



Malaysia Education Blueprint 2013-2025

(Preschool to Post-Secondary Education)



**MALAYSIA
EDUCATION
BLUEPRINT
2013 - 2025**

(PRESCHOOL TO POST-SECONDARY EDUCATION)

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FOREWORD



Education is a major contributor to the development of our social and economic capital. It inspires creativity and fosters innovation; provides our youth with the necessary skills to be able to compete in the modern labour market; and is a key driver of growth in the economy. And as this Government puts in place measures under the New Economic Model, Economic Transformation Plan and Government Transformation Plan to place Malaysia firmly on the path to development, we must ensure that our education system continues to progress in tandem. By doing so, our country will continue to keep pace in an increasingly competitive global economy.

AGENDA

Our education system has been the bedrock of our development. It has provided this generation and those before it with the skills and knowledge that have driven the country's growth and, with it, our prosperity.

At the centre of this are the thousands of dedicated teachers, principals, administrators, and officers and staff at the Ministry of Education, both past and present, whose contribution can never be overstated. In the 55 years since our independence, they have overseen a dramatic improvement to the quality and provision of education. And through their efforts we have, for example, achieved near-universal access at the primary and lower secondary levels, while global organisations such as UNESCO and World Bank have recognised and lauded Malaysia's progress in education.

But in order to meet our high aspirations amidst an increasingly competitive global environment, we cannot stand still. Our country requires a transformation of its entire education system, lifting achievement for all students. Make no mistake; this will require an entirely new perspective, so that students develop skills needed for the 21st century. Rather than simply adding staff and facilities, there is now a need to understand and improve the dynamics of the teaching and learning process.

To this end, the Government has developed the Education Blueprint. It provides a comprehensive plan for a rapid and sustainable transformation of our education system through to 2025. And by building on the range of initiatives introduced as National Key Result Areas, it sets out the fundamental changes that we require. From how we approach student learning, the way we recruit, train and reward our teachers and principals right through to how the Ministry of Education itself operates, it lays out a process for that change. And in doing so, it lays out clear improvements on the factors that really matter, along every step of this journey.

These targets are ambitious, but entirely achievable. They include: ensuring universal enrolment from preschool to upper secondary education in 10 years; halving the achievement gaps between the rich and poor, urban and rural, and between the states that form Malaysia in 10 years; rising from the bottom-third to the top-third of countries in international assessments like PISA and TIMSS in 15 years; and building an education system that gives children an appreciation for our unique identity as Malaysians. And this will be achieved with due prudence and care for the resources allocated; every ringgit spent must be directed towards improving student outcomes.

I would also like to take this opportunity to express my appreciation to the Ministry of Education and all those who contributed towards the development of this Education Blueprint. I realize that transforming the education system will not be easy and that we are likely to encounter a number of challenges along the way.

But despite this, rest assured that not only are the Government and Ministry of Education committed to delivering on these goals, I am also personally committed. And hand in hand with the rakyat, I have every confidence that we will persevere and deliver. From individual parents to members of the local community to the private sector, we all have a role to play and a personal stake in improving our education system. A role that will help sow the seeds of our children's success. A role that we should all be proud to play.

So God willing, let us take this exciting, challenging and – most importantly – this necessary journey together, as one nation.



Dato' Sri Mohd Najib bin Tun Haji Abdul Razak
Prime Minister of Malaysia

QUALITY



This Government is committed to transforming Malaysia's education system over the next one- and-a-half decades. Our goal, and the purpose of the education system, is to equip our students holistically to allow them to succeed in the 21st century, with all of the opportunities and challenges that this new era presents.

In order to compete with the best in the world, our education system must develop young Malaysians who are knowledgeable, think critically and creatively, have leadership skills and are able to communicate with the rest of the world. Just as importantly, our students must be imbued with values, ethics and a sense of nationhood, enabling them to make the right choices for themselves, their families and the country with a view towards enduring and overcoming life's inevitable challenges.

Delivering the shifts in achievement we seek, will require building on the progress already realised across the system; spreading it more widely, particularly to those groups for whom the system is currently not performing; and supporting all students to achieve. The Ministry of Education will focus its resources on those levers that actually make a difference to what matters most: student outcomes. Our strategy is to focus on teaching and learning quality, access to reliable and meaningful information, transparent accountabilities and appropriate learning environments and infrastructure.

The Ministry will ensure that all children entering school have already participated in early childhood education, regardless of socio-economic status. We will increase the number and diversity of preschools to make them broadly accessible, while raising the quality of early childhood education services across the board.

