang berkebolehan tinggi sangat penting untuk ekonomi negara. Sila berikan cadangan anda untuk menarik pelajar berkebolehan tinggi menyambung pengajian di Malaysia. _____ _____					

BAHAGIAN C

ARAHAN

Soalan yang berikut berkaitan dengan **impak staf terhadap pengantarabangsaan** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Pensyarah saya mempamerkan kemahiran mengajar yang berkualiti tinggi dan bertaraf antarabangsa.	1	2	3	4	5
2	Pensyarah saya mahir menguruskan pelajar yang pelbagai.	1	2	3	4	5
3	Pensyarah saya menggunakan Bahasa Inggeris sebagai bahasa pengantar semasa kuliah.	1	2	3	4	5
4	Staf pentadbiran di institusi pengajian saya mahir mengurus suasana kampus yang mempunyai pelbagai kerakyatan.	1	2	3	4	5
5	Staf pentadbiran di institusi pengajian saya menggunakan Bahasa Inggeris untuk hal pekerjaan.	1	2	3	4	5
6	Saya berpendapat, bahawa kursus rentas budaya mesti disediakan untuk pensyarah demi menguruskan suasana kampus yang mempunyai pelbagai kerakyatan.	1	2	3	4	5
7	Saya berpendapat, bahawa kursus rentas budaya mesti disediakan untuk staf pentadbiran demi menguruskan suasana kampus yang mempunyai pelbagai kerakyatan.	1	2	3	4	5
8	Saya berpendapat bahawa beberapa pensyarah saya yang berlatar belakang antarabangsa bermanfaat bagi saya.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
9	Saya berpuas hati dengan sudut pandang antarabangsa dan set minda pensyarah saya.	1	2	3	4	5
10	Saya berpuas hati dengan kemahiran Bahasa Inggeris staf di institusi pengajian saya.	1	2	3	4	5
11	Saya berpuas hati dengan kualiti mengajar di institusi pengajian saya.	1	2	3	4	5
12	Pada pendapat anda, patutkah kita mengambil lebih banyak staf antarabangsa untuk mengajar kursus akademik anda? Sila berikan sebab atas jawapan anda. _____ _____					

BAHAGIAN D

ARAHAN

Soalan yang berikut berkaitan dengan **program akademik** yang ditawarkan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Institusi saya menyediakan garis panduan yang jelas untuk pelajar mengikuti semester akademik atau latihan praktikal ke luar negara.	1	2	3	4	5
2	Pensyarah saya sering meggunakan kajian kes dan contoh antarabangsa dalam kuliah.	1	2	3	4	5
3	Komitmen terhadap aktiviti pendidikan antarabangsa mendapat sokongan seluruh warga institusi pengajian saya (cth: pihak atasan).	1	2	3	4	5
4	Saya percaya bahawa pensyarah saya mesti sentiasa meninjau semula kandungan kurikulum untuk mencapai standard antarabangsa.	1	2	3	4	5
5	Saya berpendapat bahawa pengambilan pakar antarabangsa menjadi sebahagian daripada barisan pensyarah saya atau kedatangan profesor antarabangsa ke institusi pengajian saya amat bermanfaat.	1	2	3	4	5
6	Saya berasa selesa apabila pensyarah saya mengadaptasi bahan antarabangsa ke dalam kursus pengajian saya.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan cara pensyarah saya menerapkan pandangan dan kajian kes antarabangsa ke dalam pengajian saya.	1	2	3	4	5
8	Saya berpuas hati bahawa institusi pengajian saya berusaha untuk memastikan kesemua bahan kursus dan penilaian terdapat dalam Bahasa Inggeris.	1	2	3	4	5
9	Saya berpuas hati bahawa institusi pengajian saya mengiktiraf perpindahan kredit di bawah program akademik antarabangsa (contohnya, latihan praktikal, program berkembar).	1	2	3	4	5
10	Bagaimanakah cara untuk kami memperbaiki pengajaran dan kurikulum supaya setanding dengan institusi pengajian antarabangsa yang terkemuka? _____ _____					

BAHAGIAN E

ARAHAN

Soalan yang berikut berkaitan dengan **penyelidikan dan pembangunan** yang dijalankan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Universiti tempatan telah membina reputasi baik dalam penyelidikan dan pembangunan.	1	2	3	4	5
2	Institusi pengajian saya memperuntukkan bajet yang sesuai untuk projek dan kolaborasi antarabangsa.	1	2	3	4	5
3	Institusi pengajian saya mengadakan mesyuarat tahunan peringkat antarabangsa sebagai platform untuk membina jaringan antara universiti tempatan dan luar negara.	1	2	3	4	5
4	Saya berpendapat bahawa penganjuran aktiviti penyelidikan dan jaringan bersama universiti antarabangsa penting untuk institusi pengajian saya.	1	2	3	4	5
5	Saya berpendapat bahawa penganjuran aktivti penyelidikan dan jaringan bersama syarikat multinasional bermanfaat untuk institusi pengajian saya.	1	2	3	4	5
6	Saya mendapat lebih banyak kemahiran dan pengetahuan kesan daripada program penyelidikan dan pembangunan bersama institusi pengajian antarabangsa.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan jaringan antarabangsa dan sokongan kewangan daripada syarikat multinasional untuk projek-projek penyelidikan di institusi pengajian saya.	1	2	3	4	5
8	Saya berpuas hati dengan jaringan antarabangsa dan sokongan kewangan daripada pihak kerajaan untuk projek-projek penyelidikan di institusi pengajian saya.	1	2	3	4	5
9	Saya berpuas hati dengan kemajuan yang dicapai oleh institusi pengajian saya dalam bidang penyelidikan dan pembangunan.	1	2	3	4	5
10	Apakah pendekatan lain yang boleh diambil untuk meningkatkan kolaborasi penyelidikan antarabangsa di Malaysia? _____					

BAHAGIAN F

ARAHAN

Soalan yang berikut berkaitan dengan **urus tadbir dan dasar autonomi** di institusi pengajian anda. *Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.*

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Institusi pengajian saya menggunakan bahasa Inggeris sebagai bahasa pengantar dalam urusan bersama staf dan pelajar (contohnya, e-mel, pengumuman).	1	2	3	4	5
2	Institusi pengajian saya menyokong program pertukaran budaya bersama institusi pengajian luar negara.	1	2	3	4	5
3	Institusi pengajian saya mempunyai pejabat operasi yang menjadi pemudah cara untuk proses kemasukan pelajar antarabangsa.	1	2	3	4	5
4	Saya berpendapat bahawa institusi pengajian saya mesti mempunyai dasar yang sesuai untuk menggalakkan kolaborasi antarabangsa atau projek untuk pelajar antarabangsa.	1	2	3	4	5
5	Saya percaya bahawa institusi pengajian di Malaysia mesti mewujudkan satu majlis/ persatuan yang menjaga kebajikan pelajar antarabangsa.	1	2	3	4	5
6	Saya berpendapat bahawa institusi pengajian saya mesti mengadakan soal selidik tahunan untuk menilai tahap kepuasan pelajar antarabangsa.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan sokongan yang diberikan institusi pengajian saya kepada pelajar yang menyertai projek atau jaringan antarabangsa.	1	2	3	4	5
8	Saya berpuas hati dengan sokongan yang diberikan Kementerian Pendidikan saya kepada pelajar yang menyertai projek atau jaringan antarabangsa.	1	2	3	4	5
9	Saya berpuas hati dengan layanan yang institusi pengajian saya berikan kepada rakan-rakan antarabangsa.	1	2	3	4	5
10	Pada pendapat anda, adakah pelajar antarabangsa menerima layanan yang baik di Malaysia? Sila berikan sebab atas jawapan anda. _____ _____					

