



Chapter 5

DEVELOPING AND RETAINING A FIRST-WORLD TALENT BASE



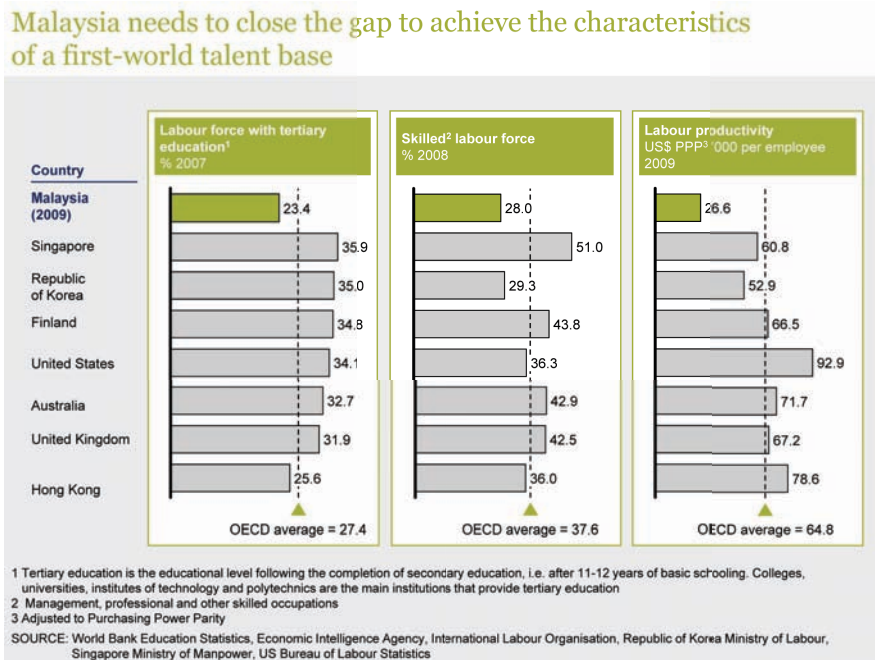
Kuala Lumpur Tower



Human capital lies at the core of innovation and a productive high income economy. It is the most important investment a country makes. No economy can succeed without a highly skilled talent base that is able to rapidly respond creatively to economic changes, and is centred on developing and utilising knowledge. To achieve the Malaysia’s aspirations, it is imperative to develop, attract and retain a first-world talent base.

The talent base and workforce of high-income nations include a number of key characteristics, specifically around higher education qualifications to promote knowledge generation and innovation, high skill-levels in both technical and professional fields, and strong levels of productivity. Regarding these characteristics, Malaysia has a long way to go and will need to concentrate efforts to catch up with a first-world skill and talent base by 2020. *Chart 5-1* shows how Malaysia’s human

Chart 5-1



capital today compares with other high-income economies in terms of these characteristics.

There are significant gaps to close in order to achieve a first-world talent base, and Malaysia is increasingly at risk of falling behind. Student performances, as benchmarked by international surveys, have been declining. In the Trends in International Mathematics and Science Study (TIMSS)¹, 2007, around 20% of Malaysian students failed to meet minimum benchmarks for both Mathematics and Science, compared to only 5% in Science and 7% in Mathematics in 2003. In addition, the workforce remains relatively unskilled, with 77% educated only up to 11 years of basic education at the Malaysian Certificate of Education (SPM) level or equivalent, and with only 28% of Malaysian jobs in the higher skilled bracket.

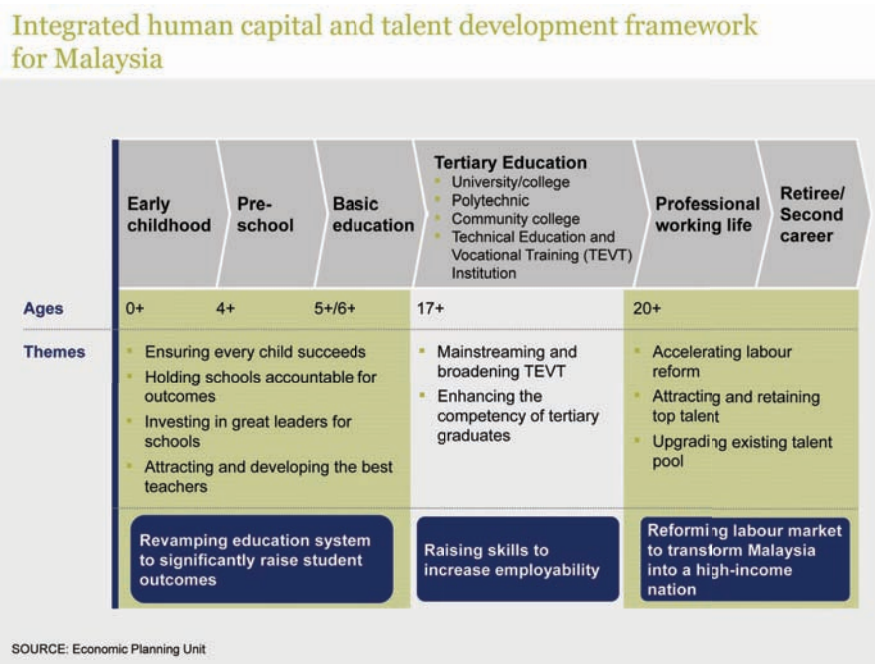
Talent shortages are almost certain to get more acute in the intensifying global competition where

the best global talent is drawn across borders to the most attractive global opportunities. Asian countries such as the Republic of Korea and Singapore have propelled themselves into the group of developed nations within a generation as a result of precise, deliberate and purposeful prioritisation of focus sectors for their economies, whilst concentrating on developing, upskilling and delivering the right talent required to drive growth in these specific sectors.

For Malaysia, the development of a first world talent base requires nothing less than a comprehensive, all-inclusive national effort from the public and private sectors as well as civil society, to lift the quality of the nation's human capital. The development of human capital in Malaysia requires the collaboration of multiple ministries and the private sector to address all population segments. It requires a holistic set of measures that supports the development needs of every Malaysian at every stage of their lives.