Quality teaching is the most effective lever available to transform primary and secondary education and deliver improved outcomes for students. The Ministry will improve the quality of teaching in our schools, building on existing good practice, and rewarding high-quality teaching with better career pathways that support teachers in the classroom. It will also revise the curriculum to embed and develop 21st Century Skills such as critical and creative thinking, as well as encourage holistic, well-rounded personal growth. Excellent professional leadership has the second-biggest effect on improving learning outcomes and so we are investing in strengthening school leadership from selection through to induction and in-role mentoring and support.

The Ministry will also provide targeted, differentiated support to every school, tailored to individual school needs. For instance, while the Ministry will support improved school infrastructure to support student learning across the education system, Sabah and Sarawak will be prioritised for infrastructure upgrades. This will ensure that every school receives the level and type of support it needs. Schools that are already high-performing will also earn greater decision rights autonomy to support continuous improvements.

Working with partners wherever necessary, we are focused on increasing opportunities for young Malaysians of all abilities, talents and interests. For instance, the vocational education pathway is being strengthened and expanded to provide students with the practical skills required to succeed in trades and other specialised occupations.

We will also further develop opportunities for religious, sports, arts, and other educational pathways. The inclusiveness of the system will also be improved, with additional opportunities and resources for groups with specific needs such as gifted, special needs and indigenous and other minority groups.

In order to deliver on these fundamental transformations, the Ministry of Education will play a key role in leading the education sector and working with education providers and stakeholders to lift student achievement. I applaud all of our Ministry personnel for their dedicated service, their hard work and their continuous efforts to improve the education and care of our students.

Over the course of the Blueprint, we will update you regularly on this transformation journey. We will establish the Education Performance and Delivery Unit (PADU) within the ministry that will support this programme. We will also share progress through annual reports which will highlight successes and gaps, with remedial action plans for continuous improvements where needed.

On behalf of the Ministry of Education, we commit to the vision of this Blueprint and to supporting its implementation to the best of our ability. For the sake of Malaysia's children, we can do better, and we will do better.



Tan Sri Dato' Haji Muhyiddin bin Haji Mohd Yassin
Deputy Prime Minister
and Minister of Education Malaysia



The Ministry of Education is committed to increase student's achievement through an efficient education system. Increase in quality, equity and access in education will continuously be strengthened to ensure the continuity of success that has been achieved since independence.

The Malaysia Education Blueprint 2013-2025 has set clear targets that need to be achieved in terms of quality, equity and access within 13 years. Meticulous planning within this duration is essential to include transformation of human resource management and finance, and the designation of key initiatives which result in students' outcomes.

The priority of the Ministry is to ensure better alignment between policy formulation and implementation along the entire education value chain. A clear understanding of this Blueprint among the Ministry's personnel and teachers is essential to ensure the programmes implemented will achieve the desired targets.

Another priority is to improve resource productivity by strengthening the link between desired outcomes and the effective allocation of resources, as well as efficient implementation of high impact programmes to enhance the quality of the education system.

The increase in efficiency and resource management can be effectively implemented by transforming

the structure of the Ministry as a whole. This transformation enables the delivery system in the Ministry to be more transparent, responsive and focused towards outcomes.

The Ministry's restructuring involves a concerted effort to empower the leadership at different levels - the Ministry, State Education Departments, District Education Offices and in schools. Greater autonomy and balanced accountability will also be provided to enable flexibility in delivering solutions tailored to the unique needs of the students. This will require constructive networking with key stakeholders across Government agencies, parents, community groups and the private sector.

I would like to express my sincere appreciation to the dedicated and hardworking Ministry personnel across Malaysia, many of whom perform their indispensable service of educating the nation's children in varying conditions. Although many challenges still lie ahead, I am confident that by working together we can deliver our shared goal.



Datuk Dr. Madinah binti Mohamad
Secretary-General
Ministry of Education Malaysia



Education is key for personal development and it provides a myriad of life opportunities. It also underpins the development of a highly skilled, innovative workforce as a critical enabling factor for social, cultural, and economic growth. The commitment and efforts we put into education are some of the most fundamental investments we can make towards securing the future wellbeing of Malaysians. Towards achieving this, various initiatives were undertaken to identify challenges and gaps related to the education system and find ways to address them. From these findings, the Ministry has come up with a Blueprint outlining strategies and initiatives for the enhancement of the National Education System.