BAHAGIAN G

ARAHAN

Soalan yang berikut berkaitan dengan **integrasi sosial dan keterlibatan masyarakat** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ◄				► Sangat Setuju
1	Institusi pengajian saya pernah mengadakan program integrasi sosial dan kebudayaan antara pelajar tempatan dan pelajar antarabangsa.	1	2	3	4	5
2	Institusi pengajian saya sering mengadakan acara yang melibatkan beberapa komuniti tempatan dan pelajar antarabangsa.	1	2	3	4	5
3	Institusi pengajian saya memastikan penglibatan pelajar tempatan dan antarabangsa yang seimbang dalam aktiviti kokurikulum supaya berlaku integrasi/kesepaduan.	1	2	3	4	5
4	Institusi pengajian saya menggalakkan pertukaran pelajar antarabangsa serta khidmat masyarakat di peringkat antarabangsa.	1	2	3	4	5
5	Saya berpendapat bahawa pendidikan tempatan yang saya lalui dapat mempersiapkan diri saya menjadi seorang rakyat di peringkat global.	1	2	3	4	5
6	Saya berpendapat bahawa kehadiran pelajar dan staf antarabangsa menyumbang kepada masyarakat tempatan.	1	2	3	4	5
7	Saya mendapat manfaat dari segi pengatahuan dan kemahiran apabila saya berinteraksi dengan pelajar antarabangsa.	1	2	3	4	5
		Very Dissatified ◄				► Very Satisfied
8	Saya berpuas hati dengan integrasi sosial dan keterlibatan masyarakat antara pelajar antarabangsa dan tempatan anjuran institusi pengajian saya.	1	2	3	4	5
9	Saya berpuas hati dengan penyepaduan pelajar asing dalam masyarakat Malaysia.	1	2	3	4	5
10	Saya berpuas hati dengan kefahaman rakyat Malaysia terhadap agama dan budaya pelajar antarabangsa.	1	2	3	4	5
11	Sejauh manakah pelajar antarabangsa dan pensyarah asing diterima dalam masyarakat Malaysia? Sila berikan sebab kepada jawapan anda. _____ _____					

Terima kasih kerana menjawab borang soal selidik ini.
Bantuan anda dalam kajian penting ini amat dihargai.

Local Student Questionnaire (English)

Official Use – 241019
No respondent:

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA: LOCAL STUDENT PERSPECTIVES

Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 20 minutes to complete. If you have any questions, please contact the following team members.

Note: This project is awarded by the Ministry of Education Malaysia to the International Institute of Public Policy and Management (INPUMA), University of Malaya [Ruj: KPT.600-2/1/7 (19)]

Lead consultant
Professor Dr Shakila Yacob
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Consultants
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Dr. K. Thiruchelvam, kthiru53@gmail.com
Mr Danial Rahman, danial@openlearning.com (Open Learning)

Thank you.

PART A		
INSTRUCTION Please answer the following questions on yourself.		
1	Age	_____
2	Gender	☐ Male ☐ Female
3	Ethnicity	☐ Malay ☐ Chinese ☐ Indian ☐ Others, please specify: _____
4	Name of Institution (e.g., UPM/UCSI)	_____
5	Current education level	☐ Foundation ☐ Diploma ☐ Degree ☐ Master ☐ PhD
6	Program enrolled (e.g. Bachelor of Psychology)	_____
7	How did you know about your Institution?	☐ Online/Institution website ☐ Recommendation from friends, relatives, etc. ☐ Education fair ☐ Recruitment agent ☐ Campaign or promotion carried out by Ministry of Education of Malaysia ☐ Others, please specify: _____

PART B

INSTRUCTION

The questions below pertain to how **students perceive internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
1	Please tell me about the following process upon your acceptance/arrival at your institution.	Strongly Disagree ←				→ Strongly Agree
	(a) My institution provides me with information on accommodation before my arrival.	1	2	3	4	5
	(b) My institution provides me with the orientation programme upon my arrival.	1	2	3	4	5
	(c) My institution provides me with advice on the academic system and programmes upon my arrival.	1	2	3	4	5
2	My institution has international institutional linkages for their students to participate in study abroad programmes (e.g. student exchange, etc).	1	2	3	4	5
3	My institution provides institutional funding for study abroad programmes.	1	2	3	4	5
4	I welcome opportunities to study abroad for short periods.	1	2	3	4	5
5	I feel it is important that my institution provides institutional funding for study abroad programmes.	1	2	3	4	5
6	I feel it is beneficial to welcome international students to study in Malaysia.	1	2	3	4	5
7	I am satisfied with the following provided by my institution	Very Dissatified ←				→ Very Satisfied
	(a) Healthcare	1	2	3	4	5
	(b) Counselling and Welfare	1	2	3	4	5
	(c) Financial Support Services (eg. paying school fees, opening accounts, etc)	1	2	3	4	5
	(d) Admission procedures	1	2	3	4	5
	(e) Facilities and student amenities (e.g. quality classrooms, etc)	1	2	3	4	5
8	It is important for Malaysia to attract top talent to support its economy. Can you recommend ways attract top talent to study in Malaysia? _____ _____					

PART C

INSTRUCTION

The questions below pertain to how the **staff impact internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My lecturers demonstrate high quality teaching comparable to international standards.					
2	My lecturers are good at managing the diversified student body.	1	2	3	4	5
3	My lecturers use English as a medium of instruction during lectures.	1	2	3	4	5
4	The administrative staff in my institution are good at managing a campus environment with different nationalities.	1	2	3	4	5
5	The administrative staff in my institution use English for work-related communication.	1	2	3	4	5
6	I feel it is important that my lecturers are provided with inter-cultural training to manage a diversified student body.	1	2	3	4	5
7	I feel it is important that the administrative staff in my institution are provided with intercultural training to manage different nationalities.	1	2	3	4	5
8	I feel it is beneficial that some of my lecturers are from an international background.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
9	I am satisfied with the international viewpoints and mindsets of my lecturers.	1	2	3	4	5
10	I am satisfied with the English proficiency of the staffs in my institution.	1	2	3	4	5
11	I am satisfied with the teaching quality in my institution.	1	2	3	4	5
12	Do you think we should have more international staff to teach in your programmes? Please provide reasons. _____ _____					

PART D

INSTRUCTION

The questions below pertain to **academic programmes** that are offered in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution provides clear guidelines for students to undertake academic semesters or internship abroad.	1	2	3	4	5
2	My lecturers regularly use international case studies and examples in my classes.	1	2	3	4	5
3	Commitment to international education activities is supported by all members of my institution (e.g. top management, etc).	1	2	3	4	5
4	I believe it is important for my lecturers to actively review curricula content to achieve international standards.	1	2	3	4	5
5	I feel it is beneficial to recruit international experts to be my lecturers or visiting international professors to my institution.	1	2	3	4	5
6	I feel comfortable when my lecturers adapted international content into my courses.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with how my lecturers have incorporated international views and case studies.	1	2	3	4	5
8	I am satisfied that my institution makes an effort to ensure all course materials and assessments are available in English.	1	2	3	4	5
9	I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc).	1	2	3	4	5
10	How do we improve the teaching and curriculum so we can compare to top international institutions? _____ _____					

PART E

INSTRUCTION

The questions below pertain to the **research and development** that is carried out in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	Malaysian universities have established a good reputation for research and development.	1	2	3	4	5
2	My institution allocates adequate budget for international projects and collaborations.	1	2	3	4	5
3	My institution organises international meetings as platforms to network between local and foreign universities on a yearly basis.	1	2	3	4	5
4	I feel it is important to my institution to establish research and networking activities with international universities.	1	2	3	4	5
5	I feel it beneficial for my institution to establish research and networking activities with multinational companies.	1	2	3	4	5
6	I find myself gaining more knowledge and expertise as a result of the research and development programmes with international institutions.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the international networks and funding from multinational companies to support research projects in my institution.	1	2	3	4	5
8	I am satisfied with the international networks and funding from the government to support research projects in my institution.	1	2	3	4	5
9	I am satisfied with the progress made in research and development by my institution.	1	2	3	4	5
10	Are there any other measures that Malaysia can take to increase international research collaborations in Malaysia? _____ _____					

PART F

INSTRUCTION

The questions below pertain to the **governance and autonomy policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution uses English as a form of communication to its students and staff (e.g. emails, announcements, etc).	1	2	3	4	5
2	My institution supports cultural exchange programmes with foreign institutions.	1	2	3	4	5
3	My institution has an operational office which facilitates the admission process of international students.	1	2	3	4	5
4	I feel it is important that my institution have a good policy to encourage international collaborations or projects for students.	1	2	3	4	5
5	I believe it is crucial for Malaysian institutions to provide an association/council which looks into the welfare of international students.	1	2	3	4	5
6	I feel it is important for my institution to conduct yearly surveys to evaluate the satisfaction level of international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the support my institution provides to the students participating in international projects or networking.	1	2	3	4	5
8	I am satisfied with the support the Ministry of Education provides to international students.	1	2	3	4	5
9	I am satisfied that my international friends are well taken care of by my institution.	1	2	3	4	5
10	Do you think Malaysia treat its International students well? Please provide your reasons. _____ _____					