¹ The TIMSS provides international comparisons on Mathematics and Science achievement over time for students with 8 years of schooling in participating countries. In 2007, a total of 59 countries participated in the study.

Chart 5-2



During the Tenth Plan period (2011 - 2015), the Government will adopt an integrated human capital and talent development framework, as illustrated in *Chart 5-2*. This approach will nurture and develop Malaysians across their entire life-cycle, from early childhood education, basic education, tertiary education and all the way to their adult working lives, specifically by:

- Revamping the education system to significantly raise student outcomes;
- Raising the skills of Malaysians to increase employability; and
- Reforming the labour market to transform Malaysia into a high-income nation.

Box 5-1***The Republic of Korea's astounding story of growth and modernisation through human capital development***

The Republic of Korea today is a developed nation by any measure. It has a trillion dollar economy, the 13th largest in the world, and a Gross Domestic Product (GDP) per capita level that rivals most developed countries. Technologically advanced, it boasts the highest rate of broadband penetration in the world at more than 90%. Republic of Korea also consistently ranks among the top countries in international student assessments such as the Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA).

Impressive as this may seem, what is more miraculous is how quickly Republic of Korea transformed itself from the ashes of the Korean war to the powerhouse it is today. Half a century ago, having an abundance of cheap labour, Republic of Korea singled out education and human capital development as the means of improving productivity to catapult itself to developed nation status. It recognised that in order to compete globally, it was important to have an education system that ensured all students were supported and could succeed without neglecting underperformers.

To this end, it focused on improving education at all levels, from elementary school to university to skills training. Initiatives undertaken included not just making middle school education compulsory, but also rapidly enhancing technical education and training via close partnerships with the largest chaebols and corporations in Republic of Korea such as the establishment of corporate universities as lifelong learning institutes. Significant investments were made in tertiary education with around 3.6 million students enrolled in both public and private higher education institutions today. In addition the government re-engineered the education system to deliver the required talent pipeline for priority industries for the country.

REVAMPING THE EDUCATION SYSTEM TO SIGNIFICANTLY RAISE STUDENT OUTCOMES

Malaysia has made enormous strides in its education system over the past years with an adult literacy rate of around 92%, universal primary enrolment, and one of the fastest growth rates in secondary school enrolment. Enhancing education is not only a matter of basic human rights, it is an economic imperative. Poor performance in education today will have negative consequences for the country's future as higher education levels are consistently correlated with more robust economic growth. Unless the Malaysian education system continues to raise the bar to international standards and to close the current achievement gap across schools, Malaysia runs the risk of being left behind in education today and in competitiveness tomorrow.

Going forward, Malaysian student performances will continue to be benchmarked against international standards and assessments. In addition to the TIMSS survey, Malaysia will participate in the Programme for International Student Assessment (PISA) to ensure that student outcomes and improvements are objectively measured and consistently compared with other countries. TIMSS and PISA are the two most widely recognised global comparisons of student achievement, with 59 countries participating in TIMSS in 2007 and 65 countries participating in the latest round of PISA assessments in 2009. During the Tenth

Plan period, the Ministry of Education (MOE) will also undertake a comprehensive review and assessment of the current status of the education system focusing on implementation and delivery capabilities.

The revamping of the education system will be guided by the National Education Philosophy, which was introduced in 1989 and remains the cornerstone of all education transformation efforts. The goal of this philosophy is to further develop the potential of individuals in a holistic and integrated manner to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious. During the Plan period, to further reinforce this philosophy, emphasis will be placed on the participation in sports and co-curricular activities in schools to contribute towards character-building of students. The education system will reinforce the importance of values and ethics as these represent critical building blocks on the journey to Vision 2020. The use of information and communications technology (ICT) in schools will be given greater emphasis to nurture creativity and innovation among students, in order to equip them with new skills and capabilities to meet the demands of a high-income economy.

Education is a National Key Result Area (NKRA) for the Government. The Education NKRA is



intended to provide the starting point and platform to improve student outcomes across Malaysia's school system and to enable access to quality education for all students.

The education system is critical in strengthening the competitiveness of the country and in building 1Malaysia. The status of national schools will

be elevated to become the school of choice for a broader segment of Malaysians by continually raising standards and closing the achievement gap across national schools.

In order to rapidly deliver significant, sustained and widespread improvements in student outcomes, the Government will move beyond an emphasis on investing in bricks and mortar for providing access to education, to investing in the most critical levers that impact student outcomes, such as the quality of teachers and the leadership in schools. Four strategies will be adopted during the Plan period to significantly improve student performance:

Box 5-2

Improving Student Outcomes is one of Six National Key Result Areas (NKRA)



Six NKRA's have been selected as the priority areas for the nation and for the people of Malaysia. They represent a combination of short-term priorities and long-term issues affecting the people. To reflect the importance of the NKRA's, they are collectively owned by the Cabinet with accountability for delivery resting on a lead minister, who is appointed and formally monitored by the Prime Minister.

The education NKRA's is targeted at improving student outcomes and is anchored upon four areas: Pre-school enrolment rates, High Performing Schools, Literacy and Numeracy Screening (LINUS) programme, and a New Deal for Head Teachers and Principals.

- Ensure every child can succeed. Set the same high expectations for all students regardless of background and provide systematic help and support to students who fall behind;
- Hold schools accountable for changes in student outcomes. Provide guided autonomy to schools in exchange for significantly improved student outcomes;
- Invest in great leaders for every school. Invest heavily in head teachers and principals as the primary drivers of change via rigorous selection, extensive training and robust performance management based on student outcomes; and



- Attract and develop top talent in the teaching profession. Enhance the attractiveness and profile of the profession to recruit top talent, improve the quality of practicum training and put in place rigorous performance management and world-class continuous professional development.

