



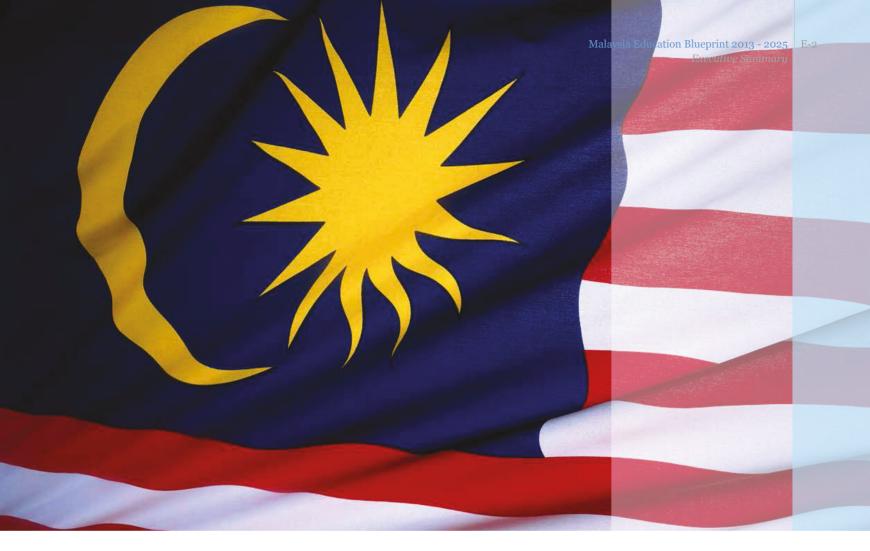
Executive Summary Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)





Executive Summary

In October 2011, the Ministry of Education launched a comprehensive review of the education system in Malaysia in order to develop a new National Education Blueprint. The decision was made in the context of raising international education standards, the Government's aspiration of better preparing Malaysia's children for the needs of the 21st century, and increased public and parental expectations of education policy. Over the course of 15 months (October 2011 to December 2012), the Ministry drew on many sources of input, from education experts at UNESCO, World Bank, OECD, and six local universities, to principals, teachers, parents, students, and other members of the public from every state in Malaysia. The result is a Malaysia Education Blueprint that evaluates the performance of current Malaysia's education system with considerations of historical starting points against international benchmarks. The Blueprint also offers a vision of the education system and student aspirations that Malaysia both needs and deserves, and suggests 11 strategic and operational shifts that would be required to achieve that vision.



Education plays a central role in any country's pursuit of economic growth and national development. There is no better predictor of a nation's future than what is currently happening in its classrooms. In today's global economy, a nation's success depends fundamentally on the knowledge, skills, and competencies of its people. It is no surprise that nations with higher education levels tend to enjoy greater economic prosperity. Education is also fundamental to nation building and unity. It provides individuals with the opportunity to improve their lives, become successful members of the community, and active contributors to national development. Through interacting with individuals from a range of socio-economic, religious, and ethnic backgrounds—and learning to understand, accept, and embrace differences—a shared set of experiences and aspirations for Malaysia's future can be built. It is through these shared experiences and aspirations that a common national identity and unity is fostered.

In recent years, the Malaysian education system has come under increased public scrutiny and debate, as parents' expectations rise and employers voice their concern regarding the system's ability to adequately prepare young Malaysians for the challenges of the 21st century. Given the nature of the education system, it will take several years for fundamental changes to be felt. This makes the need for ambitious actions now both important and urgent.

OBJECTIVES AND APPROACH OF THE REVIEW

This Education Blueprint (Blueprint) is the result of extensive research and public engagement carried out by the Ministry of Education (Ministry). The Blueprint was developed with three specific objectives:

- 1. Understanding the current performance and challenges of the Malaysian education system, with a focus on improving access to education, raising standards (quality), closing achievement gaps (equity), fostering unity amongst students, and maximising system efficiency;
- **2. Establishing a clear vision and aspirations** for individual students and the education system as a whole over the next 13 years; and
- **3. Outlining a comprehensive transformation programme for the system, including key changes to the Ministry** which will allow it to meet new demands and rising expectations, and to ignite and support overall civil service transformation.

The approach to this Blueprint was ground-breaking in many ways. Multiple perspectives were gathered from various experts and international agencies to evaluate and assess the performance of Malaysia's education system. These included the World Bank, the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), the Organisation for Economic Co-operation and Development (OECD), and six local universities. The Ministry also worked with other government agencies to ensure alignment with other public policies related to education. For example, the Ministry has worked closely with the Performance Management and Delivery Unit (PEMANDU) to develop the Government Transformation Programme (GTP)2.0 initiatives on education so they reflect the priority reforms in the Blueprint from 2013 to 2015.

Furthermore, the Ministry engaged with the *rakyat* on a scale never seen before. Over the course of a year, over 55,000

Ministry officials, teachers, school leaders, parents, students, and members of the public across Malaysia, were engaged via interviews, focus groups, surveys, National Dialogue townhalls, Open Days and roundtable discussions. More than 200 memorandums were submitted to the Ministry and over 3000 articles and blog posts were written on the issues raised in the Blueprint. The Ministry also appointed a 12-member Malaysian panel of experts, and a 4-member international panel of experts to provide independent input into the review findings.



SIGNIFICANT AND SUSTAINED DRAMATIC PROGRESS ON INVESTMENTS IN EDUCATION

The support and resources that a system provides to schools play a critical role in how schools perform as they enable teachers and principals to focus on their core business of delivering effective teaching and learning. A country's investment in its education system is therefore an important measure of its commitment.

The Malaysian Government has sustained high levels of investment in education over the 55 years since independence. As early as 1980, the Malaysian federal government's spending on primary and secondary education, as a percentage of Gross Domestic Product (GDP), was the highest in East Asia. In 2011, the amount spent, at 3.8% of GDP or 16% of total government spending, was not only higher than the OECD average of 3.4% of GDP and 8.7% of total public spending respectively, but also at par with or more than top-performing systems like Singapore, Japan, and South Korea (Exhibit 1). In 2012, with an education budget of RM36 billion, the Government has continued to devote the largest proportion of its budget, 16% to the Ministry. This demonstrates the very real commitment the Government has to education as a national priority.

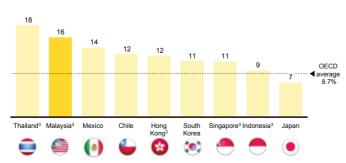
IMPROVING ACCESS TO EDUCATION

The education system has made tremendous progress since 1957. At the time of Independence, over half the population had no formal schooling, while only 6% of Malaysian children had been educated to secondary level, and a paltry 1% to the post-secondary level. Five and a half decades later, access to education has been transformed beyond recognition.

In 2011, Malaysia had achieved near universal enrolment at the primary level at 94%, and the percentage of students who dropped out of primary school had been significantly reduced (from 3% in 1989 to just 0.2% in 2011). Enrolment rates at the lower secondary level (Form 1 to 3) had risen to 87%. The greatest improvement was undoubtedly at upper secondary level (Form 4 to 5), where enrolment rates had almost doubled, from 45% in the 1980s, to 78% in 2011. These enrolment rates are even higher once enrolment in private schools is factored in: 96% at primary, 91% at lower secondary, and 82% at upper secondary level. These rates are higher than most developing countries, although they are still lower than that of high-performing education systems like

EXHIBIT 1

Percent (2008)



Basic education expenditure¹ as a percentage of total government

1 Includes operating expenditure and capital/development expenditure for basic education (primary and secondary) 2 Peers based on the following categorisation: Asian Tigers (Hong Kong, Singapore, S. Korea, Japan); SEA neighbours (Indonesia Thailand, Singapore), and comparable GDP per capita (Mexico and Chile) 3 Data for 2010

Note: Data from 2008 or 2010 depending on latest available data

expenditure for Malaysia and peers²

SOURCE: Ministry of Education Malaysia; OECD – Education at a Glance 2011; Singstat; Ministry of Finance Thailand; Ministry of Finance Indonesia; Education Bureau of Hong Kong.



Singapore and South Korea. In parallel, there has been rapid expansion in preschool education. Around 77% of students are now enrolled in some form of preschool education (either public or private), and the target is for universal enrolment through the Education National Key Results Area (NKRA) in the GTP.

The significant improvement in access to education is echoed by a similar improvement in attainment. Youth literacy has risen from 88% in 1980 to near-universal literacy of 99% today, while adult literacy has increased even more dramatically, from less than 70% to over 92% in the same time frame. Further, the proportion of the adult population (aged 15+) with no schooling has declined, from 60% in 1950 to less than 10% in 2010, while the proportion (aged 15+) that has completed secondary education has risen from around 7% in 1950 to almost 75% over the same time period (Exhibit 2). These are achievements of which Malaysia can be proud.

EXHIBIT 2

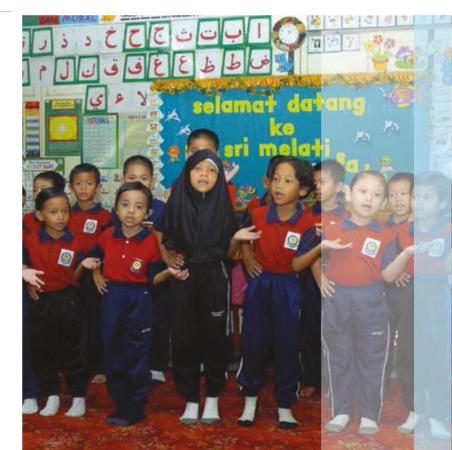


Highest educational attainment of population aged 15 and above

SOURCE: Barro and Lee, 2010 (Eurostat, UN)

SYSTEM REMAINS COMMITTED TO DEVELOPING STUDENTS HOLISTICALLY

The Malaysian school curriculum is committed to developing the child holistically along intellectual, spiritual, emotional, and physical dimensions, as reflected in the National Education Philosophy. Programmes and initiatives to develop non-academic components are present both during formal class time as well as through a variety of after-school cocurricular activities. For example, Islamic Education or Moral Education is compulsory for all students from Year 1 through to Form 5. The Ministry also has a requirement that every student participate in at least one sport, one club, and one uniformed body activity as a means of fostering individual talents and interests, along with building leadership skills. Available data suggests that student enrolment in such cocurricular activities is high.





The National Education Philosophy

The National Education Philosophy for Malaysia, written in 1988 and revised in 1996, enshrines the Ministry's and Government's vision of education as a means for the holistic development of all children: intellectually, spiritually, emotionally, and physically.

"Education in Malaysia is an ongoing effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving high levels of personal wellbeing as well as being able to contribute to the harmony and betterment of the family, the society, and the nation at large."

STUDENT COGNITIVE PERFORMANCE AGAINST INTERNATIONAL STANDARDS

A fundamental objective of any education system is to ensure that its students are being equipped with the knowledge and skills required for success in life. Historically, the Malaysian education system, like others around the world, has emphasised the development of strong content knowledge in subjects such as Science, Mathematics, and languages. There is, however, increasing global recognition that it is no longer enough for a student to leave school with the three Rs (Reading, wRiting & aRithmetic). The emphasis is no longer just on the importance of knowledge, but also on developing higher-order thinking skills.

While Malaysian student performance has improved over several decades, those remarkable gains may be at risk in both relative and absolute terms. Firstly, other systems are improving student performance more rapidly, and have found ways to sustain that momentum. The gap between Malaysia's system and these others is therefore growing. Secondly, international assessments suggest that Malaysian student performance is declining in absolute terms.

Over the past two decades, international student assessments, such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS), have emerged as a means of directly comparing the quality of educational outcomes across different systems. These assess a variety of cognitive skills such as application and reasoning.