PART G

INSTRUCTION

The questions below pertain to the **social integration and community engagement policy** of your institution.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution organises social and cultural integration programmes between local and international students.	1	2	3	4	5
2	My institution regularly organises events that involve several local communities and international students.	1	2	3	4	5
3	My institution ensures a balance of international and local students in co-curricular activities to ensure integration.	1	2	3	4	5
4	My institution promotes international student exchanges and international community service.	1	2	3	4	5
5	I feel my education in Malaysia sufficiently prepares me as a global citizen (e.g. accept others' cultures, religions, etc).	1	2	3	4	5
6	I feel that international students and staff contribute to the Malaysian community by being here.	1	2	3	4	5
7	I find myself benefiitng in knowledge and skills when I interact with international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with social integration and community engagement programmes between local and international students organised by my institution.	1	2	3	4	5
9	I am satisfied with how international students have been well-integrated into Malaysian society.	1	2	3	4	5
10	I am satisfied with how Malaysians understand international students' cultures and religions.	1	2	3	4	5
11	How well accepted are international students into Malaysian society? Please provide your reasons. _____ _____					

Thank you for completing this questionnaire.
We appreciate your help with this important research.

Local Staff Questionnaire (Bahasa Malaysia)

Kegunaan Pejabat –
261019

TINJAUAN DASAR PENGANTARABANGSAAN PENDIDIKAN TINGGI DI MALAYSIA:
SUDUT PANDANG STAF TEMPATAN

Makluman Ringkas

Terima kasih diucapkan atas penyertaan anda dalam kajian kami. Kajian ini bertujuan untuk meninjau bagaimana institusi pendidikan tinggi (IPT) di Malaysia telah meningkatkan pengantarabangsaan dari segi dasar dan pengamalannya. Oleh itu, penilaian akan dilakukan terhadap enam aspek: mobiliti pelajar, mobiliti staf, program-program akademik, penyelidikan dan pembangunan, tadbir urus dan autonomi serta integrasi sosial dan keterlibatan masyarakat.

Penyertaan anda dalam kajian ini amat penting buat kami. Penyertaan ini bersifat sukarela dan anda berhak untuk menarik diri pada bila-bila masa tanpa tindakan. Jawapan serta identiti anda akan dirahsiakan.

Sila jawab semua soalan dengan jujur. Borang soal selidik yang diberikan akan mengambil masa 20 minit untuk diselesaikan. Jika anda mempunyai sebarang soalan, sila hubungi individu yang berikut.

Nota: Projek ini di bawah Kementerian Pendidikan Malaysia dan kelolaan Institut Antarabangsa Dasar Awam dan Pengurusan (INPUMA), Universiti Malaya [Ruj: KPT.600-2/1/7 (19)]

Perunding utama
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Para perunding
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Dr. K. Thiruchelvam, kthiru53@gmail.com
Encik Danial Rahman, danial@openlearning.com (Open Learning)

Terima kasih.

BAHAGIAN A		
ARAHAN Sila jawab soalan maklumat peribadi yang berikut.		
1	Umur	_____
2	Jantina	☐ Lelaki ☐ Perempuan
3	Kaum	☐ Melayu ☐ Cina ☐ India ☐ Lain-lain, sila nyatakan: _____
4	Nama Institut Pengajian (contohnya, UPM/UCSI)	_____
5	Saya seorang ...	☐ Staf akademik (sila ke soalan 6) ☐ Staf pentadbiran (sila ke soalan 7)
6	Saya sedang mengajar pelajar di peringkat ...	☐ Asasi ☐ Diploma ☐ Ijazah Sarjana Muda ☐ Ijazah Sarjana/Pasca Siswazah
7	Tahap pendidikan tertinggi	☐ SPM ☐ STPM/Diploma ☐ Ijazah Sarjana Muda ☐ Ijazah Sarjana/Pasca Siswazah ☐ Doktor Falsafah ☐ Lain-lain, sila nyatakan: _____
8	Jumlah tahun anda bekerja di institusi pengajian tinggi.	_____

BAHAGIAN B

ARAHAN

Soalan yang berikut berkaitan dengan **pandangan pelajar** di institusi pengajian anda terhadap pengantarabangsaan.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ◄				► Sangat Setuju
1	Institusi pengajian saya mempunyai pautan institusi dan antarabangsa yang baik, untuk pelajar sertai program pengajian di luar negara (cth: program pertukaran pelajar).	1	2	3	4	5
2	Institusi pengajian saya menyediakan dana untuk program pengajian di luar negara.	1	2	3	4	5
3	(a) Menurut kefahaman saya, jumlah pelajar di institusi pengajian saya yang menyertai program pengajian di luar negara telah meningkat.	1	2	3	4	5
	(b) Sila tandakan program yang manakah pelajar anda sertai ketika belajar di luar negara (anda boleh tandakan lebih daripada 1).	☐ Program pengajian luar negara ☐ Latihan praktikal antarabangsa ☐ Penyelidikan di luar negara ☐ Lain-lain, sila nyatakan: _____				
4	(a) Institusi pengajian saya menyediakan program atau servis sokongan yang berkesan untuk pelajar antarabangsa.	1	2	3	4	5
	(b) Sila tandakan program atau servis sokongan yang terdapat di institusi pengajian anda (anda boleh tandakan lebih daripada 1).	☐ Servis sokongan akademik ☐ Kursus orientasi Malaysia dan warga tempatan ☐ Bantuan mencari rumah ☐ Servis alumni antarabangsa ☐ Lain-lain, sila nyatakan: _____				
5	Saya menerima dengan baik peluang pengajian pelajar ke luar negara dalam tempoh yang singkat.	1	2	3	4	5
6	Saya berpendapat bahawa institusi pengajian saya mestilah mendanai pelajar supaya boleh menyertai program luar negara.	1	2	3	4	5
7	Untuk menarik pelajar antarabangsa yang berkebolehan tinggi untuk menyambung pengajian di IPT di Malaysia, negara mestilah menyediakan biasiswa untuk mereka.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ◄				► Sangat Berpuas Hati
8	Saya berpuas hati dengan program pengajian luar negara yang institusi pengajian saya tawarkan.	1	2	3	4	5
9	Saya berpuas hati dengan dana yang disediakan institusi pengajian saya untuk pelajar sertai program pengajian luar negara.	1	2	3	4	5
10	Saya berpuas hati dengan program atau servis sokongan yang ditawarkan institusi saya kepada pelajar antarabangsa.	1	2	3	4	5
11	Adakah penting untuk Malaysia menarik pelajar yang berkebolehan tinggi demi membantu ekonominya? Apakah cara-cara lain yang negara dapat lakukan selain menawarkan biasiswa? _____ _____					

BAHAGIAN C

ARAHAN

Soalan yang berikut berkaitan dengan **impak staf terhadap pengantarabangsaan** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Pensyarah di institusi pengajian saya berpeluang untuk ke luar negara atas urusan sabatikal dan persidangan antarabangsa.	1	2	3	4	5
2	Pensyarah di institusi pengajian saya mempunyai set minda antarabangsa yang sesuai tentang dunia global untuk mengajar dalam universiti abad ke-21.	1	2	3	4	5
3	Pensyarah di institusi pengajian saya mahir menguruskan pelajar yang pelbagai.	1	2	3	4	5
4	Kakitangan pentadbiran di institusi pengajian saya mahir mengurus suasana kampus yang mempunyai pelbagai kerakyatan.	1	2	3	4	5
5	Saya menerima dengan baik rakan sekerja yang pernah menuntut di luar negara atau mempunyai latar belakang antarabangsa.	1	2	3	4	5
6	Rakan sekerja saya menerima dengan baik pensyarah yang berpengalaman mengajar dalam dunia akademik di peringkat antarabangsa.	1	2	3	4	5
7	Saya berpendapat bahawa kursus rentas budaya mesti disediakan untuk pensyarah dan kakitangan pentadbiran demi menguruskan suasana kampus yang mempunyai pelbagai kerakyatan.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
8	Saya berpuas hati dengan cara rakan sekerja antarabangsa berinteraksi dengan saya.	1	2	3	4	5
9	Saya berpuas hati dengan sudut pandang antarabangsa dan set minda rakan sekerja tempatan.	1	2	3	4	5
10	Saya berpuas hati dengan latihan yang diberikan kepada staf akademik dan pentadbiran yang menguruskan pelajar pelbagai kerakyatan di institusi pengajian saya.	1	2	3	4	5
11	Pada pendapat anda, patutkah kita mengambil lebih banyak staf antarabangsa untuk mengajar kursus akademik anda? Sila berikan sebab atas jawapan anda. _____ _____					