Ensuring Every Child Can Succeed

Great education systems are those that ensure every child succeeds. They do so first by setting the same high expectations for all students regardless of their background or location and secondly, by recognising that some students, especially those from disadvantaged backgrounds, require more support to reach common performance standards. The Government has a big role to play and is committed to unlocking the potential of every child in Malaysia.

Providing a Stronger Head-Start for More Children

Early childhood education plays a vital role in developing a child's mind and helps reduce existing and future disadvantages. The earliest formative years of a child's development are the most crucial

with the biggest impact on the mental development of a child. Failure in education is cumulative, and in line with the goal of ensuring every Malaysian child can succeed, the Government will increase the focus on improving and expanding adoption of early childhood education to provide more children in Malaysia with a better head-start.

The early childhood development programme for children aged four and below (PERMATA), aimed at nurturing and producing the country's future 'gems', will come under the purview of the MOE by 2011 to improve co-ordination and integration with the formal education system. PERMATA will focus on children from households with monthly income below RM1,500. After the successful PERMATA pilot programme launched in 2007, a total of 181 PERMATA centres will be established throughout the country during the Plan period with an allocation of RM36 million.

Expanding Pre-School Enrolment and Improving Quality

Children who attend pre-school programmes are found to be more committed to education and earned higher incomes in later years². Given the importance of pre-school education and the scope for Malaysia to further increase its rate of

² High Scope Perry Pre-School Study, the United States of America (2005)

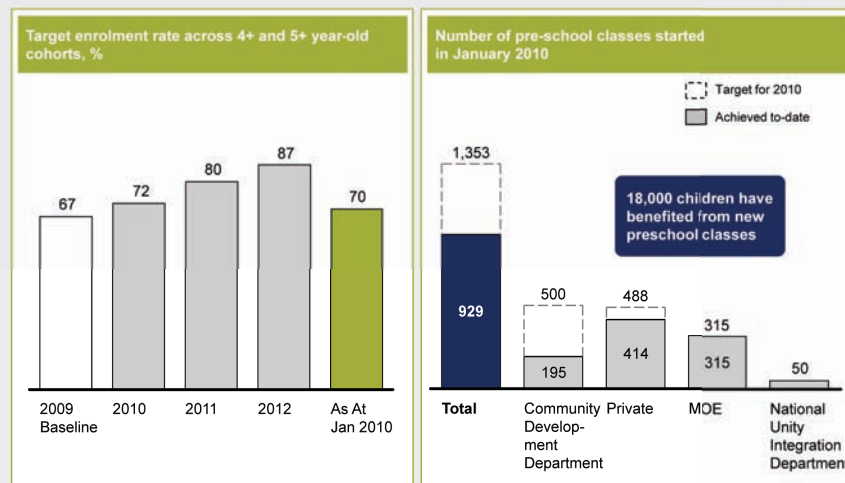
enrolment, which currently stands at 67% for children aged 4+ and 5+, pre-school education is designated a focus area under the Education NKRA. As shown in *Chart 5-3*, this programme aims to increase the pre-school enrolment rate to 87% by 2012 and to 92% by 2015, while at the same time, improving the quality of pre-school education. A total of RM2 billion has been earmarked for this programme during the period 2010-2012.

Lowering Entry Age for Schooling

With the implementation of the early childhood development and pre-school programme, more children will be ready to enter school at a younger age than is currently practised. Entry age for schooling will be lowered from 6+ to 5+ during the Plan period. This is also in line with practices in many developed countries. It will be rolled-out in stages and will begin with schools in rural and

Chart 5-3

Pre-schools enrolment rate for 4+ and 5+ year-old children is targeted to reach 87% by 2012



SOURCE: Performance Management and Delivery Unit, Prime Minister's Department

plantation areas, particularly in schools that are under utilised allowing the students to benefit from an earlier head-start to their education.

Ensuring Literacy and Numeracy

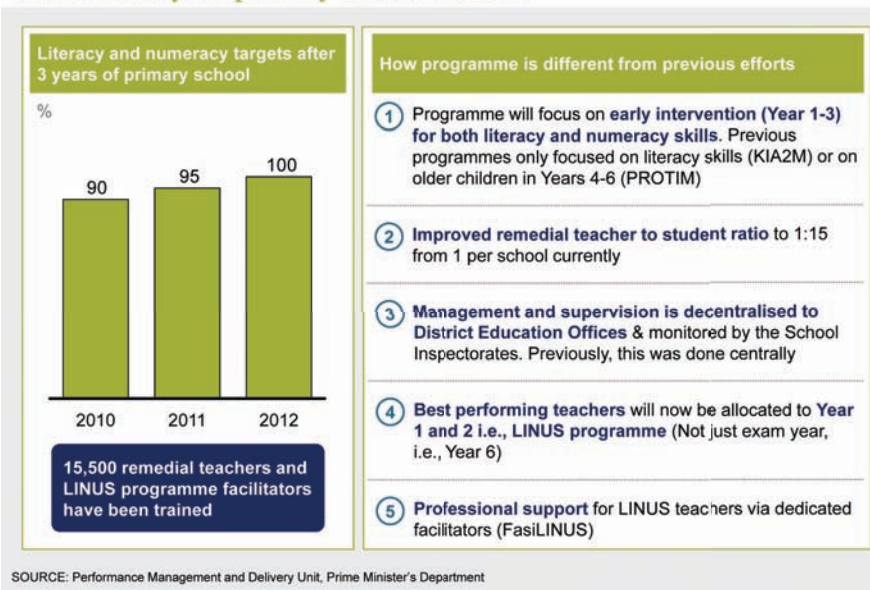
Improving literacy and numeracy skills is critical to reduce drop-out rates due to the inability of students to cope with the syllabus being taught. Starting early is crucial as it becomes harder

to compensate for deficiencies in literacy and numeracy skills as a child grows up.