When Malaysia first participated in TIMSS in 1999, its average student score was higher than the international average in both Mathematics and Science. By 2011, the last published cycle of results, the system's performance had slipped to below the international average in both Mathematics and Science with a commensurate drop in ranking. Critically, 35% and 38% of Malaysia's students failed to meet the minimum proficiency levels in Mathematics and Science in 2011, a two to fourfold up from 7% and 13% respectively in 1999. These students were identified as possessing only limited mastery of basic mathematical and scientific concepts.

The results from PISA 2009+ (the first time Malaysia participated in this assessment) were also discouraging, with Malaysia ranking in the bottom third of 74 participating countries, below the international and OECD average (Exhibit 3). Almost 60% of the 15-year-old Malaysian students who participated in PISA failed to meet the minimum proficiency level in Mathematics, while 44% and 43% did not meet the minimum proficiency levels in Reading and Science respectively. A difference of 38 points on the PISA scale is equivalent to one year of schooling (a comparison of scores shows that 15-year-olds in Singapore, South Korea, Hong Kong and Shanghai are performing as though they have had three or more years of schooling than 15-year-olds in Malaysia).



EXCELLENT EXAMPLES EXIST ACROSS THE SYSTEM

While the most recent TIMSS and PISA results are a cause for concern, there are still numerous instances of students and schools across Malaysia that are performing on a level comparable to international standards, in terms of both academic and non-academic measures. Exhibit 4 offers a snapshot of some of these achievements. The Ministry also has awarded 91 schools with the designation of being a High Performing School (HPS). These are the best schools in Malaysia that have a distinctive character, consistently produce excellent academic and non-academic student outcomes, and are capable of competing internationally.

The system also has examples of schools, districts, and states that are improving at an unprecedented pace. For example, five years ago, Johor was one of the bottom five states in its performance on the Year 6 Primary School Evaluation Test or *Ujian Pencapaian Sekolah Rendah* (UPSR) national examination. The state launched a comprehensive school improvement programme and was able to turn its performance around in just five years. Johor is now in the top third of all states in terms of student performance. Similarly, there are remote schools, like SK Ulu Lubai and SK Bakalalan in Sarawak, both of which are in low-income communities, that have swept Commonwealth Good Practice Awards for their impressive turnaround efforts. This suggests that there are opportunities to learn from these examples, and scale up good practices to the rest of the system.

Regional peers

EXHIBIT 3

Comparison of Malaysia's PISA 2009+ ranking against other countries

1 Rea	ading			
Rank	Country	Mean score		
1	Shanghai-China	556		
2	South Korea 539			
3	Finland 536			
4	Hong Kong 533			
5	Singapore 526			
26	Hungary	494		
	OECD Average			
27	Portugal :	497		
42	Russian Fed.	459		
	International Average			
43	Chile :	449		
52	Thailand :	421		
54	MALAYSIA	414		
61	: Indonesia	402		

2 Mat	thematics	
Rank	Country	Mean score
1	Shanghai-China	600
2	Singapore	562
3	Hong Kong	555
4	South Korea	546
5	Chinese Taipei	543
24	Austria	496
	OECD Average	
25	Poland :	495
41	Croatia	460
	International Average	
42	Israel :	447
52	Thailand	419
	÷	
57	MALAYSIA	404
67	: Indonesia	371

3 Science Mean Country Rank score 1 Shanghai-China 575 2 Finland 554 3 549 Hong Kong 4 Singapore 542 5 Japan 539 United States 20 502 **OECD Average** Republik Czech 21 500 40 Greece 470 **International Average** 41 Malta 461 : 51 Thailand 425 **52** MALAYSIA 422 65 383 Indonesia

SOURCE: PISA 2009+



TIMSS and PISA International Assessments

TIMSS is an international assessment based on the Mathematics and Science curricula of schools around the world. It assesses students in Grades 4 (the Malaysian equivalent is Year 4) and 8 (the Malaysian equivalent is Form 2) along two aspects: content such as algebra and geometry, and cognitive skills, namely the thinking processes of knowing, applying, and reasoning. The test was first administered in 1995. Today, over 59 countries participate in the assessment which is conducted every four years. Malaysia has participated in TIMSS since 1999, although only with Form 2 students.

PISA, coordinated by the OECD, is another widely recognised international assessment. Conducted every three years, PISA aims to evaluate proficiency in Reading, Mathematics and Science in students aged 15 years old. Its focus is not on curriculum content, but on students' ability to apply their knowledge in real-world settings. Participant countries extend beyond OECD members, with 74 countries taking part in the most recent assessment in 2009. Malaysia participated for the first time in 2010, as part of the 2009 PISA assessment cycle.

CHALLENGES REMAIN IN ACHIEVING EQUITABLE STUDENT OUTCOMES

An equally important objective for the system is to ensure that student outcomes are equitable. Unfortunately, to date, the outcomes have been uneven. States with a higher proportion of rural schools, like Sabah and Sarawak, on average, perform poorer than states with less rural schools. In the UPSR examinations, the gap between urban and rural schools is 4 percentage points in favour of urban schools. In the Malaysian Certificate of Education or *Sijil Pelajaran Malaysia* (SPM), the gap has grown to 8 percentage points. Both these gaps, however, have reduced by 5 and 2 percentage points respectively over the past six years.

The UPSR achievement gap between National and Nationaltype primary schools is also closing. The difference between National schools or *Sekolah Kebangsaan* (SK) and Nationaltype Chinese schools or *Sekolah Jenis Kebangsaan Cina* (SJKC) is insignificant. Over the past five years, National-type Tamil schools or *Sekolah Jenis Kebangsaan Tamil* (SJKT) have more than halved the gap between themselves and both SJKC and SK, and are now less than 4 percentage points behind.

In contrast, the gender gap is both significant and increasing, having widened over the last five years. Girls consistently outperform boys at every level; the gap in performance is already evident at UPSR level and increases over a student's lifetime up to university level, where females comprise approximately 70% of the cohort. While this phenomenon is not unique to Malaysia, it does require attention to ensure that the country does not have a cohort of "lost boys" who either leave school early or with low attainment levels.

Examples of Malaysian students' international achievements

No 201	Wohu Robot Olympiau (WRO 2012), Walaysia
յլ 201	o international Exhibition for roung inventors, manana including advisarile and world Ook including invention
	Genius Olympiad 2012 International High School Project Fair on Environment, New York, USA Two 14-year old students bagged third prize in the competition
	2nd International Folk Song and Dance Festival, Georgia, USA The Malaysian team of 15 performers won the Gold and Silver Diploma prizes
	Sth Asian Schools Badminton Championship, Hong Kong The Malaysian team of 16 players won 3 Gold medal, 4 Silver, and 9 Bronze medals
Jun 2012	The Invention and New Product Exposition, USA The Malaysian team won a Gold model in the category of education inventions
	4 th ASEAN School Games, Indonesia The Malaysian team of 200 athletes bagged a total of 100 medals, claiming the third spot overall
May 2012	English Speaking Union International Public A 17-year-old emerged as the first Malaysian champion Speaking Competition, London, UK
Oct 2011	ASEAN Primary School Sports Olympiad, Indonesia The Malaysia team of 36 students clinched second place overall, winning a total of 6 Gold, 2 Silver and 3 Bronze medals
Jul 2011	52nd International Mathematical Olympiad, Netherlands A Form 4 student clinched the first Gold medal for Malaysia. Another 4 students attained commendable results
	42 nd International Physics Olympiad, Thailand A Malaysian student attained a Gold medal and special prize awarded by the European Physics Society
	International Competitions and Assessments for Schools (ICAS) ¹ The Malaysian team emerged as champions for 2 consecutive years – 2009 in Pohang, South Korea and 2010 in Manila, Philippines

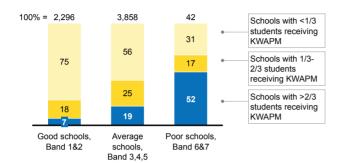
1 Australian-based independent diagnostic assessments conducted annually

SOURCE: Sports Division, Co-curricular and Arts Division, Fully Residential and Excellence Schools Management Division

EXHIBIT 5

Distribution of student population receiving KWAPM¹ by school band in 2011

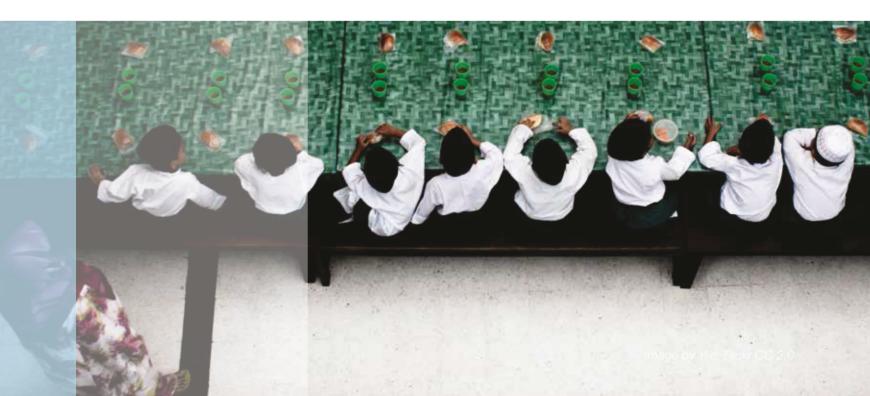
Percent of schools (2011)



1 Only primary schools were included, with the exception of 1,060 schools in Sabah and 418 schools in other states due to incomplete data.

SOURCE: Finance Division; National Key Result Area; EMIS database

Finally, the largest equity gaps remain socio-economic in origin. This has been observed using three proxies: parents' highest level of educational attainment, states' average household income, and the percentage of students receiving basic financial assistance under the Poor Students' Trust Fund, or *Kumpulan Wang Amanah Pelajar Miskin* (KWAPM). For all three proxies, the evidence consistently demonstrates that students from poor families are less likely to perform as well as students from middle-income or high-income homes. As Exhibit 5 illustrates, only 7% of Band 1 and 2 schools have student populations where more than two-thirds receive KWAPM, compared to 52% of under-performing Band 6 and 7 schools.



SOME SCHOOLING OPTIONS HAVE MORE ETHNIC HOMOGENOUS ENVIRONMENTS

Overall, enrolment in the public system remains broadly reflective of national demographics. There are specific schooling options that have more ethnic homogenous environments. This is the result of the Ministry providing parents with options, namely the option for students to be taught in their mother tongue, the option for a curriculum with a larger emphasis on religious education, as well as the mainstream option of instruction in the national language. While homogeneity and unity are not necessarily related, homogenous environments make it more challenging for students to be exposed to different cultures and ethnic groups and to develop an appreciation for diversity that is critical for unity.

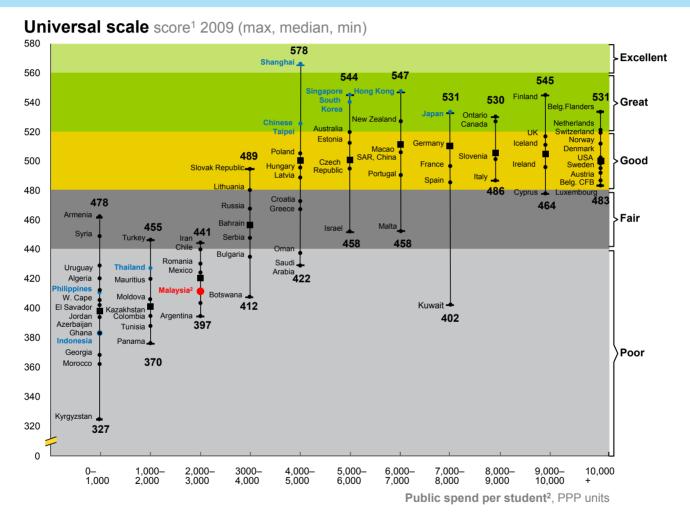
In recent years, ethnic stratification in schools has increased. The proportion of Chinese students enrolled in SJKCs has increased from 92% in 2000 to 96% in 2011. Indian students enrolled in SJKTs have also increased from 47% to 56% of SJKT enrolment for the same period. In SKs, 97% of students are ethnically Bumiputera. As student environments become more homogenous, there is a growing need for the Ministry to create avenues for students from different school-types to interact.