VISIONS

The Blueprint is the result of a multitude of analyses, interviews, surveys, and research conducted with the support of national and international education experts, officials, teachers, principals, and parents all across Malaysia. In addition, through the National Dialogue conducted earlier this year, almost 12,000 members of the public and various stakeholder groups were consulted for their ideas and feedback.

In this Blueprint, we have set ourselves ambitious, yet achievable and feasible tasks to build a strong and efficient education system by 2025 that features universal access all the way through to secondary education, that will produce students who perform in the top third of international student assessments, to provide equal and quality educational opportunities for all students regardless of background or socioeconomic status and to instill a sense of common Malaysian identity amongst all students.

These changes will necessitate the implementation of strategic support systems to engage students in the learning process. Our schools will be able to provide quality teaching, guidance, and support for our students. Placements of strong, school-based leaders will help to ensure schools comply with the high performance standards as prescribed by the Ministry of Education Malaysia. Furthermore, I am confident that with the cooperation from all internal and external stakeholders the implementation of this Blueprint will provide a sustainable and rapid transformation of Malaysia's Education System.



Tan Sri Abd. Ghafar bin Mahmud
Director-General of Education Malaysia

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Executive Summary

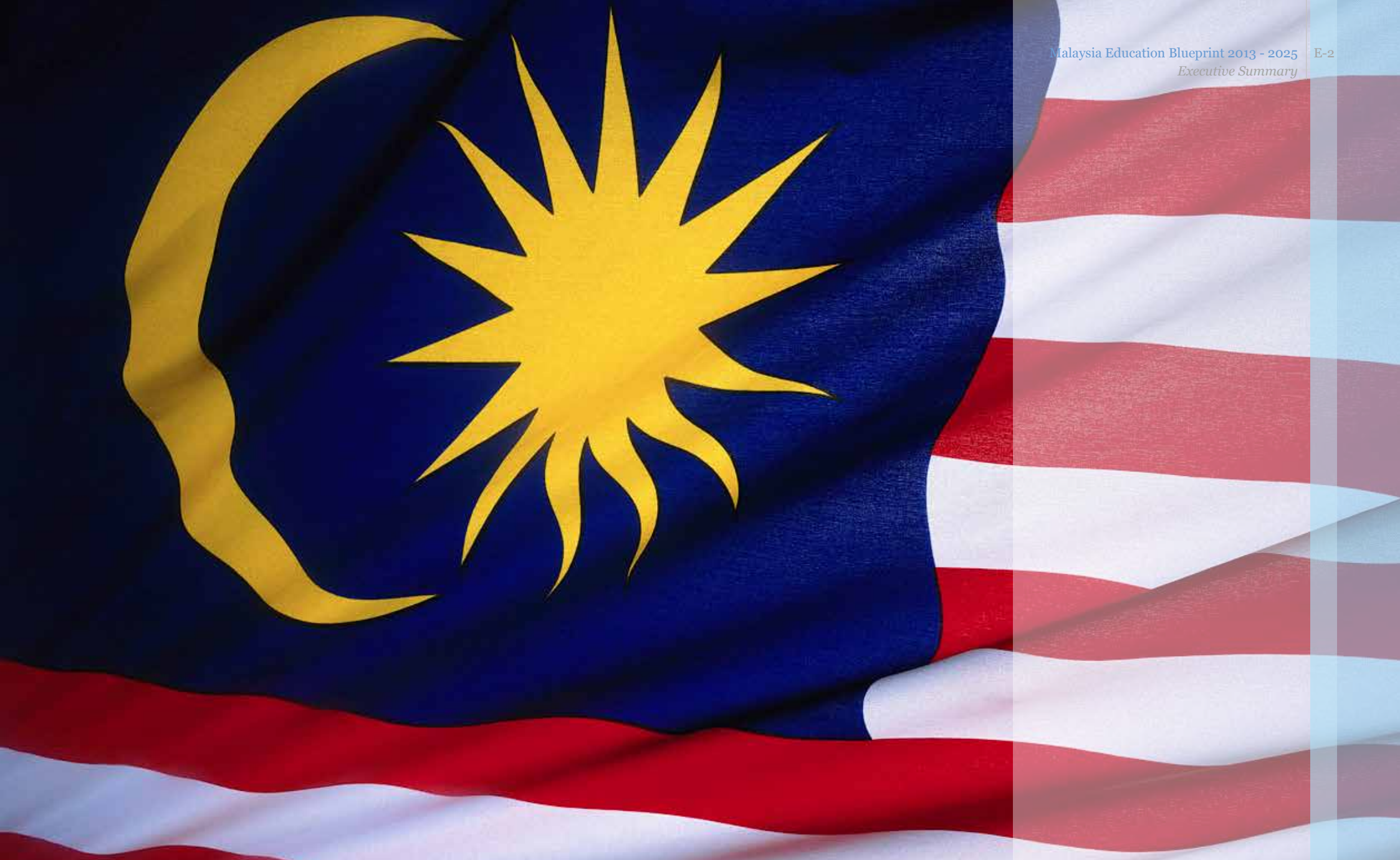
In October 2011, the Ministry of Education launched a comprehensive review of the education system in Malaysia in order to develop a new National Education Blueprint. The decision was made in the context of raising international education standards, the Government's aspiration of better preparing Malaysia's 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 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.