The Literacy and Numeracy Screening (LINUS) programme aims to ensure all students³ have basic literacy and numeracy skills after the first three years of primary education. A total of RM400 million will be allocated to this programme during the period 2010-2012. As highlighted in *Chart 5-4*, the LINUS programme focuses on early

Chart 5-4

The nationwide LINUS programme is aimed at improving literacy and numeracy for primary school students



³ Children with learning disabilities will be placed in a special programme with separate targets.

intervention and will deploy trained facilitators and remedial teachers to schools to implement the programme. To-date, a total of 15,500 remedial teachers and facilitators have been trained.

Upholding Bahasa Melayu and Strengthening English Proficiency

The Government will implement the Upholding Bahasa Melayu and Strengthening English programme during the Plan period. The objective of the programme is to uphold Bahasa Melayu as the official national language, and to strengthen English proficiency to enhance Malaysia's competitiveness. It will adopt an integrated modular approach to the teaching and learning process for Bahasa Melayu and will expand the teaching of Malay literature in primary schools.

The programme will also seek to strengthen the teaching and learning of English with the introduction of a new curriculum, stressing the five key skill areas of reading, speaking and listening, writing, grammar and language arts. The time spent on teaching English will be increased from 4 hours to 5.5 hours per week for level 1 (Year 1-3), and from 3.5 hours to 5 hours for level 2 (Year 4-6) in primary schools.

Four out of 27 Institutes of Teacher Education (ITE) will focus on English language training for

teachers. The Government will continue to assess the effectiveness of the programme on an ongoing basis and will develop further initiatives to improve English proficiency in students.

Holding Schools Accountable for Changes in Student Outcomes

Top performing school systems set high expectations for each school in terms of student outcomes, monitoring performance against those expectations and providing appropriate support whenever those expectations are not met. Moving forward, efforts to revamp the educational system will be explicitly anchored on student outcomes and on holding schools accountable for those outcomes.

Lifting Performance of All Schools with a Comprehensive School Improvement Programme

The School Improvement Programme, launched in April 2010, is a comprehensive and ambitious effort to challenge, motivate and support all public schools to improve student outcomes. Special emphasis will be given to the low performing schools that need help the most. The programme consists of a number of elements including the following:



- **School Performance Rankings.** All schools in Malaysia will be assessed and ranked annually according to performance bands. Detailed explanation of their rankings, as measured by student outcomes and school achievements, will be made available to schools. This is intended to allow greater transparency around school performance, to motivate schools to do better and to allow the MOE to target resources to schools that need support the most; and
- **School Improvement Toolkit and Plans.** This will be rolled out to all public schools as a supporting tool to help schools help themselves. It will provide head teachers and principals a thorough overview of their school's performance and to develop action plans to fit the unique needs of each school. All schools will develop school improvement plans as a basis for monitoring progress, and to help the MOE tailor the right type of support to make the plan successful.

Basic school infrastructure and amenities such as electricity, water, sanitation and teaching aids represent the foundation for improving student outcomes and the Government is committed towards delivering these basic infrastructure and amenities to all schools. As part of the School

Improvement Programme, the Government will continue to focus investments in infrastructure and facilities in schools across Malaysia that need support the most, especially for schools in rural areas in the states of Sabah and Sarawak.

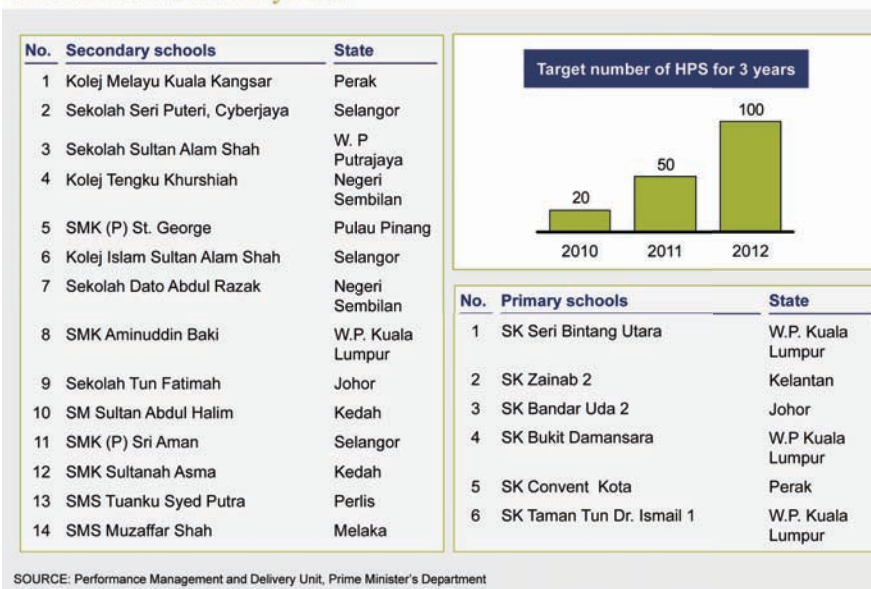
Raising Standards to International Levels with the High Performing Schools Programme

High Performing Schools (HPS) are defined as schools with ethos and a unique identity that encourages their students to excel in all aspects of education. These schools have strong work cultures and strive for continuous improvement, in addition to having strong international linkages and networks. HPS strive to raise the standards of schools to be comparable with the best schools globally and be models as well as provide support via coaching and mentoring networks to other schools.

A total of 100 HPS will be developed by 2012 with an allocation of RM140 million. A total of 20 HPS have already been identified as shown in Chart 5-5. These schools have earned their HPS designation through their consistent performance and achievements. They include multiple categories of schools, comprised of both primary and secondary schools, day schools as well as residential schools.

Chart 5-5

High Performing Schools programme: The inaugural batch of 20 HPS announced in January 2010



Investing in Great Leaders for Every School

Top performing school systems leverage on their head teachers and principals as primary drivers of change by implementing a rigorous selection and training process and focusing each head teacher's or principal's time on instructional leadership. Improvements in the performance of head teachers and principals have a significant positive impact on student outcomes. Head teachers

and principals play an active role in developing their teachers and planning, coordinating and evaluating teaching and learning activities in their schools. They also ensure that the school environment is conducive for learning as well as establishing an orderly, supportive environment both inside and outside of classrooms.