BAHAGIAN D

ARAHAN

Soalan yang berikut berkaitan dengan **program akademik** yang ditawarkan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Institusi pengajian saya berusaha untuk menyelaraskan program akademik tempatan untuk mencapai piawaian Badan Pengiktirafan Antarabangsa.	1	2	3	4	5
2	Pensyarah di institusi pengajian saya digalakkan untuk memasukkan perspektif dan bahan antarabangsa dalam pengajaran kursus mereka.	1	2	3	4	5
3	Pihak atasan di institusi pengajian saya menyatakan komitmen yang tinggi terhadap pengantarabangsaan.	1	2	3	4	5
4	Institusi pengajian saya melihat secara positif penyertaan kakitangan fakulti dalam aktiviti antarabangsa.	1	2	3	4	5
5	Saya berpendapat bahawa penggunaan kajian kes dan contoh antarabangsa oleh pensyarah dalam kelas dapat memberikan kesan yang baik.	1	2	3	4	5
6	Saya berpendapat bahawa sokongan dan komitmen daripada semua kakitangan institusi pengajian saya terhadap pendidikan antarabangsa amat penting.	1	2	3	4	5
7	Saya menerima dengan baik kemasukan pensyarah antarabangsa yang lebih banyak atau kedatangan profesor ke institusi pengajian saya.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
8	Saya berpuas hati bahawa institusi pengajian saya berusaha untuk memastikan kesemua bahan kursus dan penilaian terdapat dalam Bahasa Inggeris.	1	2	3	4	5
9	Saya berpuas hati bahawa institusi pengajian saya mengiktiraf perpindahan kredit di bawah program akademik antarabangsa (cth: latihan praktikal, program berkembar).	1	2	3	4	5
10	Saya berpuas hati dengan dana yang ditetapkan institusi pengajian saya untuk aktiviti pengantarabangsaan.	1	2	3	4	5
11	Apakah cara untuk Malaysia menyepadukan perspektif antarabangsa ke dalam program akademik? _____					

BAHAGIAN E

ARAHAN

Soalan yang berikut berkaitan dengan **penyelidikan dan pembangunan** yang dijalankan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Universiti tempatan telah membina reputasi baik dalam penyelidikan dan pembangunan.	1	2	3	4	5
2	Institusi pengajian saya telah mewujudkan jaringan dan aktiviti penyelidikan bersama syarikat multinasional.	1	2	3	4	5
3	Institusi pengajian saya menyediakan lebih banyak dana dan perhatian kepada program berasaskan penyelidikan.	1	2	3	4	5
4	Institusi pengajian saya membina jaringan dan aktiviti penyelidikan bersama universiti antarabangsa.	1	2	3	4	5
5	Saya mendapat lebih banyak kemahiran dan pengetahuan kesan daripada program penyelidikan dan pembangunan bersama institusi pengajian antarabangsa.	1	2	3	4	5
6	Saya berpendapat bahawa Malaysia mesti menjadi pusat penyelidikan dan pembangunan yang baik kerana hal ini meningkatkan reputasi Malaysia.	1	2	3	4	5
7	Saya berpendapat bahawa penganjuran aktiviti penyelidikan dan jaringan bersama syarikat multinasional bermanfaat untuk Institusi pengajian saya.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
8	Saya berpuas hati dengan jaringan antarabangsa dan sokongan kewangan daripada syarikat multinasional untuk projek-projek penyelidikan di institusi pengajian saya.	1	2	3	4	5
9	Saya berpuas hati dengan jaringan antarabangsa dan sokongan kewangan daripada pihak kerajaan untuk projek-projek penyelidikan di institusi pengajian saya.	1	2	3	4	5
10	Saya berpuas hati dengan kemajuan yang dicapai oleh institusi pengajian saya dalam bidang penyelidikan dan pembangunan.	1	2	3	4	5
11	Apakah pendekatan lain yang boleh diambil untuk meningkatkan kolaborasi penyelidikan antarabangsa di Malaysia? _____					

BAHAGIAN F

ARAHAN

Soalan yang berikut berkaitan dengan **urus tadbir dan dasar autonomi** di institusi pengajian anda. *Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.*

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Institusi pengajian saya menggunakan bahasa Inggeris sebagai bahasa pengantar dalam urusan bersama staf dan pelajar (cth: e-mel, pengumuman).	1	2	3	4	5
2	Institusi pengajian saya menyokong program pertukaran budaya bersama institusi pengajian luar negara.	1	2	3	4	5
3	Institusi pengajian saya aktif membina jaringan di peringkat tempatan dan antarabangsa dalam program akademik, penyelidikan dan pembangunan.	1	2	3	4	5
4	Saya berpendapat bahawa institusi pengajian saya mesti mempunyai dasar yang sesuai untuk menggalakkan kolaborasi antarabangsa atau projek untuk pelajar antarabangsa.	1	2	3	4	5
5	Saya percaya bahawa institusi pengajian di Malaysia mesti mewujudkan satu majlis/ persatuan yang menjaga kebajikan pelajar antarabangsa.	1	2	3	4	5
6	Saya berpendapat bahawa institusi pengajian saya mesti mengadakan soal selidik tahunan untuk menilai tahap kepuasan pelajar antarabangsa.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan sokongan yang diberikan *institusi pengajian* saya kepada pelajar yang menyertai projek atau jaringan antarabangsa.	1	2	3	4	5
8	Saya berpuas hati dengan sokongan yang diberikan *Kementerian Pendidikan Malaysia* kepada pelajar yang menyertai projek atau jaringan antarabangsa.	1	2	3	4	5
9	Saya berpuas hati dengan layanan yang institusi pengajian saya berikan kepada rakan-rakan antarabangsa.	1	2	3	4	5
10	Pada pendapat anda, adakah pelajar antarabangsa menerima layanan yang baik di Malaysia? Sila berikan sebab atas jawapan anda. _____ _____					

BAHAGIAN G

ARAHAN

Soalan yang berikut berkaitan dengan **integrasi sosial dan keterlibatan masyarakat** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ◄				► Sangat Setuju
1	Institusi pengajian saya sering mengadakan acara yang melibatkan beberapa komuniti tempatan dan pelajar antarabangsa.	1	2	3	4	5
2	Institusi pengajian saya memastikan penglibatan pelajar tempatan dan antarabangsa yang seimbang dalam aktiviti kokurikulum supaya berlaku integrasi/kesepaduan.	1	2	3	4	5
3	Institusi pengajian saya menggalakkan pertukaran pelajar antarabangsa serta khidmat masyarakat di peringkat antarabangsa.	1	2	3	4	5
4	Saya berpendapat bahawa institusi pengajian saya mesti mempunyai satu pelan komunikasi bersepadu berkaitan pengantarabangsaan (cth: promosi, penjenamaan).	1	2	3	4	5
5	Saya berpendapat bahawa penyertaan pelajar antarabangsa dalam program tempatan sangat penting.	1	2	3	4	5
6	Saya berpendapat bahawa kehadiran pelajar dan staf antarabangsa menyumbang kepada masyarakat tempatan.	1	2	3	4	5
		Very Dissatified ◄				► Very Satisfied
7	Saya berpuas hati dengan integrasi sosial dan keterlibatan masyarakat antara pelajar antarabangsa dan tempatan anjuran institusi pengajian saya.	1	2	3	4	5
8	Saya berpuas hati dengan integrasi sosial dan keterlibatan masyarakat antara staf antarabangsa dan tempatan anjuran institusi pengajian saya.	1	2	3	4	5
9	Saya berpuas hati dengan penyepaduan pelajar dan pensyarah asing dalam masyarakat Malaysia.	1	2	3	4	5
10	Sejauh manakah pelajar antarabangsa dan pensyarah asing diterima dalam masyarakat Malaysia? Sila berikan sebab atas jawapan anda. _____ _____					

Terima kasih kerana menjawab borang soal selidik ini.
Bantuan anda dalam kajian penting ini amat dihargai.