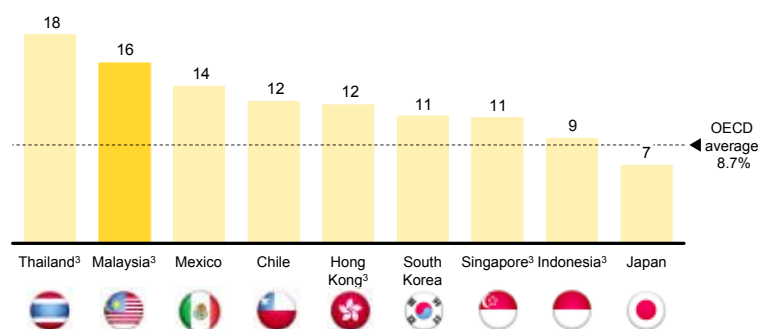
The Malaysian Government has sustained high levels of investment in education over the 55 years since independence. As early as 1980, the Malaysian federal government's spending on primary and secondary education, as a percentage of Gross Domestic Product (GDP), was the highest in East Asia. In 2011, 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.



EXHIBIT 1

Basic education expenditure¹ as a percentage of total government expenditure for Malaysia and peers²

Percent (2008)



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
 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.

DRAMATIC PROGRESS ON 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.

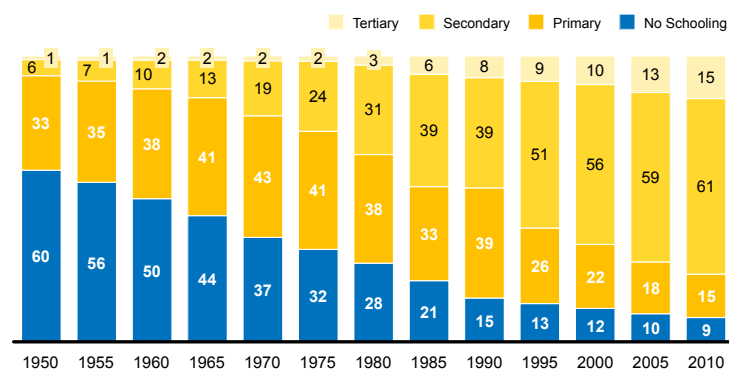
In 2011, Malaysia had achieved near universal enrolment at the primary level at 94%, and the percentage of students who dropped out of primary school had been significantly reduced (from 3% in 1989 to just 0.2% in 2011). Enrolment rates at the lower secondary level (Form 1 to 3) had risen to 87%. The 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 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 (1950-2010)

Percent of population



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 co-curricular 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 co-curricular 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 well-being 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).

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.

EXHIBIT 3

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

Regional peers

1 Reading			2 Mathematics			3 Science		
Rank	Country	Mean score	Rank	Country	Mean score	Rank	Country	Mean score
1	Shanghai-China	556	1	Shanghai-China	600	1	Shanghai-China	575
2	South Korea	539	2	Singapore	562	2	Finland	554
3	Finland	536	3	Hong Kong	555	3	Hong Kong	549
4	Hong Kong	533	4	South Korea	546	4	Singapore	542
5	Singapore	526	5	Chinese Taipei	543	5	Japan	539
⋮			⋮			⋮		
26	Hungary	494	24	Austria	496	20	United States	502
OECD Average			OECD Average			OECD Average		
27	Portugal	497	25	Poland	495	21	Republik Czech	500
⋮			⋮			⋮		
42	Russian Fed.	459	41	Croatia	460	40	Greece	470
International Average			International Average			International Average		
43	Chile	449	42	Israel	447	41	Malta	461
⋮			⋮			⋮		
52	Thailand	421	52	Thailand	419	51	Thailand	425
⋮			⋮			⋮		
54 MALAYSIA		414	57 MALAYSIA		404	52 MALAYSIA		422
⋮			⋮			⋮		
61	Indonesia	402	67	Indonesia	371	65	Indonesia	383

SOURCE: PISA 2009+

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.