To foster unity, it is important for students to interact and learn with peers and teachers from various ethnic, religious, cultural, and socioeconomic backgrounds. Accordingly, the Ministry has programmes like the Student Integration Plan for Unity, or *Rancangan Integrasi Murid Untuk Perpaduan* (RIMUP) to strengthen interaction among student from different school-types through co-curricular activities. A review by the Schools Inspectorate and Quality Assurance or *Jemaah Nazir dan Jaminan Kualiti* (JNJK) found that where RIMUP was run, there was good evidence of inter-ethnic mixing both inside and outside the classroom. However, there has been a significant drop in the number and scope of activities under the RIMUP programme due to funding constraints.



EXHIBIT 6

Country performance in international assessments relative to public spend per student



1 Universal scale based on Hanushek & Woessmann methodology, to enable comparison across systems 2 Public spend per student for basic education (preschool, primary, and secondary school levels) for 2008 current prices Note: Malaysia 2008 public spend is USD3000 per student

SOURCE: World Bank EdStats; IMF; UNESCO; PISA 2009+, TIMSS 2007; PIRLS 2006; Global Insight; McKinsey & Company 2010

RETURN ON INVESTMENT IS NOT AS HIGH AS DESIRED

Malaysia's consistently high levels of expenditure on education have resulted in almost universal access to primary education, and significant improvements in access to secondary education. However, there remains room for improvement on the dimensions of quality, equity, and unity.

Exhibit 6 compares the performance of different countries in international assessments with their education spending per student. The difference between each performance band (Poor, Fair, Good, Great, and Excellent) represents the equivalent of one year of schooling. Data as of 2010 indicates that Malaysia's performance lags behind other countries that have similar or lower levels of expenditure per student, such as Thailand, Chile, and Armenia. This suggests that the system may not be allocating funds towards the factors that have the highest impact on student outcomes, such as the training and continuous upskilling of teachers. High-performing systems like Singapore, South Korea and Shanghai, however, do spend more per student than Malaysia. The education system is also about to embark on a major transformation effort. Consequently, Malaysia's expenditure levels should be maintained but the efficiency and effectiveness of how funds are allocated and spent should be reviewed.



ASPIRATIONS FOR THE MALAYSIAN EDUCATION SYSTEM AND MALAYSIAN STUDENTS

In order to properly address the needs of all Malaysians, and to prepare the nation to perform at an international level, it is important to first envision what a highly-successful education system must accomplish, particularly in the Malaysian context. What kinds of students are best-prepared to meet the challenges of a 21st century economy? What kind of education prepares them for this rapidly globalising world? These aspirations comprise two aspects: firstly, those for the education system as a whole, and secondly, those for individual students. This vision, and these aspirations, will set the stage for the transformation of the Malaysian education system.

System aspirations

There are five outcomes that this Blueprint aspires to for the Malaysian education system as a whole: access, quality, equity, unity, and efficiency (Exhibit 7). These outcomes are in line with the aspirations articulated by participants during the National Dialogue, and are comparable to outcomes set by other high-performing education systems. Action across all five areas is important, and no initiative in one area should detract from or undermine progress in another.

- Access: Every Malaysian child deserves equal access to an education that will enable that child to achieve his or her potential. The Ministry thus aspires to ensure universal access and full enrolment of all children from preschool through to upper secondary school level by 2020.
- **Quality:** All children will have the opportunity to attain an excellent education that is uniquely Malaysian and comparable to the best international systems. The aspiration is for Malaysia to be in the top third of countries in terms of performance in international assessments, as measured by outcomes in TIMSS and PISA, within

EXHIBIT 7

Access

Quality

Equity

Unity

Efficiency

Five system aspirations for the Malaysian education system

100% enrolment across all levels from preschool to upper secondary by 2020

Top third of countries in international assessments such as PISA and TIMSS in 15 years

50% reduction in achievement gaps (urban-rural, socio-economic and gender) by 2020

An education system that gives children shared values and experiences by embracing diversity

A system which maximises student outcomes within current budget

15 years. TIMSS and PISA currently test for literacy, Mathematics, and Science only. Additional assessments that address other dimensions of quality that are relevant to the Malaysian context may be included as they are developed and become accepted international standards.

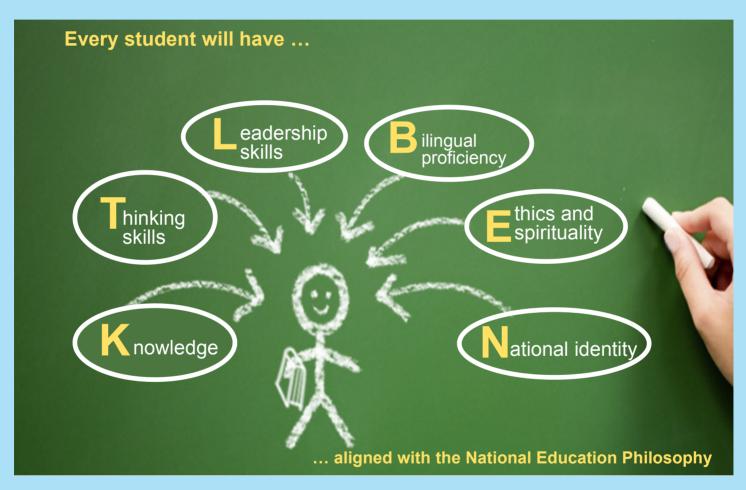
- **Equity:** Top-performing school systems deliver the best possible education for every child, regardless of geography, gender, or socio- economic background. The Ministry aspires to halve the current urban-rural, socio-economic, and gender achievement gaps by 2020.
- Unity: As students spend over a quarter of their time in school from the ages of 7 to 17, schools are in a key position to foster unity. Through interacting with individuals from a range of socio-economic, religious, and ethnic backgrounds, students learn to understand, accept, and embrace differences. This creates a shared set of experiences and aspirations to build Malaysia's future on. The Ministry aspires to create a system where students have opportunities to build these shared experiences and aspirations that form the foundation for unity.
- Efficiency: The Malaysian education system has always been well-funded, yet improvements in student outcomes have not always matched the resources channelled into the system. While the Government will maintain current levels of investment, the aspiration is to further maximise student outcomes within the current budget levels.

Student aspirations

Beyond these system-wide outcomes, stakeholders were also very clear on what "quality" should be at the individual student level. In a nutshell, educators, parents, students, and other members of the public were united in a vision of education as a vehicle for the holistic development of children from the intellectual, spiritual, emotional, and physical dimensions. This is the same vision that has underscored all education improvement efforts since the National Education Philosophy was written in 1988. Looking ahead, the Blueprint will continue to use the National Education Philosophy's vision of a balanced education as its foundation for individual student aspirations. It has also drawn on learnings from other high-performing systems to develop a refined articulation of the specific skills and attributes that students would need to thrive in tomorrow's economy and globalised world (Exhibit 8):

- **Knowledge:** At the most basic level, every child will be fully literate and numerate. Beyond this, it is important that students master core subjects such as Mathematics and Science, and are informed with a rounded general knowledge of Malaysia, Asia, and the world. This would include their histories, people, and geography. Students will also be encouraged to develop their knowledge and skills in other areas such as the arts, music, and sports.
- **Thinking skills:** Every child will learn how to continue acquiring knowledge throughout their lives (instilling a love for inquiry and lifelong learning), to be able to connect different pieces of knowledge, and to create new knowledge. Every child will master a range of important cognitive skills, including critical thinking, reasoning, creative thinking, and innovation. This is an area where the system has historically fallen short, with students being less able than they should be in applying knowledge and thinking critically outside familiar academic contexts.
- Leadership skills: In our increasingly inter-connected world, being able to lead and work effectively with others is critical. The education system will help every student reach his or her full potential by creating formal and informal opportunities for students to work in teams, and to take on leadership roles. In the context of the education system, leadership encompasses four dimensions: entrepreneurship, resilience, emotional intelligence, and strong communication skills.
- **Bilingual Proficiency:** Every child will be, at minimum, operationally proficient in bahasa Malaysia as the national language and language of unity, and in English as the international language of communication. This means that upon leaving school, the student should be able to

Six key attributes needed by every student to be globally competitive





work in both a bahasa Malaysia and English language environment. The Ministry will also encourage all students to learn an additional language.

- Ethics and Spirituality: The education system will inculcate strong ethics and spirituality in every child to prepare them to rise to the challenges they will inevitably face in adult life, to resolve conflicts peacefully, to employ sound judgement and principles during critical moments, and to have the courage to do what is right. The education system also seeks to nurture caring individuals who gainfully contribute to the betterment of the community.
- **National identity:** An unshakeable sense of national identity, tied to the principles of the *Rukun Negara*, is necessary for Malaysia's success and future. Every child will proudly identify as Malaysian, irrespective of ethnicity, religion or socio-economic status. Achieving this patriotism requires that every child understands the country's history, and shares common aspirations for the future. Establishing a true national identity also requires a strong sense of inclusiveness. This can be achieved through not only learning to understand and accept diversity, but to embrace it.

ELEVEN SHIFTS TO TRANSFORM THE SYSTEM

Over the course of the 15 months, the Ministry has sought input from a broad range of stakeholders, from educationists and academics to parents and students, on what would be required to deliver on the aspirations identified above. Given the volume of input, there was a surprisingly high degree of consensus on some topics such as the importance of raising the quality of teachers. There were also topics, such as the future of language education, where there were mixed responses.

The Ministry reviewed these suggestions carefully, and integrated them into the Blueprint based on four criteria. Firstly, any action undertaken had to contribute to the system and student aspirations described above. This meant that initiatives that delivered one outcome at the expense of another, or that would lead to a different aspiration, were deprioritised. Secondly, the Ministry drew on international evidence to identify and prioritise the factors that would make the most difference in system, nation, and student improvement. Thirdly, the proposals had to be relevant to the system's starting point and be within the Ministry's

Eleven shifts to transform the system

PROVIDE EQUAL ACCESS TO QUALITY EDUCATION OF AN INTER- NATIONAL STANDARD	ENSURE EVERY CHILD IS PROFICIENT IN BAHASA MALAYSIA AND ENGLISH LANGUAGE AND IS ENCOURAGED TO LEARN AN ADDITIONAL LANGUAGE	DEVELOP VALUES-DRIVEN MALAYSIANS	TRANSFORM TEACHING INTO THE PROFESSION OF CHOICE	ENSURE HIGH- PERFORMING SCHOOL LEADERS IN EVERY SCHOOL
 Benchmark learning of languages, Science and Mathematics to international standards Launch revised Primary (KSSR) and Secondary (KSSR) and Secondary (KSSM) Curriculum in 2017 Revamp examinations and assessments to increase focus on higher-order thinking skills by 2016 Strengthen STEM education Enhance access and quality of existing education pathways, starting with vocational track Raise quality of all preschools and encourage universal enrolment by 2020 Increase investment in physical and teaching resources for students with specific needs Move from 6 to 11 years of compulsory schooling 	 Roll out the KSSR Bahasa Malaysia curriculum for National-type schools, with intensive remedial support for students who require it Expand the LINUS programme to include English literacy Upskill English language teachers Make English language SPM paper a compulsory pass and expand opportunities for greater exposure to the language Encourage every child to learn an additional language by 2025 	 Enhance Islamic and Moral Education with greater focus on unity and fostering stronger bonds among students Develop students holistically by reinforcing requirement to participate in 1 Sport, 1 Club and 1 Uniformed Body Enhance and expand RIMUP from 2016 to facilitate interaction across school types 	 Raise the entry bar for teachers from 2013 to be amongst top 30% of graduates Revamp the IPG to world class standards by 2020 Upgrade the quality of continuous professional development (CPD) from 2013 Focus teachers on their core function of teaching from 2013 Implement competency and performance-based career progression by 2016 Enhance pathways for teachers into leadership, master teaching and subject specialist roles by 2016 Develop a peer-led culture of excellence and certification process by 2025 	 Enhance selection criteria and succession planning process for principals from 2013 Roll out a New Principal Career Package in waves with greater support and sharper accountability for improving student outcomes