Introducing the *Bai'ah* or New Deal for Head Teachers and Principals

The new performance management approach

(New Deal) for head teachers and principals commencing in 2010 will reward them financially and non-financially for exceptional performance. This New Deal will apply to all head teachers and principals of all public schools in Malaysia.

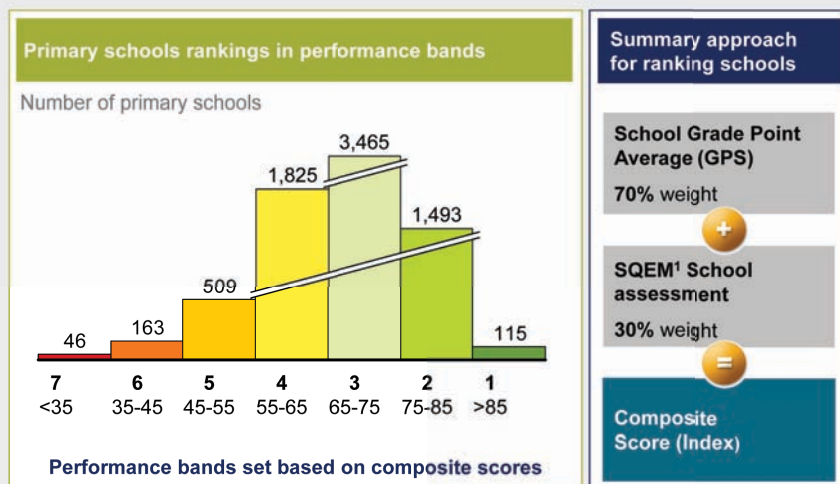
and the Standard for Quality Education in Malaysia, which measures the quality of teaching and learning, organisational management, educational programme management and student accomplishment, as shown in *Chart 5-6*.

The performance of all public schools will be assessed and ranked annually according to a composite score. The composite score comprises the Grade Point Average based on the school's performance in public examinations

It is estimated that approximately 2% of head teachers and principals in 2010 will be eligible for reward under this programme, with a target of 5% in 2012. They will be rewarded for achieving a specified target composite score or for delivering

Chart 5-6

New Deal for Principals: All primary schools across Malaysia have been ranked by performance



¹ Standard Quality Education Malaysia (SQEM) is the standard quality instrument for evaluating schools based on 4 main dimensions (vision and mission; organisational management; educational program management and pupil accomplishment)
SOURCE: Performance Management and Delivery Unit, Prime Minister's Department

substantial improvements in their school's performance. This would give head teachers and principals a chance to receive a reward regardless of the starting points of their schools, as long as they are able to achieve significant improvements in the performance of their schools. In addition, approximately 10% of the bottom performing head teachers and principals will be provided with remedial and developmental training to help them improve their performance. An allocation of RM160 million will be made for this programme during period 2010-2012.

Enhancing Support and Coaching for Head Teachers and Principals

Leadership plays an extremely important role in delivering improved student outcomes. The Government recognises that leaders and drivers are critical to any change process, and will continue to strengthen the leadership training and support provided to them. The Aminuddin Baki Institute (IAB) is the primary leadership training institute for education personnel, including principals, administrators and officers. IAB targets to provide leadership training and programmes to at least 14,000 school leaders and officers each year during the Plan period, from the current level of 8,000 per year.

The delivery of training at IAB will move from a lecture-based mode to an emphasis on

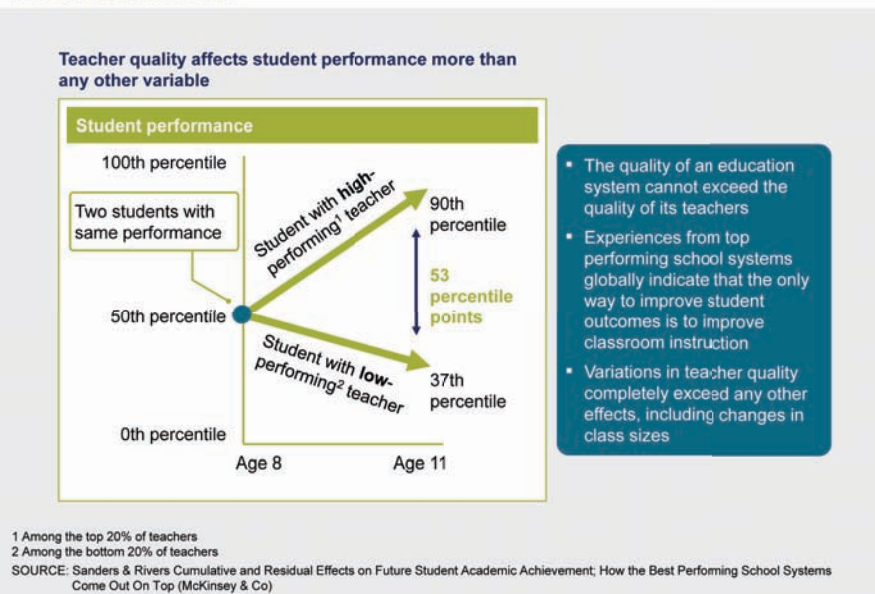
experiential learning. The educational and management courses will be delivered on campus as well as online using the Institute's e-learning platform, and complemented by a digital repository of knowledge. Consultation, coaching and mentoring will also be given more emphasis as IAB moves towards a service-line approach to help school leaders improve performance. In line with the School Improvement Programme, specialist principal coaches will provide additional leadership coaching and support to school leaders at low performing schools.

Attracting and Developing Top Talent in Teaching

Teacher quality is the single most important determinant of student outcomes, as highlighted in *Chart 5-7*. Experiences from top performing school systems globally indicate that the only way to improve student outcomes is to improve classroom instruction. Top performing school systems attract and admit only the best candidates into teaching, continuously develop them in school-based settings and develop a strong performance culture. During the Plan period, the Government will undertake measures to systematically improve both the quality of the new teacher intake as well as to upgrade the quality and professionalism of all existing teachers in the system.