Local Staff Questionnaire (English)

Official Use – 24102019
No respondent:

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA: LOCAL STAFF PERSPECTIVES

Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 20 minutes to complete. If you have any questions, please contact the following team members.

Note: This project is awarded by the Ministry of Education Malaysia to the International Institute of Public Policy and Management (INPUMA), University of Malaya [Ruj: KPT.600-2/1/7 (19)]

Lead consultant
Professor Dr Shakila Yacob
shakila@um.edu.my (University of Malaya)

Consultants
Professor Dr Chan Nee Nee, neenee.chan@qiup.edu.my (Quest International University)
Dr. K. Thiruchelvam, kthiru53@gmail.com
Mr Danial Rahman, danial@openlearning.com (Open Learning)

Thank you.

PART A		
INSTRUCTION Please answer the following questions on yourself.		
1	Age	_____
2	Gender	☐ Male ☐ Female
3	Ethnicity	☐ Malay ☐ Chinese ☐ Indian ☐ Others, please specify: _____
4	Name of Institution (e.g., UPM/UCSI)	_____
5	I am an ...	☐ Academic staff (go to question 6 and continue) ☐ Administrative staff (go to question 6 and continue)
6	I am currently teaching the _____ level.	☐ Foundation ☐ Diploma ☐ Degree ☐ Postgraduate
7	Highest education level	☐ SPM ☐ STPM/Diploma ☐ Degree ☐ Master ☐ PhD
8	How many years have you worked in the Malaysia higher education institution?	_____

PART B

INSTRUCTION

The questions below pertain to how **students perceive internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution has good international, institutional linkages for students to participate in study abroad programmes (e.g. student exchange, etc).	1	2	3	4	5
2	My institution provides institutional funding for study abroad programmes.	1	2	3	4	5
3	(a) To the best of my understanding, the number of students from my institution who participated in education abroad programme has increased.	1	2	3	4	5
	(b) Please indicate which programmes your students participated in when studying abroad (you may tick more than 1).	☐ Study abroad programme ☐ International internships ☐ Research abroad ☐ Others, please specify: _____				
4	(a) My institution offers effective programmes or support services for international students.	1	2	3	4	5
	(b) Please indicate the programmes or support services available at your institution (you may tick more than 1).	☐ Academic support service ☐ Orientation to Malaysia and the local community ☐ Assistance in finding housing ☐ International alumni services ☐ Others, please specify: _____				
5	I welcome opportunities for my students to study abroad for short periods.	1	2	3	4	5
6	I feel it is important for my institution to provide institutional funding to join programmes abroad.	1	2	3	4	5
7	To attract top talent to study in Malaysian higher education institutions, Malaysia must provide scholarships for international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the study abroad programmes offered by my institution to the students.	1	2	3	4	5
9	I am satisfied with the *institutional funding* provided by my institution for the students to join study abroad programmes.	1	2	3	4	5
10	I am satisfied with the programmes or support services offered by my institution to the international students.	1	2	3	4	5
11	It is important for Malaysia to attract top talent to support its economy. What are the measures can Malaysia take besides offering scholarships? _____ _____					

PART C

INSTRUCTION

The questions below pertain to how **staff impact internationalisation** in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	The lecturers at my institution are provided with opportunities to go abroad for sabbaticals and international conferences.	1	2	3	4	5
2	The lecturers in my institution have the right international mindsets of the globalised world to teach in a 21st century university.	1	2	3	4	5
3	The lecturers in my institution are good at managing a diversified student body.	1	2	3	4	5
4	The administrative staff in my institution are good in managing a campus environment with different nationalities.	1	2	3	4	5
5	I welcome my colleagues who have studied abroad or are from an international background.	1	2	3	4	5
6	My colleagues welcome lecturers with international academic teaching experience.	1	2	3	4	5
7	I feel it is important for the lecturers and administrative staffs to be provided with intercultural training to manage a campus environment with diversified nationalities.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with how my international colleagues engage with me.	1	2	3	4	5
9	I am satisfied with the international viewpoints and mindsets of my local colleagues.	1	2	3	4	5
10	I am satisfied with the training given to the academic and administrative staffs handling different nationalities in my institution.	1	2	3	4	5
11	Do you think we should more international staff to teach in your programmes? Please provide reasons. _____ _____					

PART D

INSTRUCTION

The questions below pertain to **academic programmes** that are offered in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution makes efforts to align local academic programmes to meet standards of international accreditation bodies.	1	2	3	4	5
2	The lecturers in my institution are actively encouraged to include international perspectives and content in their courses.	1	2	3	4	5
3	Top management in my institution have expressed a strong commitment to internationalisation.	1	2	3	4	5
4	Participation in international activities by faculty members is viewed positively by my institution.	1	2	3	4	5
5	I feel it is beneficial for the lecturers to regularly use international case studies and examples in classes.	1	2	3	4	5
6	It is important to get support from all member of my institution towards commitment to international education.	1	2	3	4	5
7	I welcome having more international lecturers or visiting professors in my institution.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied that my institution makes an effort to ensure all course materials and assessments are available in English.	1	2	3	4	5
9	I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc).	1	2	3	4	5
10	I am satisfied with the funding allocated from my institution for internationalisation activities.	1	2	3	4	5
11	What are the ways can Malaysia integrate international perspective into the academic programmes? _____ _____					

PART E

INSTRUCTION

The questions below pertain to the **research and development** that is carried out in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.*

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	Malaysian universities have established a good reputation for research and development.	1	2	3	4	5
2	My institution establishes research and networking activities with multinational companies.	1	2	3	4	5
3	My institution provides more funding and focus on research-based programmes.	1	2	3	4	5
4	My institution establishes research and networking activities with international universities.	1	2	3	4	5
5	I find myself gaining more knowledge and expertise as a result of the research and development programmes with international institutions.	1	2	3	4	5
6	It is important for Malaysia to be seen as a R&D centre of excellence as it enhances our reputation.	1	2	3	4	5
7	I feel it is beneficial for my institution to establish research and networking activities with multinational companies.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the international networks and support in funding from multinational companies to support research projects in my institution.	1	2	3	4	5
9	I am satisfied with the international networks and support in funding from the government to support research projects in my institution.	1	2	3	4	5
10	I am satisfied with the progress made in research and development by my institution.	1	2	3	4	5
11	Are there any other measures that Malaysia can take to increase international research collaboration in Malaysia? _____ _____					

PART F

INSTRUCTION

The questions below pertain to the **governance and autonomy policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution uses English as a form of communication to its students and staff (e.g. emails, announcements, etc).	1	2	3	4	5
2	My institution supports cultural exchange programmes with foreign institutions.	1	2	3	4	5
3	My institution actively seeks regional and international networks in academic programmes, research and development.	1	2	3	4	5
4	It is important that my institution has a good policy to encourage international collaborations or projects for international students.	1	2	3	4	5
5	I believe it is crucial for Malaysian institutions to provide an association/council which looks into the welfare of international students.	1	2	3	4	5
6	I feel important for my institution to conduct yearly surveys to evaluate the satisfaction level of international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the support my institution provides to participating students in international projects or networking.	1	2	3	4	5
8	I am satisfied with the support the Ministry of Education provides to participating students in international research, projects or networking.	1	2	3	4	5
9	I am satisfied that my international friends are well taken care of by my institution.	1	2	3	4	5
10	Do you think Malaysia treat International students well? Please provide your reasons. _____ _____					

PART G

INSTRUCTION

The questions below pertain to the **social integration and community engagement policy**.
Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution regularly organises events that involve several local communities and international students.	1	2	3	4	5
2	My institution ensures a balance of international and local students in co-curricular activities to ensure integration.	1	2	3	4	5
3	My institution promotes international student exchanges and international community service.	1	2	3	4	5
4	I think it is important for my institution to have one integrated communication plan on internationalisation (e.g. promotion, branding, etc).	1	2	3	4	5
5	I feel it is important for international students to participate in local programmes.	1	2	3	4	5
6	I feel that international students and staff contribute to the Malaysian community by being here.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with social integration and community engagement programmes between local and international **students** organised by my institution.	1	2	3	4	5
8	I am satisfied with social integration and community engagement programmes between local and international **staffs** organised by my institution.	1	2	3	4	5
9	I am satisfied with how foreign students and lecturers in Malaysia are well-integrated into Malaysian society.	1	2	3	4	5
10	How well accepted are international students and foreign lecturers into Malaysian society? Please provide your reasons. _____ _____					

Thank you for completing this questionnaire.
We appreciate your help with this important research.