SHIFT

EMPOWER JPNs, PPDs, AND SCHOOLS TO CUSTOMISE SOLUTIONS BASED ON NEED

- Accelerate school improvement through systematic, districtled programmes rolled out across all states by 2014
- Allow greater schoolbased management and autonomy for schools that meet a minimum performance criteria
- Ensure 100% of schools meet basic infrastructure requirements by 2015, starting with Sabah and Sarawak
- Ensure all government and government-aided schools receive equitable financial support

E=mc ²

LEVERAGE ICT TO SCALE UP QUALITY LEARNING ACROSS MALAYSIA



TRANSFORM MINISTRY DELIVERY CAPABILITIES AND CAPACITY



PARTNER WITH PARENTS, COMMUNITY, AND PRIVATE SECTOR AT SCALE



MAXIMISE STUDENT OUTCOMES FOR EVERY RINGGIT



INCREASE TRANS-PARENCY FOR DIRECT PUBLIC ACCOUNT-ABILITY

- Provide internet access and virtual learning environment via 1BestariNet for all 10,000 schools
 - Augment online content to share best practices starting with a video library of the best teachers delivering lessons in Science, Mathematics, Bahasa Malaysia and English language
 - Maximise use of ICT for distance and selfpaced learning to expand access to high-quality teaching regardless of location or student skill level
- Empower JPNs and PPDs through greate decision-making power over budget and personnel from 2013, and greater accountability for improving student outcomes
- Deploy almost 2,500 more personnel from the Ministry and JPNs to PPDs in order to better support schools by 2014
- Strengthen leadership capabilities in 150-200 pivotal leadership positions from 2013
- Design new functions and structure for the Ministry, with implementation from 2016

- Equip every parent to support their child's learning through a parent engagement toolkit and online access to their child's in-school progress
- Invite every PIBG to provide input on contextualisation of curriculum and teacher quality from 2016
- Expand Trust School model to 500 schools by 2025 by including alumni groups and NGOs as potential sponsors
- Link every programme to clear student outcomes and annually rationalise programmes that have low impact
- Capture efficiency opportunities, with funding reallocated to the most critical areas such as teacher training and upskilling
- Publish an annual public report on progress against Blueprint targets and initiatives, starting from the year 2013
- Conduct comprehensive stocktakes in 2015, 2020 and 2025

ability to deliver. Initiatives were thus sequenced to evolve in complexity as the capabilities and capacity of the Ministry officers, teachers, and school leaders were developed. Fourthly, the benefits of implementing the proposal had to outweigh the financial and operational downsides.

The Ministry has identified 11 shifts that will need to occur to deliver the step change in outcomes envisioned by all Malaysians. Each shift will address at least one of the five system outcomes of access, quality, equity, unity, and efficiency, with quality as the common underlying focus across all shifts due to the fact that this is the dimension which requires the most urgent attention. Some of these shifts represent a change in strategy and direction. Others represent operational changes in the way the Ministry and schools have historically implemented existing policies. Regardless of whether it is a strategic or operational shift, they all represent a move away from current practices.

Collectively, these shifts address every stakeholder and the main concerns of the public. The Ministry hopes that this inclusiveness will provide the basis for a common focus that can be embraced by all Malaysians. The following section summarises each of these shifts and provides examples of game-changing initiatives that will be launched.

Shift 1: Provide equal access to quality education of an international standard

Why is it needed?: The foundation for the success of a school system lies in its definition of what its students must know, understand, and be able to do— Malaysian students have historically always excelled at reproducing subject content. However, this skill is less valuable in today's ever-changing economy. Instead, students need to be able to reason, to extrapolate, and to creatively apply their knowledge in novel and unfamiliar settings. They also need attributes such as leadership to be globally competitive. As the TIMSS and PISA international assessments have demonstrated, our students struggle with higher-order thinking skills. Surveys of Malaysian and multinational companies also suggest that our students fall short on the soft skills looked for by prospective employers.

At the same time, education is often seen as an enabler for social mobility, enabling children born in poor families to earn higher incomes as adults. As long as socio-economic status remains the greatest predictor of academic success, and the factor behind the largest of all student outcome gaps in Malaysia, this promise will remain elusive for many Malaysians.

What will success look like?: Firstly, standards for student outcomes and learning practices will be benchmarked and aligned with that of high-performing education systems so that the students Malaysia produces are globally competitive. Secondly, students who need more help will be given access to the right levels of support to succeed at school.

Benchmark the learning of languages, Mathematics, and Science to international standards. Every student will receive a strong grounding in foundational skills of literacy and numeracy as well as in Science, a key growth area for the Malaysian economy. They will be taught a curriculum that has been benchmarked to the standards of high-performing education systems, and this benchmarking will be validated by an independent party to build parents' confidence. The Ministry will also set and monitor performance targets for its performance on the PISA and TIMSS international assessments. Additional assessments that address other dimensions of quality that are relevant to the Malaysian context may be added as they are developed, and become accepted international standards.

Launch the Secondary School Standard Curriculum or *Kurikulum Standard Sekolah Menengah* (KSSM) and revised Primary School Standard Curriculum or *Kurikulum Standard Sekolah Rendah* (KSSR) in 2017. The school curriculum at both primary and secondary levels will be revised to embed a balanced set of knowledge and skills such as creative thinking, innovation, problemsolving, and leadership. This curriculum will still stress student-centred and differentiated teaching, but have a greater emphasis on problem-based and project-based work, a streamlined set of subjects or themes, and formative assessments. The curriculum will also support an accelerated learning pathway for high-performing students to complete SPM in four rather than five years, and UPSR in five rather than six years. Additionally, clear learning standards will be laid out so that students and parents understand the progress expected within each year of schooling.

Revamp national examinations and school-based assessments to gradually increase percentage of questions that test higher-order thinking. By 2016, higher-order thinking questions will comprise at least 40% of questions in UPSR and 50% in SPM. This change in examination design means that teachers will focus less on predicting what topics and questions will come out and drilling for content recall. Instead, students will be trained to think critically and to apply their knowledge in different settings. Similarly, school-based assessments will also shift their focus to testing for higher-order thinking skills.

Strengthen quality of Science, Technology, Engineering and Mathematics (STEM) education.

The curriculum, examinations and assessments for all STEM subjects will be revised as part of the broader KSSR, KSSM and higher-order thinking reforms described above. For Science and Mathematics in particular, students will also benefit from increased instructional time and an emphasis on practical applications of knowledge through laboratory and project-based work. In the interim, the Ministry will introduce top-up curricular modules to address the largest content and skill gaps among students identified in the TIMSS and PISA assessments. These modules will be implemented from 2014. The Ministry will also conduct a diagnostic of teachers' content and pedagogical skills to enable the provision of targeted upskilling programmes, and explore the use of blended-learning models that leverage technology to enhance student learning.

Enhance access to and quality of existing education pathways, starting with the vocational track. By the

end of 2013, academic and career counselling services will be built into the secondary school timetable to help students make better informed choices about the various education pathways on offer such as religious schools, vocational and technical schools, arts and sports schools, accelerated learning programmes for high-performing and gifted students, and Form 6 and matriculation. For pathways such as vocational education where student demand outstrips supply, the Ministry will explore seat-purchase agreements with the private sector. The Ministry will also raise the quality of existing provision. For vocational education, this means collaborating with the private sector to develop industryrecognised qualifications, offer more hands-on practicum opportunities and upskill teachers.

Raise quality of all preschools and encourage universal enrolment by 2020. Every child aged 5+ will be enrolled in a registered preschool, be it public or private. Low-income families that would otherwise not be able to afford preschool will receive need-based financial support from the Ministry. All preschools will follow a set of national quality standards, including a provision that every preschool teacher has a minimum diploma qualification. These schools will also be inspected regularly by the Ministry or the Early Childhood Care and Education Council of Malaysia to ensure that they meet minimum standards.

Increase investment in physical and teaching resources for students with specific needs. Orang

Asli students and other minority groups, and students with physical or learning disabilities will receive additional support so that they can enjoy the same educational opportunities. By 2025, these students will all go to schools with the facilities and equipment needed to create a conducive and supportive learning environment. They will be taught by teachers who have received additional training to help them understand their students' specific contexts and challenges, and the teaching strategies required to address them. These students will also be supported by an expanded network of counsellors, therapists, and teaching assistants, as required. Move from six to 11 years of compulsory schooling, starting at age 6+, supported by targeted retention programmes. By 2020, every student will leave formal schooling with a minimum SPM or equivalent vocational qualification. This means that compulsory schooling will increase from six to 11 years, and that approximately 5%, 10%, and 20% more students will be enrolled at the primary, lower, and upper secondary levels respectively (based on 2011 enrolment numbers for public and private schools). Students who are at risk of dropping out will be supported through a variety of retention initiatives, from remedial coaching to parent and student counselling.

Shift 2: Ensure every child is proficient in Bahasa Malaysia and English language and is encouraged to learn an additional language

Why is it needed?: Malaysia's multicultural society makes it a natural environment for producing students who are proficient in more than one language. The current system produces commendably strong Bahasa Malaysia learning outcomes. There is widespread operational proficiency in Bahasa Malaysia among students, with 75% of students achieving a minimum credit in the 2010 SPM examination. Bahasa Malaysia also consistently shows the strongest pass rates out of the core subjects in the UPSR, PMR and SPM examinations. Operational proficiency in English is, however, much lower. Only 28% of students achieved a minimum credit in the 2011 SPM English paper against Cambridge 1119 standards. Poor English proficiency among fresh graduates, since 2006, has also been consistently ranked as one of the top five issues facing Malaysian employers.

As the ethnic groups move through different primary schools, there are differences in outcomes by ethnicity. Bumiputera students perform very strongly on Bahasa Malaysia proficiency with 84% achieving a minimum credit at SPM, in contrast to 63% of Chinese students, and 57% of Indian students. For English, only 23% Bumiputera, 42% Chinese, and 35% Indian students score at a level equivalent to a Cambridge 1119 credit or above (all results based on the 2010 SPM examination).

What will success look like?: Boosting all students' proficiency in bahasa Malaysia and English language will be the most immediate priority. After three years of schooling, every child will achieve 100% basic literacy in bahasa Malaysia and English language. By the end

of Form 5, 90% of students will score a minimum of a Credit in SPM Bahasa Malaysia, and 70% in SPM English (against Cambridge 1119 standards). From 2016, the Ministry will make the English language SPM paper a compulsory pass. Further, the provision of other language subjects at all primary and secondary schools will be strengthened so that every child can have the opportunity to learn an additional language by 2025.

Roll out new Bahasa Malaysia curriculum for National-type schools, with intensive remedial support for students who require it. In 2011, the

Ministry introduced a new Bahasa Malaysia curriculum specially designed for teaching students, whose mother tongue is not Bahasa Malaysia and who have less instruction time in Bahasa Malaysia as compared to National schools. This curriculum will have fewer learning requirements in the early years of primary education (Year 1-3), but converge to similar skill acquisition standards in National schools by Year 6 with appropriate assessment. The roll-out started with Year 1 students and will complete the cycle by 2016. Additionally, parents of students, who have yet to meet the required proficiency levels, will have the option of sending their children for after-school remedial classes from Years 4 to 6, or put them through the "Remove" or *Peralihan* year.