EXHIBIT 4

Examples of Malaysian students' international achievements

Nov 2012	World Robot Olympiad (WRO 2012), Malaysia	Malaysian teams swept 9 medals, making Malaysia the overall champion for the third time
Jul 2012	8 th International Exhibition for Young Inventors, Thailand	The Malaysian team won a Gold medal for their 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
	2 nd International Folk Song and Dance Festival, Georgia, USA	The Malaysian team of 15 performers won the Gold and Silver Diploma prizes
	5 th 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 Speaking Competition, London, UK	A 17-year-old emerged as the first Malaysian champion
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	52 nd 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
Dec 2010	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



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.

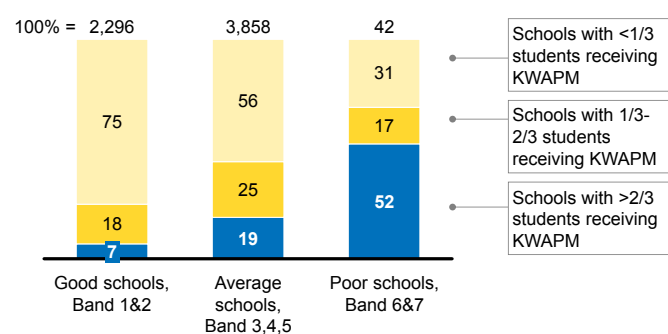
The UPSR achievement gap between National and National-type primary schools is also closing. The difference between National schools or *Sekolah Kebangsaan* (SK) and National-type Chinese schools or *Sekolah Jenis Kebangsaan Cina* (SJKC) is insignificant. Over the past five years, National-type Tamil 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.

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.

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.

RETURN ON INVESTMENT IS NOT AS HIGH AS DESIRED

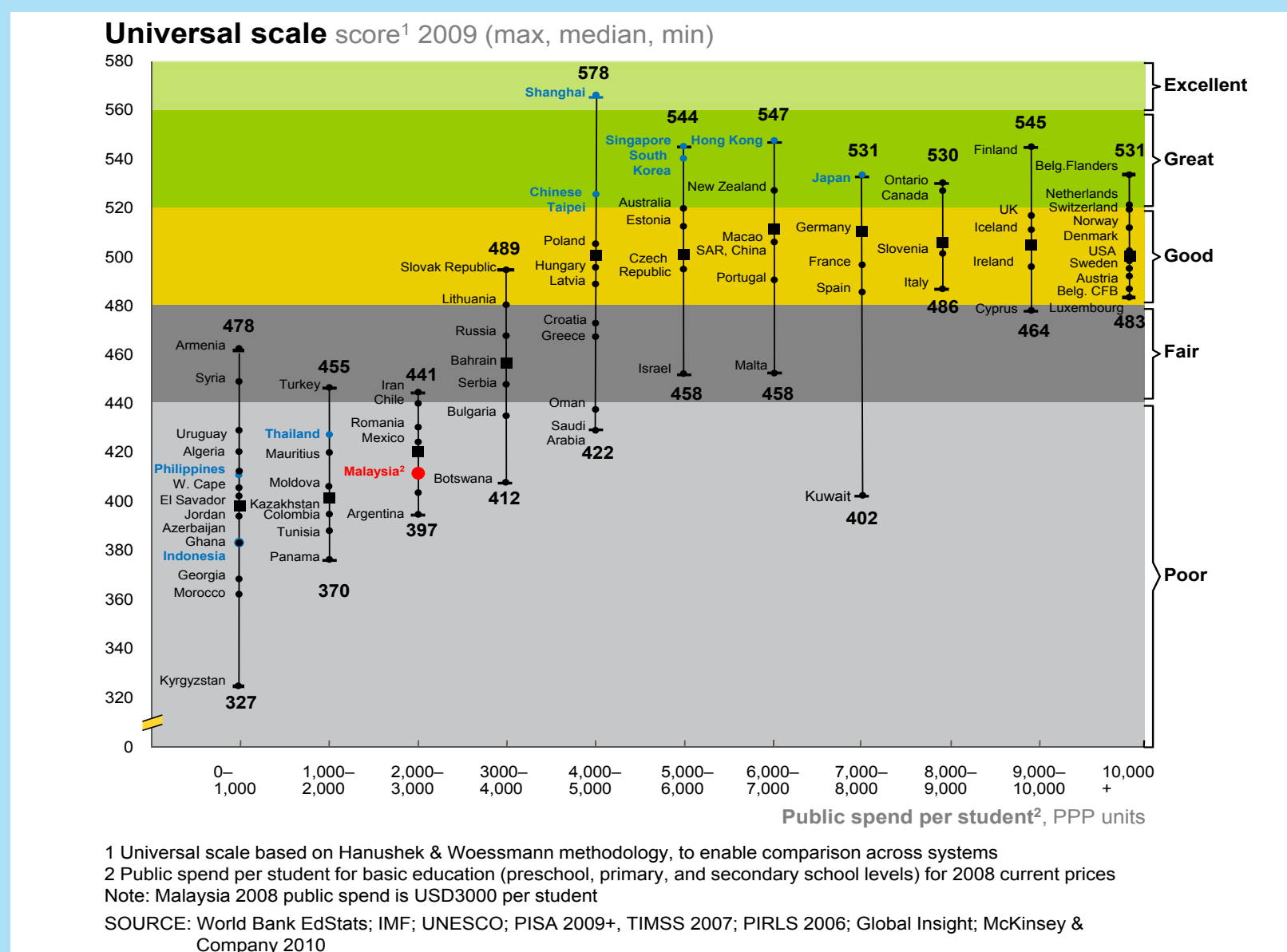
Malaysia's consistently high levels of expenditure on education have resulted in almost universal access to primary education, and significant improvements in access to secondary education. However, there remains room for improvement on the dimensions of quality, equity, and unity.