Alumni Questionnaire (Bahasa Malaysia)

Kegunaan Pejabat – 261019
Nombor responden:

TINJAUAN DASAR PENGANTARABANGSAAN PENDIDIKAN TINGGI DI MALAYSIA:
SUDUT PANDANG ALUMNI

Makluman Ringkas

Terima kasih diucapkan atas penyertaan anda dalam kajian kami. Kajian ini bertujuan untuk meninjau bagaimana institusi pendidikan tinggi (IPT) di Malaysia telah meningkatkan pengantarabangsaan dari segi dasar dan pengamalannya. Oleh itu, penilaian akan dilakukan terhadap enam aspek: mobiliti pelajar, mobiliti staf, program-program akademik, penyelidikan dan pembangunan, tadbir urus dan autonomi serta integrasi sosial dan keterlibatan masyarakat.

Penyertaan anda dalam kajian ini amat penting buat kami. Penyertaan ini bersifat sukarela dan anda berhak untuk menarik diri pada bila-bila masa tanpa tindakan. Jawapan serta identiti anda akan dirahsiakan.

Sila jawab semua soalan dengan jujur. Borang soal selidik yang diberikan akan mengambil masa 20 minit untuk diselesaikan. Jika anda mempunyai sebarang soalan, sila hubungi individu yang berikut.

Nota: Projek ini di bawah Kementerian Pendidikan Malaysia dan kelolaan Institut Antarabangsa Dasar Awam dan Pengurusan (INPUMA), Universiti Malaya [Ruj: KPT.600-2/1/7 (19)]

Perunding utama
Profesor Dr Shakila Yacob
shakila@um.edu.my (Universiti Malaya)

Para perunding
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Dr. K. Thiruchelvam, kthiru53@gmail.com
Encik Danial Rahman, danial@openlearning.com (Open Learning)

Terima kasih.

BAHAGIAN A		
ARAHAN Sila jawab soalan maklumat peribadi yang berikut.		
1	Umur	_____
2	Jantina	☐ Lelaki ☐ Perempuan
3	Kewarganegaraan	_____
4	(a) Nama Institut Pengajian (contohnya, UPM/UCSI)	_____
	(b) Status	☐ Alumni
5	Tahap pendidikan semasa/Pendidikan tertinggi	☐ Asasi/Matrikulasi/A-Levels ☐ Diploma ☐ Advanced Diploma ☐ Ijazah Sarjana Muda ☐ Ijazah Sarjana/Pasca Siswazah ☐ Doktor Falsafah ☐ Lain-lain, sila nyatakan: _____
6	Program yang didaftarkan (cth: Ijazah Sarjana Muda Psikologi)	_____
7	Bagaimana anda mengetahui tentang institusi anda?	☐ Dalam talian/Laman sesawang rasmi ☐ Disyorkan rakan dan keluarga, dll ☐ Pameran pendidikan ☐ Ejen pengrekutan ☐ Promosi atau kempen anjuran Kementerian Pendidikan Malaysia ☐ Lain-lain, sila nyatakan: _____
8	(a) Selepas saya menamatkan pengajian saya, saya mahu.	☐ Kekal di Malaysia ☐ Berpindah ke negara lain ☐ Lain-lain, sila nyatakan: _____
	(b) Sila terangkan sebab utama jawapan anda kepada soalan 8(a) di atas.	_____ _____

BAHAGIAN B

ARAHAN

Soalan yang berikut berkaitan dengan **pandangan pelajar** di institusi pengajian anda **terhadap pengantarabangsaan**.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda. ***Kaitkan dengan pengalaman anda ketika sedang menuntut di institusi pengajian tinggi dahulu.***

No.	Pernyataan	Respons				
1	Sila nyatakan tentang proses penerimaan/ ketibaan anda di institusi anda	Sangat Tidak Setuju ←				→ Sangat Setuju
	(a) Institusi saya menyediakan maklumat penginapan sebelum ketibaan saya.	1	2	3	4	5
	(b) Institusi saya menyediakan program orientasi semasa ketibaan saya.	1	2	3	4	5
	(c) Institusi saya menyediakan nasihat berkaitan sistem akademik dan program semasa ketibaan saya.	1	2	3	4	5
	(d) Institusi saya membantu dalam proses dan prosedur pemeriksaan kesihatan.	1	2	3	4	5
2	Saya dapati kos sara hidup di Malaysia berpatutan.	1	2	3	4	5
3	Saya berasa selamat di kampus.	1	2	3	4	5
4	Saya berpendapat pelajar antarabangsa diterima dengan baik di Malaysia.	1	2	3	4	5
5	Saya berpendapat pelajar antarabangsa harus diberi keistimewaan selepas tamat pengajian (cth: keistimewaan kediaman, memudahkan proses permit kerja, dll).	1	2	3	4	5
6	Saya berpuas hati dengan perkara berikut yang disediakan kepada pelajar antarabangsa	Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
	(a) Penjagaan kesihatan	1	2	3	4	5
	(b) Kauseling dan kebajikan	1	2	3	4	5
	(c) Perumahan	1	2	3	4	5
	(d) Perkhidmatan sokongan kewangan (cth: membayar yuran pengajian, membuka akaun, menerima wang dari luar negara, dll)	1	2	3	4	5
	(e) Fasiliti dan kemudahan pelajar	1	2	3	4	5
	(f) Prosedur kemasukan	1	2	3	4	5
7	Bolehkah anda memberikan contoh bagaimana sistem Pendidikan Malaysia dapat meningkatkan pengalaman pengajian anda? _____ _____					

BAHAGIAN C

ARAHAN

Soalan yang berikut berkaitan dengan **impak staf terhadap pengantarabangsaan** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Pensyarah saya menunjukkan pengajaran berkualiti tinggi yang setanding dengan piawaian antarabangsa.	1	2	3	4	5
2	Pensyarah saya menggunakan Bahasa Inggeris sebagai medium pengajaran semasa kuliah.	1	2	3	4	5
3	Staf pentadbiran di institusi saya menggunakan Bahasa Inggeris sebagai medium komunikasi dalam urusan kerja.	1	2	3	4	5
4	Staf di institusi saya bagus dalam menguruskan persekitaran kampus yang mempunyai pelbagai kewarganegaraan.	1	2	3	4	5
5	Saya berasa didiskriminasi ketika melanjutkan pengajian di Malaysia.	1	2	3	4	5
6	Saya merasakan penting bagi kakitangan di institusi saya diberi latihan tentang kepelbagaian budaya bagi menguruskan budaya yang berbeza.	1	2	3	4	5
7	Saya berasa bermanfaat untuk sesetengah pensyarah saya mempunyai pengalaman belajar di luar negara atau berlatar belakang antarabangsa.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
8	Saya berpuas hati dengan kemampuan kakitangan di institusi saya dalam berbahasa Inggeris.	1	2	3	4	5
9	Saya berpuas hati dengan kualiti pengajaran di institusi saya.	1	2	3	4	5
10	Saya berpuas hati bagaimana pensyarah saya melibatkan saya dalam pengajaran.	1	2	3	4	5
11	Adakah anda mempunyai pengalaman didiskriminasi semasa belajar di Malaysia? Jika ya, sila terangkan dan nyatakan pihak yang terlibat (cth: rakan-rakan pelajar, kakitangan akademik, kakitangan sokongan universiti, komuniti, dll) yang bertanggungjawab terhadap diskriminasi tersebut. _____ _____					

BAHAGIAN D

ARAHAN

Soalan yang berikut berkaitan dengan **program akademik** yang ditawarkan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda. ***Kaitkan dengan pengalaman anda ketika sedang menuntut di institusi pengajian tinggi dahulu.***