Expand the LINUS programme to include English

literacy. Every student in Years 1 to 3 will be screened twice a year to determine if they are progressing in Bahasa Malaysia and English literacy at an expected pace. Students who fall behind will be given remedial coaching until they are able to return to the mainstream curriculum. Teachers working with such students will also receive dedicated coaching from district level teacher coaches.

Upskill English teachers. Every student will be taught English by a teacher who is proficient according to international standards. This will be achieved by having all 61,000 English teachers pass the Cambridge Placement Test (CPT) within two years. Teachers who have yet to meet this standard will receive intensive upskilling.

Make the English language SPM paper a compulsory pass and expand opportunities for greater exposure to the language. The Ministry will make it compulsory for students to pass the English SPM paper from 2016 in order to obtain their SPM certificate. To support students in meeting this requirement, the Ministry is rolling out a variety of support programmes, including a set system of grouping and teaching students by proficiency levels. Beyond that, students will have greater exposure to the language, for example via an expanded, compulsory literature in English module at the primary and secondary level. International research indicates that more exposure time than the current 15-20% is required for students to achieve operational proficiency. The Ministry will also explore the introduction of blended learning models that leverage technology to enhance student learning.

Encourage every child to learn an additional

language by 2025. Currently, many students already learn additional languages apart from Bahasa Malaysia and English language, which equip them well for entering the workforce in a globalising world. The aspiration is therefore for every child to have the opportunity to learn an additional language from primary through to secondary school. During the early years, the Ministry will focus on building up its cadre of Chinese, Tamil, and Arabic language teachers to ensure that the supply



of teachers matches student demand. As the system builds up capacity and capability, the Ministry will also expand the provision of other important languages such as Spanish, French, and Japanese. The teaching of an additional language will also be incorporated into instruction time at secondary school, as is the case in the revised KSSR.

Shift 3: Develop values-driven Malaysians

Why is it needed?: Today's students will inherit a world fraught with challenges, from environmental degradation to armed conflict, on a scale that has never been seen before. Successfully navigating these issues will not only require students to have leadership skills, but strong universal values such as integrity, compassion, justice, and altruism, to guide them in making ethical decisions. At the same time, it is important to balance the development of global citizenship with a strong national identity.

What will success look like?: Every student leaves school as a global citizen imbued with core, universal values and a strong Malaysian identity. The values they have learnt are applied in their day-to-day lives, leading to more civic behaviour such as an increase in volunteerism; a willingness to embrace peoples of other nationalities, religions and ethnicities; and a reduction in corruption and crime. Every student also leaves school prepared to act as a leader, whether in their own lives and families, or as part of the broader community and nation.

Enhance Islamic and Moral Education with greater focus on unity and fostering stronger bonds among

students. The revised KSSR and KSSM curriculum will require that every primary and secondary school student participate in community service. For secondary school students, this community service element will be a pre-requisite for graduation. The Islamic Education curriculum for Muslim students and Moral Education for non-Muslim students will be strengthened through a greater focus on understanding values related to unity and fostering good relations among students.

Develop students holistically by reinforcing the requirement for every student to participate in one Sport, one Club, and one Uniformed Body. Co-

curricular involvement provides students with opportunities to develop their individual talents and interests outside of a formal classroom setting. Such activities also provide excellent leadership opportunities for students. Every child will therefore still be expected to participate in at least one sport, one club, and one uniformed body. The Ministry will also look into making participation a requirement for graduation and scholarships for further education. To improve the quality of activities offered at each school, the Ministry will provide targeted training to teachers who act as advisors for these different activities, and partner with more community organisations and the private sector in the delivery of these programmes.

Enhance and scale up RIMUP from 2016 to facilitate interaction across school types. The Ministry currently runs a cross-school activity programme, RIMUP, to foster greater interaction across students from different school types. In the future, the frequency and intensity of the programme will be increased and targeted at schools with more homogeneous student populations, such as National-type and religious schools. The Ministry will also expand this programme to include private schools.

Shift 4: Transform teaching into the profession of choice

Why is it needed?: International research shows that teacher quality is the most significant school-based factor in determining student outcomes. The quality of a system cannot exceed the quality of its teachers. While there are certainly many excellent teachers in the Malaysian education system, a 2011 research by AKEPT found that only 50% of lessons are being delivered in an effective manner. This means that the lessons did not sufficiently engage students, and followed a more passive, lecture format of content delivery. These

lessons focused on achieving surface-level content understanding, instead of higher-order thinking skills. This statistic is particularly challenging as an estimated 60% of today's teachers will still be teaching in 20 years' time.

What will success look like?: Teaching will be a prestigious, elite profession that only recruits from the top 30% of graduates in the country. Teachers will receive the best training possible, from the time they enter their teacher training programmes, through to the point of retirement. They will have access to exciting career development opportunities across several distinct pathways, with progression based on competency and performance, not tenure. There will be a peer-led culture of excellence wherein teachers mentor one another, develop and share best practices and hold their peers accountable for meeting professional standards.

Raise the entry bar for teachers from 2013 to be amongst top 30% of graduates: In the future, only the best candidates will be recruited as teachers. This means that the Ministry will rigorously enforce entry standards to ensure that 100% of every teacher training intake meet the minimum academic requirement. The Ministry will ensure that the same standards are put in place in the teacher training programmes in Public and Private Higher Education Institutions (IPT). Additionally, the Ministry will ensure that the quality of the curriculum and lecturers are upgraded to deliver the kind of teachers desired. The Ministry will also introduce more stringent graduation requirements so that only the best trainees can graduate and be guaranteed placement in Malaysian schools.

Revamp the IPG. The Ministry aims to transform the IPG into a world-class teacher training university by 2020. To do so, the Ministry will review the current pre-service training curriculum to ensure that teachers are adequately prepared to teach the higher-order thinking skills desired of Malaysia's students. This will include increasing the

percentage of time spent on practicum training to 40% across all programmes. The IPG will also offer different programmes (diplomas, undergraduate and postgraduate degrees) to cater to candidates with varying experience levels (fresh graduates and mid-career leavers). The selection criteria for new lecturers will be enhanced, and existing lecturers will be upskilled.

Upgrade the quality of continuous professional development (CPD) from 2013. Teachers will receive greater support to help them achieve their full potential. When they enter the profession, teachers will develop an individualised CPD programme with their supervisors. This CPD programme will include common training requirements expected of all teachers, as well as electives that teachers can pursue based on their own developmental needs. It will mostly be run at school, as school-based training has proven to be the most effective form of CPD. It will use a network of peers including teacher coaches, senior teachers, and principals to disseminate best practices. The training will allow teachers to continuously build their skill levels against each of the competencies expected of a teacher. The Teacher Education Division or Bahagian Pendidikan Guru (BPG) will be responsible for providing this CPD.

Focus teachers on their core function of teaching from 2013. Teachers will enjoy a reduced administrative burden, so that they can focus the majority of their time on their core function of teaching. This will be achieved by streamlining and simplifying existing data collection and management processes. Some administrative functions will also be moved to a centralised service centre or to a dedicated administrative teacher at the school level.

Implement competency and performance-based career progression by 2016. Teachers will be assessed annually by their principals, with input potentially being provided by peers. This assessment will be done using a new evaluation instrument that focuses on teachers' ability to deliver effective instruction in and out of the classroom. This new tool is more reflective of the fact that a teacher's primary role is helping students learn. High-performing teachers will enjoy faster career progression. The very best teachers may even be promoted from DG41 to DG54 in a faster time period than the current average promotion time of 25 years. Teachers who are struggling to meet the minimum quality will receive extra coaching support to help them get back on track. Teachers who consistently underperform even with the extra support will be redeployed to other school-based functions such as administration, discipline management or co-curricular management. Over time, the Ministry will gradually reduce the total cohort size of teachers through improvements in teacher time utilisation and productivity.

Enhance pathways for teachers into leadership, master teaching and subject specialist roles by 2016.

Teachers will also be able to pursue attractive pathways based on their performance, potential and interests. For example, they may wish to pursue a leadership role at the school, district, state, or federal level. They may choose to become subject specialists focused on developing curriculum, assessment, and training programmes for the broader system. They may work as master teachers in schools. Regardless of the pathway chosen, the commitment to investing in their development and in building an environment of professional accountability will be maintained across their careers. There will also be comparable opportunities for promotion across these pathways.

Develop a peer-led culture of professional excellence and certification process by 2025. The Ministry will focus on ensuring that all teachers fully utilise the flexibilities accorded to them over professional issues related to curriculum timetabling and lesson organisation, pedagogical approaches and school-based assessment. The Ministry will also facilitate teacher-driven CPD activities to enable teachers to mentor one another, develop and disseminate best practices and hold each other accountable for meeting professional standards. As an extension of the competencybased progression system, the Ministry may also consider setting up a certification scheme linked to the mastery of the teacher competencies described above. As with all measures, the Ministry will work collaboratively with teacher representatives to achieve these aims.

Shift 5: Ensure high-performing school leaders in every school

Why is it needed?: The quality of school leaders is the second biggest school-based factor in determining student outcomes, after teacher quality. Several international research on school leadership shows that an outstanding principal is one focused on instructional and not administrative leadership. Effective school leaders can raise student outcomes by as much as 20%. The current selection criterion is, however driven primarily by tenure rather than leadership competency. Additionally, 55% of today's principals received no preparatory or induction training before or during their formative first three years of principalship. This means that principals may enter, ill-prepared for their new role. With 40% of principals due to retire within the next five years, there is an opportunity to upgrade the cohort.

What will success look like?: Every school will have a high-performing principal who is relentless in his or her focus on improving student outcomes, both academic and non-academic. The best principals will be given incentives to serve in the weakest schools, and will serve as mentors for the broader community. Further, the leadership base in each school will be strengthened with assistant principals, subject heads, and department heads being developed to act as instructional leaders in their own right.

Enhance selection criteria and succession planning processes for principals from 2013. The Ministry will move from a tenure-based selection criteria to one that is focused on the demonstration of leadership competencies. Every principal will also be required to complete the National Professional Qualification for Educational Leaders (NPQEL) at *Institut Aminuddin Baki* (IAB) before they can be appointed. In doing so, the average age of a principal is expected to drop, allowing principals to serve for longer periods in each school and in the system as a whole. Further, the Ministry will institute a succession planning process that identifies and cultivates high-potential individuals to ensure that there is a ready pool of candidates that can be called upon as soon as an opening is available. Once these mechanisms have been set up, the Ministry will expand their planning focus to include assistant principals, as well as subject and department heads.

Roll out a New Principal Career Package in waves with greater support and sharper accountability

for improving student outcomes. As with teachers, principals will receive greater support to help them achieve their full potential and will therefore be held more accountable for the delivery of higher student outcomes. Soon-to-be appointed principals will benefit from a new on-boarding programme where they spend one month under the mentorship of the principal who will be leaving. They will also enjoy a set period of coaching and mentoring from an experienced principal or district School Improvement Partner (SIPartner+) once they have formally started their new role as principal. These individualised opportunities for CPD will not stop in their first year, but remain a resource that principals can draw on for constant professional renewal. IAB will also ensure that comparable CPD opportunities are available to assistant principals, subject heads, and department heads.

Principals will have the flexibility to serve at a primary or secondary school through a new, common civil service track. They will be assessed annually on a new evaluation instrument that focuses on their leadership abilities and improvement of student outcomes. As with teachers, high-performing principals will enjoy faster career progression opportunities. Incentives will also be revised to encourage high-performing principals to take up positions in rural and/or underperforming schools. Principals who struggle to meet the minimum standard will receive extra coaching support and principals who consistently underperform despite this concerted support will be redeployed back to a teaching position in another school.

All school leaders (principals, assistant principals, department heads and subject heads) will be prepared to fully utilise the decision-making flexibilities accorded to them. This includes instructional leadership matters such as school improvement planning and curriculum and co-curricular planning, as well as administrative leadership matters such as allocation of school funds. As with teachers, the aspiration is to create a peer-led culture of professional excellence wherein school leaders mentor and train one another, develop and disseminate best practices and hold their peers accountable for meeting professional standards.