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.

EXHIBIT 6

Country performance in international assessments relative to public spend per student



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.

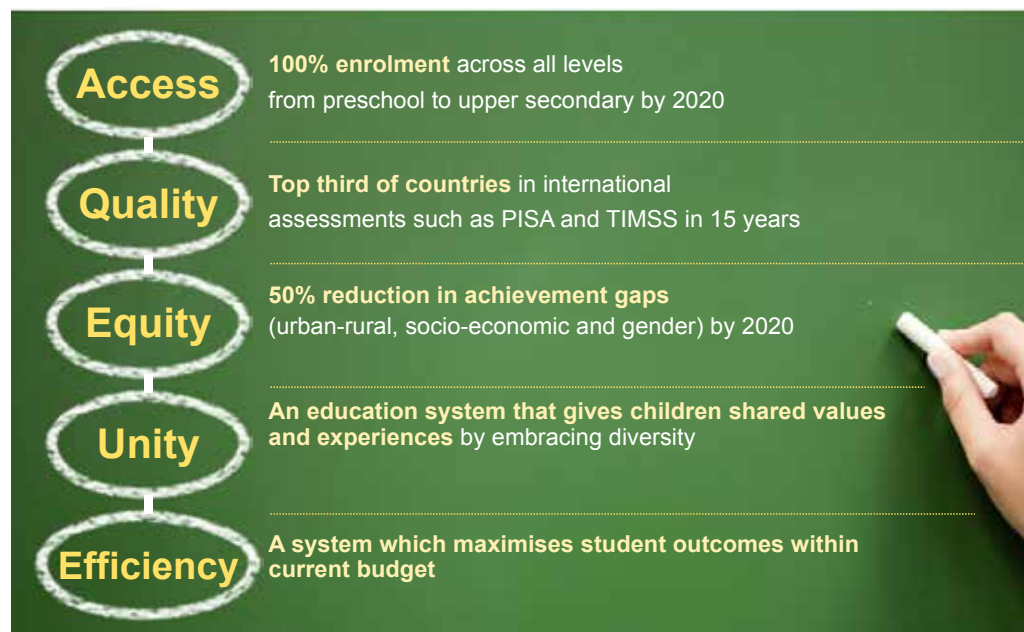
System aspirations

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 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.

EXHIBIT 7

Five system aspirations for the Malaysian education system



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

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.

EXHIBIT 8

Six key attributes needed by every student to be globally competitive



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 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

- **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 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, problem-solving, 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 industry-recognised 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