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Pensyarah saya kerap menggunakan contoh-contoh kajian kes antarabangsa semasa di dalam kelas.	1	2	3	4	5
2	Institusi saya berusaha untuk menyelaraskan program akademik tempatan bagi memenuhi piawaian Badan Akreditasi Antarabangsa.	1	2	3	4	5
3	Penyertaan dalam aktiviti antarabangsa dilihat secara positif di institusi saya.	1	2	3	4	5
4	Saya percaya pentingnya untuk pensyarah saya sentiasa menyemak kandungan kurikulum bagi mencapai piawaian antarabangsa.	1	2	3	4	5
5	Saya berpendapat adalah sangat bermanfaat untuk melantik pakar antarabangsa atau Profesor Pelawat Antarabangsa untuk menjadi pensyarah di institusi saya.	1	2	3	4	5
6	Saya berasa tidak selesa apabila pensyarah saya mengadaptasi kandungan antarabangsa ke dalam kursus pengajian.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan usaha pensyarah saya menggabungkan pandangan kajian kes antarabangsa.	1	2	3	4	5
8	Saya berpuas hati institusi saya berusaha untuk memastikan semua bahan kursus dan penilaian tersedia dalam Bahasa Inggeris.	1	2	3	4	5
9	Saya berpuasa hati institusi saya mengiktiraf pemindahan kredit dalam program-program akademik antarabangsa (cth: program pertukaran pelajar, latihan industri di luar negara, dll).	1	2	3	4	5
10	Bagaimanakah cara untuk memperbaiki pengajaran dan kurikulum di Malaysia agar setanding dengan institusi antarabangsa yang terkemuka? _____ _____					

BAHAGIAN E

ARAHAN

Soalan yang berikut berkaitan dengan **penyelidikan dan pembangunan** yang dijalankan di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda. ***Kaitkan dengan pengalaman anda ketika sedang menuntut di institusi pengajian tinggi dahulu.***

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Universiti di Malaysia mempunyai reputasi yang baik dalam penyelidikan dan pembangunan.	1	2	3	4	5
2	Institusi saya telah menubuhkan perjanjian penyelidikan dan pembangunan antarabangsa untuk penempatan sementara pelajar.	1	2	3	4	5
3	Institusi saya mempunyai bajet yang mencukupi untuk projek kerjasama antarabangsa.	1	2	3	4	5
4	Saya berpendapat adalah penting bagi institusi saya untuk membuat aktiviti penyelidikan dan rangkaian dengan universiti antarabangsa.	1	2	3	4	5
5	Saya berpendapat adalah bermanfaat kepada institusi saya untuk menubuhkan aktiviti penyelidikan dan laman rangkaian dengan syarikat multinasional.	1	2	3	4	5
6	Saya mendapati diri saya memperoleh lebih banyak pengetahuan dan kepakaran hasil daripada program penyelidikan dan pembangunan dengan institusi antarabangsa.	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan rangkaian dan pembiayaan antarabangsa daripada kerajaan untuk menyokong projek penyelidikan.	1	2	3	4	5
8	Saya berpuas hati dengan kemajuan dalam penyelidikan dan pembangunan di institusi saya.	1	2	3	4	5
9	Saya berpuas hati dengan peluang penyelidikan dan pembangunan yang diberikan kepada pelajar antarabangsa.	1	2	3	4	5
10	Adakah terdapat langkah-langkah lain yang boleh diambil oleh Malaysia untuk meningkatkan kerjasama penyelidikan antarabangsa di Malaysia? _____					

BAHAGIAN F

ARAHAN

Soalan yang berikut berkaitan dengan **urus tadbir dan dasar autonomi** di institusi pengajian anda. *Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda.* ***Kaitkan dengan pengalaman anda ketika sedang menuntut di institusi pengajian tinggi dahulu.***

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ←				→ Sangat Setuju
1	Institusi saya menggunakan Bahasa Inggeris sebagai medium komunikasi antara pelajar dan kakitangannya (cth: emel, pengumuman, dll).	1	2	3	4	5
2	Institusi saya mempunyai program asasi/ program persediaan untuk orientasi pelajar baru antarabangsa yang belajar di Malaysia.	1	2	3	4	5
3	Institusi saya mempunyai pejabat operasi yang memudahkan proses kemasukan pelajar antarabangsa.	1	2	3	4	5
4	Saya berpendapat adalah penting bagi institusi saya untuk mempunyai dasar yang baik bagi menggalakkan kerjasama antarabangsa untuk pelajar.	1	2	3	4	5
5	Saya berpendapat adalah penting bagi institusi Malaysia untuk menyediakan persatuan/ pertubuhan kebajikan pelajar antarabangsa.	1	2	3	4	5
6	Saya rasa penting bagi institusi saya menjalankan kajian tahunan untuk menilai tahap kepuasan pelajar antarabangsa	1	2	3	4	5
		Sangat Tidak Berpuas Hati ←				→ Sangat Berpuas Hati
7	Saya berpuas hati dengan sokongan yang diberikan oleh institusi saya kepada pelajar yang mengambil bahagian dalam projek antarabangsa.	1	2	3	4	5
8	Saya berpuas hati dengan sokongan yang diberikan oleh Kementerian Pelajaran kepada pelajar antarabangsa.	1	2	3	4	5
9	Saya berpuas hati rakan-rakan antarabangsa saya dijaga dengan baik oleh institusi saya.	1	2	3	4	5
10	Adakah anda berpendapat bahawa Malaysia menjaga pelajar antarabangsa dengan baik? Sila jelaskan pendapat anda. _____ _____					

BAHAGIAN G

ARAHAN

Soalan yang berikut berkaitan dengan **integrasi sosial dan keterlibatan masyarakat** di institusi pengajian anda.

Sila baca setiap pernyataan dan bulatkan angka yang menandakan tahap kebenaran pernyataan tersebut serta tahap persetujuan anda. ***Kaitkan dengan pengalaman anda ketika sedang menuntut di institusi pengajian tinggi dahulu.***

No.	Pernyataan	Respons				
		Sangat Tidak Setuju ◄——► Sangat Setuju				
1	Institusi saya menganjurkan program integrasi sosial dan budaya antara pelajar tempatan dan antarabangsa.	1	2	3	4	5
2	Institusi saya kerap menganjurkan acara yang melibatkan komuniti tempatan dan pelajar antarabangsa.	1	2	3	4	5
3	Institusi saya mempromosikan pertukaran pelajar dan khidmat komuniti antarabangsa.	1	2	3	4	5
4	Semasa dalam pengajian, saya percaya bahawa saya telah memberi sumbangan kepada masyarakat Malaysia.	1	2	3	4	5
5	Saya merasakan adalah penting bagi institusi saya untuk mempunyai perancangan komunikasi bersepadu mengenai pengantarabangsaan (contohnya, promosi, penjenamaan, dll).	1	2	3	4	5
6	Saya percaya bahawa interaksi antara pelajar tempatan dan antarabangsa dapat meningkatkan pengetahuan dan kemahiran.	1	2	3	4	5
		Very Dissatified ◄——► Very Satisfied				
7	Saya berpuas hati dengan integrasi baik antara pelajar antarabangsa dan masyarakat Malaysia.	1	2	3	4	5
8	Saya berpuas hati dengan integrasi sosial dan program penglibatan masyarakat antara pelajar tempatan dan antarabangsa yang dianjurkan oleh institusi saya.	1	2	3	4	5
9	Saya berpuas hati dengan pelajar tempatan dan antarabangsa yang sentiasa menghormati budaya dan agama saya.	1	2	3	4	5
10	Adakah anda akan mengesyorkan pelajar lain untuk belajar di Malaysia? Sila jelaskan pendapat anda. _____ _____					

Terima kasih kerana menjawab borang soal selidik ini.
Bantuan anda dalam kajian penting ini amat dihargai.

Alumni Questionnaire (English)

Official Use – 261019
No respondent:

REVIEW OF THE INTERNATIONALISATION POLICY OF HIGHER EDUCATION IN MALAYSIA: ALUMNI PERSPECTIVES

Briefing Statement

Thank you for participating in this study to review how higher education institutions (HEI) in Malaysia have become more internationalised in its policies and practices. Six areas are evaluated: student mobility, staff mobility, academic programmes, research and development, governance and autonomy and social integration and community engagement.

Your participation in this survey is very important. Your participation is completely voluntary and you have the right to withdraw at any point without penalty. Your answers will be kept confidential and anonymous.

Do answer all the questions as honestly as you can. The questionnaire will take approximately 20 minutes to complete. If you have any questions, please contact the following team members.

Note: This project is awarded by the Ministry of Education Malaysia to the International Institute of Public Policy and Management (INPUMA), University of Malaya [Ruj: KPT.600-2/1/7 (19)]

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Thank you.