Shift 6: Empower JPNs, PPDs, and schools to customise solutions based on need

Why is it needed?: Both national and international data suggest that Malaysian schools are spread across a wide performance spectrum. For example, in the 2009+ PISA, 7% of participating schools were graded as Good, 13% as Fair, and 80% as Poor.

Historically, many programmes have been designed according to a "one-size-fits-all" model. International evidence suggests that different sets of interventions are required in order to best serve schools at different performance levels.

What will success look like?: Every school, regardless of location, size, or type, will provide its students with a good, holistic education. This not only means that there will be no underperforming (Bands 6 or 7) schools in the country by 2020, but also that more schools will be recognised as high performing or cluster schools based on their performance. The amount of financial and operational support provided to each school will depend on its specific needs. State, district and school leaders will also have greater decision making power over day-to-day operations to tailor interventions based on the school's context and enable greater school-based management.

Accelerate school improvement through systematic, district-led programmes rolled out across all states

by 2014. Building off the success of the GTP 1.0 School Improvement Programme, every District Education Office or *Pejabat Pelajaran Daerah* (PPD) will be empowered to tailor the support provided to schools on dimensions from student attendance through to principal and teacher deployment. Resources can then be directed to where they are most needed. This includes employing full-time teacher and principal coaches to support principals and teachers in lowerperforming schools (Bands 5, 6 and 7). At the same time, the Ministry will ensure that all schools and districts remain aligned to the Ministry's strategic priorities through the rollout of a common set of Key Performance Indicators (KPIs). This programme will be piloted in Kedah and Sabah from January 2013, with implementation in all districts by 2014.

Allow greater school-based management and autonomy for schools that meet a minimum

performance criteria. In the future, all schools will be responsible for operational decision making in terms of budget allocation and curriculum implementation. For example, principals will have full authority over how they spend the per capita grant (PCG) and on how they design the school timetable. However, this process will occur in waves, starting with High Performing and Cluster Schools (in recognition of their academic and non-academic achievements), and Trust Schools (in recognition of their innovative public-private partnership delivery model). Over time, more and more schools will be granted these decision rights based on their performance. This increased emphasis on school-based management will also be accompanied by sharper accountability on the part of school principals.

Ensure 100% of schools meet basic infrastructure requirements by 2015, starting with Sabah and

Sarawak. Every school in Malaysia, regardless of location, size, or type, will meet a set of minimum infrastructure requirements to create a safe, hygienic, and conducive environment for learning. This includes access to clean, treated water; at least 12-hours of electricity per day, along with sufficient toilets, classrooms, tables, and chairs for the student and teacher population. This process will start with the upgrading of all schools to fulfil basic infrastructure standards by 2015, starting with Sabah and Sarawak as they currently face the greatest infrastructure challenges. Once all schools have met basic infrastructure standards, the Ministry will proceed to invest in another wave of upgrades to meet baseline requirements for delivering the curriculum effectively such as Science laboratories and Living Skills workshops.



Ensure all government and government-aided schools receive equitable financial support. The

Ministry will develop and implement a transparent and equitable set of principles for the allocation of financial and other support to all school types. These principles will be in line with the system aspirations of access, quality, equity, unity, and efficiency. For example, the Ministry recognises that some schools face more challenges than others due to their higher proportion of low-income students or students with specific needs. In the interest of equity, these schools will require additional funding so that they can deploy extra support services for their students.

Shift 7: Leverage ICT to scale up quality learning across Malaysia

Why is it needed?: The Ministry has spent more than RM6 billion on information and communication technology (ICT) over the past decade in education initiatives such as smart schools-one of the most capital-intensive investments the system has undertaken. However, ICT usage in schools continues to lag expectations-both in terms of quantity and quality. For example, a 2010 Ministry study found that approximately 80% of teachers spend less than one hour a week using ICT, and only a third of students perceive their teachers to be using ICT regularly. Critically, the 2012 UNESCO review found that ICT usage has not gone much further than the use of wordprocessing applications as an instructional tool. ICT has tremendous potential to accelerate the learning of a wide range of knowledge and thinking skills. However, this potential has not yet been achieved.

What will success look like?: Across all 10,000 schools in Malaysia, ICT will enhance how teaching and learning happens. Students will be able to access a wider range of content that is more engaging and interactive. They will be able to learn some lessons at their own pace, and will have fewer limitations in what they choose to study through distance-learning programmes. Teachers and principals will have access to both national and international learning resources and communities to help them improve their practice. ICT will be a ubiquitous part of schooling life, with no urban-rural divide, and with all teachers and students equipped with the skills necessary to use this technology meaningfully and effectively.

Provide internet access and virtual learning environments via 1BestariNet for all 10,000 schools

by 2013. In the very near future, every student will have access to a 4G network at their school through 1BestariNet. This network will serve as the basis for the creation of a virtual learning platform that can be used by teachers, students and parents to share learning resources, run interactive lessons, and communicate virtually. To maximise the impact from investment, the Ministry will also invest in ICT-competency training for all teachers, and gradually improve the device-to-student ratio from approximately 1:30 in 2011 to 1:10 by 2020. In order to remain cost-efficient, the Ministry will invest in fit-for-purpose devices such as basic computers or low-cost laptops. It will also experiment with utilising new, less resource-intensive alternatives for ICT facilities compared to current computer labs, such as a lending library for notebooks and computers-on-wheels.

Augment online content to share best practices starting with a video library in 2013 of the best teachers delivering lessons in Science, Mathematics, Bahasa Malaysia, and English language. Teachers will be able to access even more exemplary teaching resources online. This will begin with a video library in 2013 of the top Guru Cemerlang delivering daily lessons in important subjects of Science, Mathematics, Bahasa Malaysia, and English language. Other subjects will be added to the video library over time. This resource can be used by teachers for inspiration, or even by students as a revision tool.

Maximise use of ICT for distance and self-paced learning to expand access to high-quality teaching regardless of location or student skill level. In the future, students will enjoy greater personalisation of their educational experience. They will be able to pursue subjects that are not offered at their own school and learn directly under the best teachers in the country through distance learning programmes. They will also be able to learn at their own pace, with teachers acting as facilitators rather than direct content providers. Pilot programmes for these innovations will be rolled out from 2016, with successful programmes scaled up nationwide.

Shift 8: Transform Ministry delivery capabilities and capacity

Why is it needed?: Malaysia's education delivery network is extensive. It employs approximately 6,800 officials and support staff at the federal level, almost 6,400 at the state level, and a further 6,000 at the district level. This is in addition to approximately 420,000 principals and teachers in schools, and more than 13,100 officials and support staff in IPGS, IAB and matriculation colleges. Implementing policy across a network of this size is complex. Issues identified include overlaps in the responsibilities of the federal, state, and district levels; limited coordination across divisions and administrative levels; policies that are sometimes rolled out with inconsistent information or insufficient support; and weak outcome-based monitoring and followthrough.

The PPD, in particular, has been identified by the Ministry as a key point in the education delivery chain. PPDs were historically conceived as an administrative arm of the federal and state levels. As the needs of schools have evolved, however, so too has the scope of activities expected of the PPDs. As the closest ministry entity to schools, PPDs are now expected to be very hands-on. They should provide direct support to school leaders and proactively manage school performance to ensure student outcomes improve. However, the Ministry's resourcing structure has yet to shift to meet this demand, resulting in schools receiving uneven levels of support. What will success look like?: The transformed Ministry will have strong leaders at every level, new processes and structures, and a culture of high performance. The roles of the federal, state and district levels will be streamlined, with the federal or head office focused on policy development and macrolevel planning, and the state education departments or JPNs and PPDs strengthened to drive day-to-day implementation. The organisational structure will be rationalised with more personnel deployed to the frontlines. These measures should yield more consistent and effective policy implementation across all states and districts.

Empower JPNs and PPDs through greater decisionmaking power over budget and personnel from 2013, and greater accountability for improving

student outcomes. The Ministry will streamline roles and responsibilities across federal, state, and district levels and move towards a more decentralised system of operations. JPNs and PPDs will increasingly be able to make key operational decisions in budgeting, such as maintenance allocations for schools, and in personnel, such as the appointment of principals. Due to this increased operational flexibility, JPNs and PPDs will be held accountable against a common set of KPIs that align with the system targets of access, quality, equity, unity, and efficiency. To support district and state officers in delivering on these new responsibilities, the Ministry will invest more in their continuous professional development.

Deploy almost 2,500 more personnel from the Ministry and JPNs to PPDs in order to better support

schools by 2014. Schools will receive more hands-on support through the deployment of almost 2,500 teacher and principal coaches across all PPDs in Malaysia. Regardless of function, all PPD officers will also be expected to shift their focus from work at the PPD to hands-on engagement with schools. This is to ensure that they fully understand the contexts in which each school operates. The goal is for PPDs to function as the first line of support for schools and their main point of contact with the rest of the Ministry. Strengthen leadership capabilities in 150 to 200

pivotal leadership positions from 2013. The Ministry has identified 150 to 200 pivotal leadership positions at the federal, state, and district levels that particularly impact the activities of the 10,000 schools in the system. These positions include the heads of 138 PPDs and 16 JPNs and several key central functions such as teacher education. The Ministry has started reviewing competency profiles and developing succession plans to ensure that these roles are staffed with highly-skilled individuals capable of transforming the departments and schools under them. As with teachers and principals, the intent is to promote officers to these critical roles based on their performance and competency, and not by tenure.

Design new functions and structure for the Ministry by 2013, with implementation from 2016. The

Ministry will work collaboratively with the central agencies, particularly JPA to clearly articulate what the restructured Ministry roles, headcounts and reporting lines should look like and how the transition will occur. The Ministry will also strengthen central functions critical to the rollout of the Blueprint. These include policy research and planning, teacher education, curriculum development, school inspections, and examination and assessment. Possible measures include setting up the divisions as centres of excellence to increase their independence, and/or targeted hiring of external specialists. Partial implementation of the plan will commence in 2014, with full implementation from 2016 as the Ministry transformation gathers momentum.



Shift 9: Partner with parents, community, and private sector at scale

Why is it needed?: International experience makes it clear that learning happens well beyond the school walls and can occur at home and in the community. In Malaysia, approximately a quarter of a child's time from the ages of seven to 17 is spent in school. The priority is thus to shift from "school learning" to "system learning" by engaging parents, the community, as well as the private and social sectors as partners in supporting student learning. Critically, international evidence is clear that some forms of involvement make more of a difference. For example, evidence from the OECD studies on PISA indicate that certain parent-child activities-such as reading to their children on a daily basis or discussing how their day was-can significantly raise student outcomes, regardless of socio-economic background. Similarly, international research has found that schools that engage with businesses, civic organisations, and higher education institutes enjoy benefits that include higher grades and lower student absenteeism.

What will success look like?: Every parent will be an active partner in their child's learning, not only through the standard raft of activities like report card and sports days, but also a strengthened parent-teacher association or *Persatuan Ibu Bapa dan Guru* (PIBG) that provides input on school-based management matters, as well as parent toolkits to support student learning. Schools will also have a network of community and private sector partners that contribute expertise to the school's development. The involvement of all these stakeholders will create a learning ecosystem that reinforces the knowledge, skills, and values taught to students at school.

Equip every parent to support their child's learning through a parent engagement toolkit and online access to their child's in-school progress. In the future, parents can expect to work more closely with teachers to improve their child's performance. Parents will sign home-school agreements that specify simple actions they can take to help their child, from ensuring that the child is always on time for school, to helping them build literacy and numeracy skills at home. Parents will be supported in this process through the provision of online access to their child's progress on school-based and national assessments (via the School Examination Analysis System or *Sistem Analisis Peperiksaan Sekolah*, (SAPS)) and initiatives that promote adult literacy, ICT and parenting skills. These initiatives may be driven by the Ministry or a new Parent Support Group that will be established within each PIBG.