Chart 5-7

Teacher quality is the most important lever for changing student outcomes



Significantly Improving the Quality of New Teacher Recruits

There are currently over 175,000 applicants for entry to the teaching profession in Malaysia every year with up to 20,000 new teachers placed into schools annually. Many applicants do not have the right aptitude and attitude for becoming teachers. For applications to ITEs in 2010, only 7% of applicants to the undergraduate teaching programme had more than 7 As in their SPM, and only 3% of applicants to the postgraduate

teaching programme had a combined grade point average of more than 3.5 out of 4.0. For students in the top secondary schools, teaching is not widely considered a preferred career option.

In countries like Australia or Singapore, teaching is consistently one of the highest ranked professions by school leavers. Similarly, in countries like Republic of Korea and Finland, only graduates in the top 10% and 15% respectively of their cohorts are eligible to apply to teacher training programmes. The high entry requirements



reinforce the image of teaching as a top profession that only accepts the best.

Making Teaching the Profession of Choice

It is critical to get more of the best and brightest graduates in Malaysia to be attracted to the teaching profession. Programmes will be launched during the Plan period, including a high-profile nationwide marketing campaign, to raise the awareness of teaching as a highly regarded profession.

The Government will seek to elevate the status of teaching as the profession of choice by highlighting and reinforcing the following four value propositions:

- Financially rewarding: The teaching profession is already among the highest-paying public sector profession at entry-level;
- Career-building: Under the New Deal for Teachers, the teaching profession will have excellent career prospects, with extensive opportunities for professional development, as well as an accelerated career path for performers;
- Prestigious: The teaching profession is a highly selective and prestigious career option with

stringent evaluation processes. It is a highly competitive career reserved only for the best candidates; and

- Nation-building: The teaching profession is responsible for moulding the future leaders of Malaysia, and is one of the most critical professions to drive Malaysia towards high-income nation status.

Improving Teacher Training Through an Enhanced Practicum Component

Practicum experience is an essential element in teacher training as it increases the opportunities for actual classroom experiences. Top school systems such as those in Finland and New Zealand are increasing the quantity and quality of practical experience that teachers have before entering the system. In Malaysia, steps will be taken to improve the consistency and quality of the practicum experience of teacher trainees in terms of increasing time spent on practicum training, and engaging experienced teachers with strong mentoring skills to supervise trainees.

The practical training for trainee teachers will be improved through the following measures during the Plan period:

Box 5-3***Teach for Malaysia programme: A campaign to target high achievers***

Teach for All is a global network of social enterprises operating in multiple countries that recruit outstanding graduates from top universities and young leaders from a variety of disciplines and career interests to commit two years to teach in high-need areas. This programme provides a critical source of additional teachers who ensure their students have the educational opportunities they deserve, despite socioeconomic factors. The Teach for America programme today has grown to include more than 20,000 individuals. The Teach for All network also covers countries as diverse as India, Australia, the United Kingdom, Germany and Peru.

Malaysia intends to launch a high profile 'Teach for Malaysia' programme to attract the best and brightest Malaysian graduates to teach for two years at underperforming or rural schools. Top graduates under corporate sponsorships will be encouraged to participate in the programme, prior to returning to work with their employers. Participating graduates will be placed at underperforming schools as these are the schools that are most in need of motivated, inspirational and high quality teachers.

Participating graduates will enter a fast-track training programme where they will receive intensive training in latest teaching methods. They will also undergo continuous mentoring and coaching, as well as peer support over the two years. Additional training in leadership development will be provided through management training and extensive networking opportunities with leading corporations. After their two years of service, graduates will be equipped with a grounded sense of reality of Malaysia's core educational issues, and can be expected to advocate change to address these concerns from within and outside of the education system.

- The Postgraduate Teaching Course will be extended from one year to one and a half years to increase the practicum experience of teacher trainees;
- State Education Departments will coordinate the practicum programme by facilitating the allocation of practicum trainees to qualifying schools and monitoring compliance of mentor teachers;
- Experienced teachers in qualifying schools will be provided with mentoring courses to upgrade their capabilities; and

- The quality of the practicum training provided will be linked to the performance evaluation of the school and the mentor teachers.

Removing Guaranteed Placement of Trainees

Currently, teacher trainees are guaranteed placements in schools regardless of how they have performed. Guaranteed placement for teacher trainees in ITEs and public universities will be removed. Only the best and most qualified teachers will be offered teaching positions. The objective of removing guaranteed placement is to ensure that there is a higher minimum quality requirement for new teachers.

Transitioning to a Full 'Open System' of Teacher Training

The talent pool of teacher trainees will also be expanded from the existing ITEs and public universities to include private universities and colleges to 'open up' sourcing of trained teachers from outside public institutions. By liberalising the teacher training system, primary and secondary schools will thus have a much larger talent pool of teachers to recruit from. This will enhance competition and improve the overall quality of the teacher training system.

Lifting the Quality of Current Teachers to Deliver Outstanding Education through a New Deal for All Teachers

During the Plan period, the Government will launch and implement a comprehensive New Deal for all teachers in Malaysia, both to fundamentally transform the attractiveness, as well as to radically raise the professionalism and profile of the teaching profession. In addition, the Government will increase the percentage of graduate teachers in schools, from 89.4% in 2009 to 90.0% by 2015 in secondary schools, and from 28.0% in 2009 to 60.0% by 2015 for primary schools.

The New Deal for the teaching profession will incorporate three elements:

- Faster career progression based on competencies and performance, not just tenure;
- Enhanced and systematic Continuous Professional Development (CPD) for all teachers; and
- New evaluation instrument and performance management approach.

Implementing a Competency Based Career Track with Faster Progression

The slow career progression of the teaching career will be addressed. The majority of teachers often go through their entire 30-year teaching career with only one or two promotions. Currently, the time-based policy means that teachers will typically take 10 years to progress from beginner to the next level.