PART A		
INSTRUCTION Please answer the following questions on yourself.		
1	Age	_____
2	Gender	☐ Male ☐ Female
3	Nationality	_____
4	(a) Name of previous Institution (e.g., UPM/UCSI)	_____
	(b) Status	☐ Alumni
5	Current/Highest education level	☐ Foundation/Matriculation/A-Levels ☐ Diploma ☐ Advanced Diploma ☐ Bachelor ☐ Master ☐ PhD ☐ Others, please specify: _____
6	Program enrolled (e.g., Bachelor of Psychology)	_____
7	How did you know about your Institution?	☐ Online/Institution website ☐ Recommendation from friends, relatives, etc. ☐ Education fair ☐ Recruitment agent ☐ Campaign or promotion carried out by Malaysian Government/ Ministry of Education of Malaysia ☐ Others, please specify: _____
8	(a) After I completed my studies, I would have liked to ...	☐ Remain in Malaysia ☐ Move on to another country ☐ Others, please specify: _____
	(b) Please explain the main reason for your answer to Question 8(a) above	_____ _____

PART B

INSTRUCTION

The questions below pertain to how **students perceive internationalisation** in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.* ***Kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
1	Please tell me about the following process upon your acceptance/arrival at your institution.	Strongly Disagree ←				→ Strongly Agree
	(a) My institution provides me with information on accommodation before my arrival.	1	2	3	4	5
	(b) My institution provides me with the orientation programme upon my arrival.	1	2	3	4	5
	(c) My institution provides me advice on the academic system and programmes upon my arrival.	1	2	3	4	5
	(d) My institution guides me with the health check processes and procedures.	1	2	3	4	5
2	I find the cost of living in Malaysia is manageable.	1	2	3	4	5
3	I feel safe on campus.	1	2	3	4	5
4	I feel welcomed as an international student studying in Malaysia.	1	2	3	4	5
5	I feel international students should be rewarded with special privileges after graduation (e.g. residential privileges, easy processing of work permits, etc).	1	2	3	4	5
6	I am satisfied with the following provided to an international student:	Very Dissatified ←				→ Very Satisfied
	(a) Healthcare	1	2	3	4	5
	(b) Counselling and welfare	1	2	3	4	5
	(c) Housing	1	2	3	4	5
	(d) Financial support services (e.g. paying school fees, opening accounts, receiving money from abroad, etc)	1	2	3	4	5
	(e) Facilities and student amenities	1	2	3	4	5
	(f) Admission procedures	1	2	3	4	5
7	Can you please provide examples of how the Malaysia education system can improve your international student experience? _____ _____					

PART C

INSTRUCTION

The questions below pertain to how **staff impact internationalisation** in your institution.

Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it. ***Kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My lecturers demonstrate high quality teaching comparable to international standards.	1	2	3	4	5
2	My lecturers use English as a medium of instruction during lectures.	1	2	3	4	5
3	The administrative staff in my institution use English for work-related communication.	1	2	3	4	5
4	The staffs in my institution are good at managing a campus environment with different nationalities.	1	2	3	4	5
5	I feel I am discriminated against when pursuing my studies in Malaysia.	1	2	3	4	5
6	I feel it is important that my institution's staffs are provided with intercultural training to manage different nationalities.	1	2	3	4	5
7	I feel it is beneficial that some of my lecturers studied abroad or are from an international background.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
8	I am satisfied with the English proficiency of the staffs in my institution.	1	2	3	4	5
9	I am satisfied with the teaching quality in my institution.	1	2	3	4	5
10	I am satisfied with how my lecturers engage with me.	1	2	3	4	5
11	Have you encountered any discrimination when you are/ were in Malaysia? If yes, please state the parties (e.g. fellow students, academic staff, university support staff, community, etc.) responsible for the discrimination. Please give examples. _____ _____					

PART D

INSTRUCTION

The questions below pertain to **academic programmes** that are offered in your institution.
Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it. ***Kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My lecturers regularly use international case studies and examples in my classes.	1	2	3	4	5
2	My institution makes efforts to align local academic programmes to meet standards of international accreditation bodies.	1	2	3	4	5
3	Participation in international activities is viewed positively by my institution.	1	2	3	4	5
4	I believe it is important for my lecturers to actively review curricular content to achieve international standards.	1	2	3	4	5
5	I feel it is beneficial to recruit international experts to be my lecturers or visiting international professors to my institution.	1	2	3	4	5
6	I feel uncomfortable when my lecturers adapted international content into my courses.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with how my lecturers have incorporated international views and case studies.	1	2	3	4	5
8	I am satisfied that my institution makes an effort to ensure all course materials and assessments are available in English.	1	2	3	4	5
9	I am satisfied that my institution recognises credit transfer in international academic programmes (e.g. twinning programmes, internships, etc).	1	2	3	4	5
10	How can the teaching and curriculum be improved in order to compete with top international institutions? _____ _____					

PART E

INSTRUCTION

The questions below pertain to the **research and development** that is carried out in your institution. *Read each statement and circle on the number that best describes how true that statement is for you or how much you agree with it.* ***If you are responding as an Alumni, kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	Malaysian universities have established a good reputation for research and development.	1	2	3	4	5
2	My institution has established international agreements on research and development for student attachments.	1	2	3	4	5
3	My institution allocates adequate budget for international projects and collaborations.	1	2	3	4	5
4	I feel it important for my institution to establish research and networking activities with international universities.	1	2	3	4	5
5	I feel it beneficial for my institution to establish research and networking activities with multinational companies.	1	2	3	4	5
6	I find myself gaining more knowledge and expertise as a result of the research and development programmes with international institutions.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the international networks and funding from the government to support research projects.	1	2	3	4	5
8	I am satisfied with the progress made in research and development by my institution.	1	2	3	4	5
9	I am satisfied with the research and development opportunities given to international students.	1	2	3	4	5
10	Are there any other measures that Malaysia can take to increase international research collaboration in Malaysia? _____ _____					

PART F

INSTRUCTION

The questions below pertain to the **governance and autonomy policy**.

Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it. ***If you are responding as an Alumni, kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution uses English as a form of communication to its students and staff (e.g. emails, announcements, etc).	1	2	3	4	5
2	My institution has a good foundation/preparatory programme to orientate new International students studying in Malaysia.	1	2	3	4	5
3	My institution has an operational office which facilitates the admission process of international students.	1	2	3	4	5
4	I feel it is important that my institution have a good policy to encourage international collaborations or projects for students.	1	2	3	4	5
5	I believe it is crucial for Malaysian institutions to provide an association/council which looks into the welfare of international students.	1	2	3	4	5
6	I feel it is important for my institution to conduct yearly surveys to evaluate the satisfaction level of international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with the support my institution provides to the students participating in international projects or networking.	1	2	3	4	5
8	I am satisfied with the support the Ministry of Education provides to international students.	1	2	3	4	5
9	I am satisfied that my international friends and I are well taken care by my institution.	1	2	3	4	5
10	Do you think Malaysia treat its International students well? Please provide your reasons. _____ _____					

PART G

INSTRUCTION

The questions below pertain to the **social integration and community engagement policy**. *Read each statement and circle the number that best describes how true that statement is for you or how much you agree with it.* ***If you are responding as an Alumni, kindly reflect upon your time when you were studying at your higher education institution.***

No.	Statement	Response				
		Strongly Disagree ←				→ Strongly Agree
1	My institution organises social and cultural integration programmes between local and international students.	1	2	3	4	5
2	My institution regularly organises events that involve several local communities and international students.	1	2	3	4	5
3	My institution promotes international student exchanges and international community service.	1	2	3	4	5
4	I feel a sense of contribution to the Malaysian community by being here.	1	2	3	4	5
5	I feel it is important for my institution to have one integrated communication plan on internationalisation (e.g. promotion, branding, etc).	1	2	3	4	5
6	I find myself benefiting in knowledge and skills when I interact with local and international students.	1	2	3	4	5
		Very Dissatified ←				→ Very Satisfied
7	I am satisfied with how international students have been well-integrated into Malaysian society.	1	2	3	4	5
8	I am satisfied with social integration and community engagement programmes between local and international students organised by my institution.	1	2	3	4	5
9	I am satisfied with how local and international students understand my culture and religion.	1	2	3	4	5
10	Would you recommend others to study in Malaysia? Please provide your reasons. _____ _____					

Thank you for completing this questionnaire.
We appreciate your help with this important research.

NOTES

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