Invite every PIBG to provide input on contextualisation of curriculum and teacher quality

from 2016. In the future, the role of the PIBG will evolve from typically being focused on fund-raising, to working collaboratively with school leadership to improve student outcomes. Specifically, PIBGs will be invited to provide input on how the school can make the national curriculum more relevant to the needs of the local community, and to provide feedback on the quality of teaching and learning experienced by their children. PIBGs and school leaders will then work together to define solutions for the identified issues. In some cases, this may mean securing parental support to take on roles as supplementary coaches and teachers for school activities.

Expand Trust School model to 500 schools by 2025 by including alumni groups and Non-Governmental Organisations (NGOs), as potential sponsors. A

greater diversity of private and social sector entities will have the opportunity to get involved in the school improvement process. This will be done through the expansion of the Trust Schools programme which enables a private sponsor to partner with school leadership to manage a school. Initial results from a pilot started in 2010 have been promising, and the Ministry intends to not only expand the number of schools, but also the type of schools that are involved. The Ministry sees particular promise in expanding the programme to include schools that cater to more communities with specific needs such as indigenous and minority groups, students with special needs, and rural schools.

Shift 10: Maximise student outcomes for every ringgit

Why is it needed?: In 2011, 16% of Malaysia's annual federal budget was spent on education—the largest proportion among all ministries. Malaysia's education budget, as a share of GDP, is also one of the highest in the world. This significant investment is an indication of the Government's commitment to education. However, it is unlikely that substantially more funds can be diverted to the education system away from other priorities. Instead, it is critical for the Ministry to increase the efficiency and effectiveness of how it allocates and spends its funds.

What will success look like?: Given the ambitious transformation effort that the education system is about to undertake, the Government will continue to invest an approximate level of expenditure—16% of the federal budget—in the education system. The Ministry will allocate these funds to the priorities set out in the Blueprint, and away from other lower impact programmes and initiatives. The Ministry will also track and report the captured return on investment for every initiative, with further investment conditional of having delivered improved outcomes.

Link every programme to clear student outcomes, and annually rationalise programmes that have low impact.

Moving forward, every programme launched by the Ministry will be linked to specific targets in terms of student outcomes. The federal, state and district offices will undertake an annual review exercise to evaluate the programme's success in meeting these targets. Funding for the following year will be conditional of having demonstrated improved outcomes. With this outcome-based budgeting approach, parents, teachers, and principals can be assured that every programme is aligned with the Blueprint's priorities and adds value. This move will also reduce the risk of initiative overload so that teachers and principals are not overburdened.

Capture efficiency opportunities, with funding reallocated to the most critical areas such as teacher training and upskilling. The Ministry will carefully review spending patterns at federal, state, and district levels to establish appropriate spending benchmarks and refine procurement processes. Departments and offices that are spending above the expected benchmark will be required to bring their spending patterns back in line. In line with this practice, the Ministry is committed to taking action on any issues highlighted in the annual Auditor-General report. The Ministry will also shift towards need-based financial aid programmes. Low-income families will continue to receive the aid they need to keep their children in schools, while



What Impact Will This Transformation Journey Have?

For the transformation of the Malaysian education system to be effective and sustainable, each participant must understand the critical role they play and the benefits that they will enjoy. It is envisaged that the programme defined in this Blueprint will lead to a collective set of desirable benefits, rights, and responsibilities for each group.

Students

Students will make significant gains in their development irrespective of their background. Students will study in conducive learning environments, and will feel stretched and nurtured by their school experience. When they leave school, students will have worldclass knowledge and skills, strong moral values, and will be capable of competing with their peers in other countries.

Students will learn in an environment where the fundamental belief is that all students can learn and all students can succeed. Teachers will have high expectations of students regardless of their background or prior achievement, and will provide them with the necessary support to meet those expectations;

Students will have a richer school experience, both academic and nonacademic, so that they can excel in life. There will be more project and group-based work to develop students' higher-order thinking skills and ability to work both independently and collaboratively in groups. There will be more community-based projects and cross-school activities to foster interaction with individuals from all walks of life. There will be more opportunities for students to learn at their own pace and to pursue their interests in academic, vocational or technical streams; and

Students will have greater say in shaping their learning experience. Teachers will work with them and their parents to set their own learning targets. Teachers will also encourage them to be advocates for themselves so that teachers understand what learning styles work best for each of them.

In return, students will be asked to try their best at all times and to work collaboratively with their teachers to reduce disruptive classroom behaviour. All students will have the collective responsibility to help make their school safe and conducive to learning.

Teachers

Teachers will develop the world-class capabilities needed to facilitate desired student outcomes and gain more enjoyment and fulfillment from their jobs. With the new teacher career package, they will enjoy more fulfilling professional development, improved career pathways, and fair and transparent evaluation processes that are directly linked to relevant competencies and performance.

Teachers will have the support they need to succeed. They will have access to more school-based professional development opportunities. They will participate in constructive feedback discussions and dialogue that focus not on blame and punishment, but on learning and development so that areas for improvement can become areas of strength; Teachers will enjoy better working conditions, performance-based rewards and enhanced pathways. They will work in schools with adequate facilities and appropriate working conditions. They will have a reduced administrative burden so that they can focus their energy on their core activities of teaching and learning. They will enjoy exciting

- performance-based rewards including faster
- career progression and can develop their
- interests along distinct pathways: teaching,
- leadership, and subject specialism; and

Teachers will be immersed in a culture of collaboration and professional excellence. They will collaborate with one another to tackle

issues and share best practices. They will have greater pedagogical flexibility in the classroom in their quest to ensure that every student learns.

In return, teachers will be asked to stay open to learning and to new ways of working, to involve parents and students in the learning process, and to model the mindsets, values and behaviours expected of students.

School leaders

School leaders will become excellent instructional leaders, and act as agents for change. They will enjoy closer support and enhanced services from federal, state, and district education officers. They will gain access to world-class leadership training, as well as best practices from their peers in Malaysia.

School leaders will have the support and resources they need to guide their schools effectively. They will receive better preparatory, induction, and ongoing training to help them develop their leadership skills. They will see improved responsiveness from PPDs on issues they face, from deployment of principal coaches to the provision of additional resources if the school is in greater need:

School leaders will enjoy better working conditions and performance-based

rewards. Principals, assistant principals as well as subject and department heads will work in schools with adequate facilities and have a reduced administrative burden so that they can focus their energy on instructional leadership. They will enjoy exciting performance-based rewards including faster career progression and "extra credit" for successful deployment in under-performing rural schools; and

School leaders will be empowered through greater school-based management. They

will have operational flexibility commensurate with their school's performance on matters such as curriculum timetabling and budget allocation. They will enter into a professional partnership with their PPDs, with input into their school's annual performance targets, and will enjoy greater transparency with regard to decisions affecting their school.

In return, school leaders will be asked to perform to the high expectations set and agreed to for their school. They will need to stay open to new ways of working, to involve the community in school improvement, and to serve as coaches and trainers to build capabilities in their staff as well as for other schools.

Ministry officials Pa

Ministry officials will develop as change leaders, with the skills and attributes needed to support schools. They will become better managers, coaches, and supporters of school excellence. They will benefit from greater meritocracy, greater empowerment with accountability, and will move away from hierarchy and control.

Ministry officials will receive targeted support, training, and resources needed to fulfill their new roles and responsibilities. They will have new roles focused on supporting packade, and have new roles to more professional

schools, and have access to more professional development opportunities. They will participate in constructive feedback discussions that focus not on blame and punishment, but on learning and development;

Ministry officials will work in a collaborative and transparent environment. Silos between divisions will be broken down, and roles and responsibilities will be streamlined to eliminate duplication of functions and activities. Information will be shared efficiently to allow for evidencebased decisions. There will be greater clarity about how decisions are made; and

Ministry officials will receive greater operational flexibility and accountability. The system will move towards decentralisation with more decision rights being awarded to state and district offices. Officials will have more say in identifying areas of improvement for their states, districts, and schools, and in tailoring solutions to specific contexts.

In return, Ministry officials will be asked to stay open to feedback from schools and from the community. They will champion the changes the system is about to undergo. They will need to be highly responsive in providing schools with the support and resources they need, as well as to keep all internal and external stakeholders wellinformed.

Parents

Parents will see tangible and sustained improvements in the educational experiences of their children. There will be increased transparency around a school's performance and priorities, and parents will be constantly kept in the loop as to how their child is doing at school, both in terms of

- achievements and areas for
- development. Parents will feel like true partners with schools in facilitating their child's learning.

Parents will have a better understanding of how their children are developing, and how they can help them improve. They will have regular contact with their children's teachers,

- not just when there is a problem. They will have full visibility and access to their children's performance on national examinations and school-based assessments. They will get guidance, from parenting tips to adult education classes, on how to best support their children's
- learning and development; and

Parents will have more opportunities to provide input into their school's

improvement strategies. They have the right to be fully informed about the school's mission, current performance, and annual improvement programme. They will be able to, via their PIBG, provide input on matters such as teacher and curriculum quality. They will feel welcomed and valued for their commitment to their children and to the school.

In return, parents will be asked to support their children in meeting their learning potential (for example, ensuring that they complete their homework and attend school on time), and to model commitment, engagement, and openness for their children. Parents will need to communicate input and concerns to schools in a constructive manner and actively participate in activities at school.

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higher-income families who can afford more will receive significantly less aid. Funding that would otherwise have been spent on these programmes will be reallocated to the areas with the greatest impact on student outcomes, namely teacher training and upskilling. An initial RM1 billion in operational expenditure for the period of 2013-2015 has been identified for saving and reallocation, and a review of development expenditure is still ongoing.

Shift 11: Increase transparency for direct public accountability

Why is it needed?: The GTP and economic transformation programmes signalled a fundamental shift in the way the Government made itself accountable to the *rakyat*, anything less is now deemed unacceptable. This was reinforced during the National Dialogue where stakeholders frequently stressed the need for the Ministry to engage and communicate more with the public on types and progress of initiatives being undertaken and the results being delivered.



What will success look like?: All stakeholders will have access to regular and transparent information about the Ministry's progress against the blueprint. This information will enable them to engage in a constructive dialogue with the Ministry on existing and forthcoming initiatives, and to get involved in their local community school or the broader education system, as outlined in Shift 9. This will lead not only to an informed and empowered populace, but also a more accountable and responsive way of policy-making in the Ministry.

Publish an annual public report on progress against Blueprint targets, starting from the year 2013. The Ministry will publish an annual report on the progress made against each initiative outlined in the Blueprint. Where relevant, this will also include clear explanations of how KPIs like the NKRA school performance band have been calculated, and ongoing efforts to improve how the system measures success. All stakeholders will enjoy a degree of transparency that has never before existed.

Conduct comprehensive stock-takes in 2015, 2020

and 2025. The Ministry will undertake a stock-take at key milestones in the Blueprint journey. As part of this stock-take, all stakeholders will be able to provide input through a National Dialogue process on what is or is not working well within the system, and what the Ministry could do about the situation. Thirteen years is a long timeframe, during which changes to the overarching strategy or specific initiatives are likely to be required. If major policy decisions are required during a non-stock-take year, the Ministry will conduct a national survey to gather input from relevant parties.