A faster career progression and fast-tracking for high performing teachers is key to making the teaching profession attractive, and help to ensure high quality potential teacher candidates are not turned away. In addition, allowing more teachers to reach more senior grade levels will result in creating a larger pool of experienced teachers who can then mentor and coach new teachers earlier in their career.

Under the New Deal, the career track for teachers will be changed with faster timelines for them to progress through the first few grade levels based on competency and performance levels. Automatic fast track progression will be opened to all teachers at all stages of their career, instead of on an application basis. The target is for the new career track system to start in 2011 and to be fully migrated to by 2015.



Delivering Tailored Continuous Professional Development for Career Progression

Teachers will benefit from targeted training to help them prepare for new roles, as well as from training that supports them in improving their instructional abilities. Currently, there is no systematic approach for CPD in the teaching profession. A more comprehensive approach towards CPD will be rolled out in 2011, consisting of the following elements:

- Tailored CPD modules mapped to each grade level to better equip teachers for new role requirements at each grade level;
- Greater focus on school-based learning programmes; and
- A broader range of CPD modules and modes of delivery, such as formal training courses, post-graduate studies, distance learning, and coaching activities, to allow teachers to have greater choice and to be less disruptive to school operations.

Launching a New Instrument and Process for Teacher Evaluation and Assessment

The current form of evaluation for teachers is consistent with the overall civil service evaluation approach, but does not take into account student outcomes, core teaching abilities or key competencies required for the profession. Evaluation scores for teachers will need to meaningfully differentiate between different levels of performance, and be less subjective and more evidence-driven.

A new evaluation approach will be implemented in 2011 that is consistent with practices in top performing school systems, to ensure greater consistency, objectivity across evaluations and to instil a stronger performance culture in schools. This approach will include a new teacher evaluation instrument using a weighted combination of key dimensions of teaching with a heavy emphasis on teaching and learning, and including professional values, activities outside the classroom and contribution to the school and wider community.

Transforming the Effectiveness of Delivery

The urgency to improve student outcomes places immense pressure on the system to deliver

effectively and efficiently. An innovative approach will be employed to ensure effective delivery.

Delivering Service Lines to Support School Improvement

Improving the delivery mechanism for schools will require changes in the most critical processes directly affecting schools, such as teacher deployment, school performance management, as well as the role of the Ministry, State, and District Education Departments. To ensure optimal delivery of service, the MOE will deploy specific 'Service Lines' to provide tailored assistance to schools that need it the most, including coaching, capability-building and supporting tools. As for pre-schools, the Government will continue to harmonise and improve the quality of all public pre-schools provided by the different Government agencies. This will require productivity improvements in human and financial capacity, as well as to significantly enhance delivery capabilities.

Implementing a New Curriculum to Nurture Creativity and Innovation

During the Plan period, a new curriculum for primary and secondary schools will be introduced. The Integrated Primary School Curriculum will be replaced by the Standard Primary School Curriculum in 2011 and this is to be followed by



a new curriculum for secondary schools. Modular in design, the curriculum will provide an avenue for students to progress according to their capabilities, nurture students to be responsible for their own learning through exploration to unleash their potentials. The curriculum will emphasize creativity, innovation, and entrepreneurship across all subjects.

Inculcating values and ethics from a young age is key to the character building of an individual. The new curriculum will incorporate the principles of 1Malaysia in the pedagogical approach to deliver education. In addition, to develop well-rounded students that excel both academically as well as in sports, the new curriculum will include Sports as a subject beginning 2011. Under the '1Student, 1Sports' policy, each student is required to take

up at least one sports. The secondary school students would get 90 minutes while primary school students would spend 60 minutes a week to play a game of their choice. The annual sports grant would be increased from RM2.40 per student to RM4 for primary school students and from RM4 to RM6 for secondary school students.

Private Pre-School and Basic Education

Private provision of education is becoming more widely accepted by governments and education consumers alike. During the Plan period, private providers will be encouraged to deliver education at all stages from the pre-school to tertiary levels. The Government will implement various modes of public-private partnership in the provision of the

education services such as in the management of schools and financing of students' fees.

Public-Private Partnerships in Developing Pre-Schools

The Government will leverage upon private sector provision of pre-school education. Incentives will be provided to private pre-school operators to accelerate the deployment of new pre-schools to support the goal of increasing overall pre-school enrolment. The incentives will enable private pre-school operators to access grants for the development of pre-schools in underserved rural areas. The private sector is expected to establish 488 pre-schools in 2010, a total of 1,000 pre-schools in 2011 and 1,145 pre-schools in 2012.

A co-payment scheme to increase demand for pre-school education will be implemented during the Plan period. In order to reduce the overall burden of pre-school education on household spending, low income families will receive student fee assistance, amounting to RM150 per month

to enrol 4+ and 5+ year old students to private pre-schools.

Public-Private Partnerships in Basic Education

Public-private partnerships in the provision of basic education allows significant autonomy to school operators in exchange for delivering specified improvements in student outcomes under a formal performance contract. Examples of public-private partnerships in basic education include charter schools in the United States, specialist schools and academy schools in the United Kingdom and independent schools in Sweden. Similarly, such partnership has existed in Malaysia in some independent Chinese schools.

In implementing this initiative, the Government will introduce the Trust School framework for selected existing public schools. Trust Schools are public schools that are managed jointly by private partners and civil service school leaders.

**Box 5-4*****Trust Schools: Public-private partnerships in education to close the achievement gap***

Trust Schools are public schools that are managed jointly by private partners and civil service school leaders, under the umbrella of the Ministry of Education. The Government provides Trust Schools with greater decision-making freedom and in return requires greater accountability in the form of improved student outcomes. Trust Schools will include schools from across the performance spectrum, with the goal of creating a change in outcome regardless of starting point: from mediocre to good, good to great. Trust Schools are intended to encompass a representative composition of existing government and government-aided schools (e.g. primary and secondary; urban, suburban and rural; and geographical spread). In the spirit of raising standards across the board, the schools selected will comprise schools with weak, average and good performance. Regardless of the starting point, Trust Schools aim to accelerate the improvement process to create excellent, well-rounded schools.