The education transformation will take place over 13 years

Wave 1 (2013-2015) *Turn around system by supporting teachers and focusing on core skills*

- Raising teaching standards through tailored on-the-ground teacher coaching, particularly in core subjects (Bahasa Malaysia, English Language, Mathematics and Science)
- Revamping examination questions to include greater focus on higher-order thinking skills
- Strengthen quality of STEM education through an enhanced curriculum, the testing and training of teachers, and the use of blended learning models
- Rolling out National-type school Bahasa Malaysia Primary School Standard Curriculum designed for students whose mother tongue is not Bahasa Malaysia
- Strengthening English language proficiency through testing and retraining of teachers, expansion of LINUS and remedial support as well as blended learning models
- Rolling out 1BestariNet to all schools to integrate ICT into day-to-day learning
- Rolling out District Transformation Programme, focused on under-performing schools, including those for students with specific needs, to accelerate school improvement
- Revamping the IPG and pre-service training, and raising entry standards for new teachers
- Rolling out dedicated principal coaches for Band 5,6 and 7 schools and enhanced selection criteria for principals to improve quality of school leadership
- Transforming the Ministry by placing the best leaders in pivotal JPN and PPD positions to improve delivery
- Increasing preschool and secondary school enrolment through enrolment drives, greater parental involvement, and better vocational programmes
- Enhancing practicum in vocational programmes through greater private sector collaboration

Key outcomes

- 100% students literate in bahasa Malaysia and numerate after 3 years of schooling; target for English literacy to be determined after baseline is established
- 92% preschool, 98% primary, 95% secondary enrolment
- 25% reduction in the urban-rural gap

Wave 2 (2016-2020) Accelerate system improven

- Rolling out secondary (KSSM) and revised primary (KSSR) curriculum to raise content and learning standards to international benchmarks
- Increasing public interest and awareness in STEM through campaigns and partnerships
- Piloting options to increase English language exposure, and strengthening additional language provision to improve overall language proficiency
- Enhancing programmes for groups with specific needs such as indigenous and other minority groups, gifted, and special needs
- Accelerating ICT innovations especially for distance and self-paced learning
- Enhancing teacher coaching and support to improve delivery of knowledge, skills, and values across all academic and non-academic aspects of curriculum
- Enhancing competency and performance based progressions and career pathways for teachers to revitalise the teaching profession
- Strengthening core divisions, streamlining federal, state and district roles, and restructuring the Ministry to improve delivery capacity and capabilities
- Obtaining international accreditation and enhancing curriculum for the matriculation programme to better equip students for university
- Expanding vocational education options through off-take agreements with private vocational providers

Wave 3 (2021-2025)

Move towards excellence with increased operational flexibility

- Scaling up innovations and options to continuously raise BM and English language proficiency and providing more choices of additional languages
- Rolling out ICT innovations and programmes for groups with specific needs to continuously raise learning standards nationally
- Cultivating a peer-led culture of professional excellence, where teachers and principals mentor one another, share best practices and hold peers accountable for meeting professional standards
- Creating greater school-based management and autonomy around curriculum implementation and budget allocation for most, if not all schools
- Strengthening the Ministry and institutionalising transformation with enhanced career progression for Ministry officials
- Reviewing school structure to determine if further optimisation of pathways and schooling options are necessary

- Malaysia's performance at par with international average at the next TIMSS and PISA cycle
- 100% preschool to secondary enrolment
- 50% reduction in the urban-rural gap, 25% reduction in the socio-economic and gender gap
- Malaysia's performance on TIMSS and PISA in top third of systems
- Maintain or improve enrolment
- Maintain or improve urban-rural gap, 50% reduction in the socio-economic and gender gaps

SEQUENCING THE TRANSFORMATION

The envisaged reform is broad and complex. Consequently, many initiatives have been developed as part of the reform. While each individual initiative is important and meaningful, it is critical to streamline and sequence them so that the system is not overtaxed and execution fatigue is avoided.

Common to all successful transformations in the private and public sectors is the prioritisation of some areas of improvement, sometimes at the expense of others. This prioritisation is driven both by the system's starting point as well as international evidence on the factors that make the most difference in improving student outcomes. Given the need to build the system's capacity and capability successively, the Ministry has sequenced the transformation to occur in three waves (Exhibit 9).

Wave 1 (2013-2015): Turn around system by supporting teachers and focusing on core skills.

The Ministry's focus during this phase will be on delivering a rapid turnaround programme. During this period, the focus will be on raising teaching quality by upskilling the existing pool of teachers, raising school leadership quality by improving how the education system appoints and trains principals, and improving student literacy (in both Bahasa Malaysia and English language) and numeracy through intensive remedial programmes. The Ministry will also strengthen and empower state and district offices to improve the quality of frontline support provided to all schools. By the end of Wave 1, the Ministry will ensure that all teachers, principals, and schools have achieved a minimum quality standard.

Wave 2 (2016-2020): Accelerate system improvement. During the second wave, the Ministry will roll out structural changes aimed at accelerating the pace of change (planning for all these initiatives will likely need to begin during Wave 1). These include moving all 410,000 teachers and 10,000 principals onto a new career package, restructuring the federal, state, and district offices to align with the revised roles laid out in Wave 1, and introducing a standard secondary and revised primary curriculum that addresses concerns regarding the knowledge, skills, and values needed to thrive in today's global economy.

Wave 3 (2021-2025): Move towards excellence with increased operational flexibility. By the start of the third wave, all schools, teachers, and principals should be performing well above the minimum standard. As such, the Ministry will focus on increasing operational flexibility to cultivate a peer-led culture of professional excellence. The Ministry will also move most, if not all schools, onto a school-based management model, and scale up successful models of instructional innovation. The goal is to create a self-sustaining system that is capable of innovating and taking achievements to greater heights.

DELIVERING THE ROADMAP

The Malaysian education system will need to undergo a complete transformation if it is to meet the ambitious aspirations set out in this Blueprint. This is a task of great complexity in both breadth and depth, particularly given that most education system reforms around the world have fallen short of their aspirations. Of the 55 school systems that took part in PISA 2000, only 12 have managed to demonstrate improvements in student outcomes over time—the rest either stagnated, or fell behind. This track record is not dissimilar to that of corporations undergoing major transformations—only one third is successful.

The Ministry has carefully reviewed international and national evidence to identify what the Ministry would need to do differently to deliver significant, sustainable, and widespread results. Based on this research, the Government and the Ministry are committed to the following actions:

 Sustaining leadership commitment and focus at the top: Top Government and Ministry leadership, including the Prime Minister and the Minister of Education, are committed to regularly reviewing progress, providing guidance, and resolving issues with regard to the Blueprint. The Ministry leadership is also committed to identifying, cultivating and developing the leadership capabilities of the next generation of system leaders to ensure continuity and consistency of the transformation efforts.

• Establishing a small, high-powered delivery unit to drive Blueprint delivery: The Ministry has established the Education Performance and Delivery Unit (PADU) to drive delivery of all Blueprint initiatives across the Ministry and schools. Specifically, PADU will monitor progress, problem-solve implementation issues with the responsible officers, and manage communication with stakeholders with regard to the transformation. PADU will draw from both the public and private sector to secure the best talent available.

Intensifying internal and external performance management: Successful school reforms go beyond programme design to dramatically improve the effectiveness and efficiency of the Ministry of Education itself. As such, the Ministry will establish a performance management system that sets high expectations of individuals through clear KPIs. This system will invest in capability building to help individuals achieve their targets, reward strong performance, and address poor performance without creating a culture of blame. The Ministry will also publish performance results annually so that the public can track progress on the Blueprint.

Engaging Ministry officials and other

stakeholders: The Blueprint development process was unprecedented in its attempt to engage and secure the input of the *rakyat* and the system's biggest constituents: parents, students, teachers, principals and Ministry officials. As the Blueprint initiatives are rolled out, the Ministry will continue to solicit feedback from these parties and will regularly communicate progress to ensure that the entire education system is engaged in the transformation process.

GAINS WILL BE DELIVERED WITHIN THE FIRST YEAR OF IMPLEMENTATION

The Malaysian education system is entering an intensive period of change. Transformation of an education system takes time and some of the most significant results of these changes, such as improvements in performance on international assessments, will only be visible a few years down the road. Nonetheless, over the next twelve months, the public can expect to see significant changes in the way the system is run. These changes will form the foundation for future results. Exhibit 10 (page E-43) offers a sampling of what to expect over the coming months.

Malaysian education stands at a crossroads, and the Ministry, taking the voices of the *rakyat* to heart, has chosen the more difficult, but ultimately more rewarding path. However, the Malaysian education system can only fulfil its ambitious aspirations through the continued support and commitment of all stakeholders. This Blueprint is a chance to carve out a brighter, bolder future for all Malaysian children—an ambitious mandate, but an inspiring one. It is the responsibility of every single Malaysian to work towards making these aspirations a reality, and it is only through all stakeholders working together that all Malaysian children will get the future they truly deserve.



OVERVIEW OF BLUEPRINT CHAPTERS

There are eight chapters and eight appendices in the Blueprint:

- **Chapter 1** lays out the objectives and approach behind the development of the Blueprint;
- Chapter 2 outlines a set of new aspirations for the overall Malaysian education system, including aspirations for every Malaysian child;
- Chapter 3 contains the detailed analyses on Malaysian student outcomes and establishes the current performance of the education system;
- Chapter 4 examines student learning in the Malaysian education system, looking at solutions to effect the changes necessary for the stated aspirations to be achieved. It includes initiatives from Shifts 1, 2 and 6 related to curriculum and assessment, strengthening of language skills, strengthening of STEM education, school improvement interventions, and education for students with specific needs;
- Chapter 5 explores the roles of teachers and school leaders as the frontline of the Malaysian education system, with a focus on how to improve the quality of and support provided to teachers and school leaders. It addresses initiatives raised in Shifts 4 and 5;

- **Chapter 6** looks at how the Ministry itself will develop in order to best implement the policies and initiatives laid out in this Blueprint, including by transforming the Ministry's fundamental approach to human resources and finances to improve delivery capacity and resource productivity. This encompasses the initiatives raised in Shifts 6, 7, 8 and 10;
- **Chapter 7** examines the structure of the system, and focuses on the phases of education, creating more varied educational pathways to address a broader spectrum of student interests and abilities, developing values among students, developing preschools, and better engaging with parents, local communities and the private sector. It includes initiatives from Shifts 1, 3 and 9;
- **Chapter 8** outlines the overall transformation programmes, including the sequencing of initiatives between 2013 and 2025 with the ultimate objective of improving student outcomes, raising the professional quality of teachers and school leaders, and revamping the structures of the Ministry and the education system. This chapter includes initiatives from Shift 11 to ensure that the Blueprint delivery is a success;

- Appendix I provides a brief overview of the major developments in the education system since the British Colonial period;
- Appendix II details the methodology used in developing the Blueprint, including different sources of inputs drawn from external experts such as UNESCO, OECD and local universities, to the results of the 2012 National Dialogue and through pre-Blueprint memorandums;
- **Appendix III** maps out how key issues raised during the National Dialogue and through pre-Blueprint memorandums have been addressed in the Blueprint;

- **Appendix IV** lists the memorandums on the preliminary Blueprint that were submitted to the Ministry;
- **Appendix V** explains the methodology behind the "Universal Scale" used in Chapter 3;
- **Appendix VI** details all major Blueprint initiatives across each wave of reform;
- **Appendix VII** highlights the initiatives that have been folded into the GTP 2.0 NKRA on Education; and
- **Appendix VIII** highlights the initiatives under the ETP Education National Key Economic Area (NKEA).

Integration with the "National Higher Education Strategic Plan"

The Ministry is also in the process of reviewing the 2007-2020 National Higher Education Strategic Plan (hereafter referred to as the Plan). The Plan covers the post-secondary education and life long learning ecosystem, which encompasses community colleges, polytechnics and universities in both the public and private sector. The review commenced at the start of 2013 and will both assess progress of the Plan to date, as well as consider areas for enhancement in order to account for changes in the global and local higher education landscape. The Plan will also integrate its thrusts and critical action projects with relevant themes and initiatives from the Blueprint to ensure a seamless transition for youth from the basic to higher education system.

Note: In 2013, the Ministries of Education and Higher Education were merged into a single entity, the Ministry of Education.

Early results within the coming 12 months