Trust Schools will have extensive decision-making rights over curriculum, finance and human resources to encourage innovation and responsiveness to the needs of their individual school communities. Autonomies include the ability to choose curriculum content, allocate funds as necessary, provide performance-based incentives, and select both teaching and non-teaching staff. In return, Trust Schools must meet a set of performance targets within a 5-year time frame. Failure to do so may result in the Ministry reassuming the management of schools from the Sponsor.

RAISING THE SKILLS OF MALAYSIANS TO INCREASE EMPLOYABILITY

Over the past decade, Malaysia has invested heavily in post-secondary and higher education. Currently, the nation has established 20 public universities and 26 private universities, as well as 405 public skills training institutes and 584 private skills training institutes. In 2009, higher education institutions across the nation produced more than 181,000 graduates, including more than 81,000 graduates from private higher education institutions. Similarly, in 2009, skills training institutes produced more than 120,000 graduates, including more than 30,000 graduating from private skills training institutes.

Malaysia's current workforce with tertiary education stands at 23%, whereas the average for Organisation of Economic Co-operation and Development (OECD) countries is nearly 28% with some, like Singapore and Finland, as high as 35%. For students graduating from local higher education institutions in 2009, 27% remained unemployed six months after completion of their studies. Furthermore, of the graduating students who were employed, 29% in 2006 and 33% in 2009 earned less than RM1,500 per month.

Employers and industry associations state that lack of soft skills, such as positive work ethics, communications, teamwork, decision making and leadership skills, is the primary factor

hampering employability of many Malaysian graduates. As there is still a sizeable gap between the competency levels of graduates and comparable international standards, the issue of graduate competency needs to be addressed to ensure that Malaysia has a skilled, well-rounded and employable graduate pool to enter the workforce.

Similarly, there are an estimated 100,000 or 22% of Malaysian students in 2009 who enter the workforce directly upon completion of only 11 years of schooling, after achieving a SPM. This group of students may be more technically inclined and therefore offers significant opportunity to improve their skills in the technical fields.

Given the rapid pace at which Malaysia will need to develop its human capital to achieve high-income nation status, it is necessary to radically raise the skills of Malaysians to increase their employability by focusing on the following:

- Mainstreaming and broadening access to quality technical education and vocational training; and
- Enhancing the competencies of tertiary graduates to prepare them for entering the labour market.

Mainstreaming and Broadening Access to Quality Technical Education and Vocational Training

Malaysia aspires to move up the value chain to become a high-income economy, and must therefore significantly increase enrolment in technical education and vocational training (TEVT) and raise overall training quality to upskill the workforce. The purpose of TEVT is to increase the skilled human capital base in Malaysia by providing quality education to learners who possess keen interest, ability and talent in the technical and vocational fields. TEVT aims to provide skills that will be immediately applicable in the labour market.

TEVT has become a mainstream education option in many developed countries. Many high-income countries adopt a binary or 'dual-pathway' model of education that allows significant flexibility and mobility between the academic and technical or vocational streams, with equivalent career prospects. In Malaysia, only 10% of students enrol in upper secondary technical and vocational education, whereas the average enrolment rate for OECD countries is 44%. Improving the availability, access and quality of TEVT for the technical pathway is equally as important as the academic pathway of tertiary education.

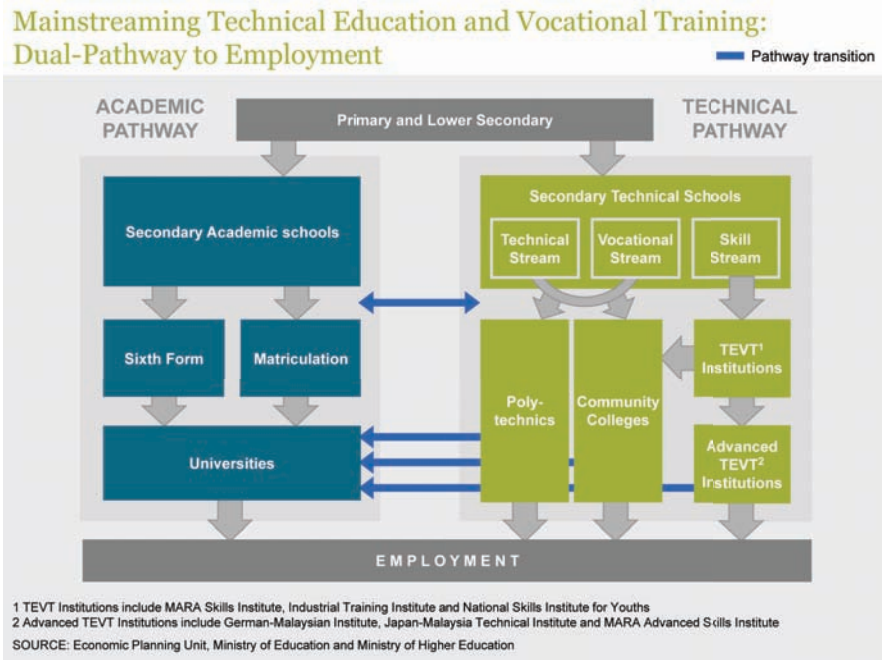
The dual-pathway approach that is currently being pursued with some degree of mobility between the two pathways is shown in *Chart 5-8*. It highlights the different components of TEVT currently available in Malaysia, as well as the transition options to and from the academic pathway. TEVT at secondary school has two main streams, namely technical and vocational. Technical stream has more academic component, whereas vocational stream has more of hands-on content.

TEVT skills benefit employees and employers directly and also benefit the specific industrial sector with the distribution of benefits dependent on the mix of skills acquired. Therefore, the intention is for costs associated with TEVT to be shared among government, employers, the industry and individual students according to the benefits obtained.

During the Plan period, the following four strategies will be adopted to mainstream and broaden access to quality TEVT:

- Improving perception of TEVT and attract more trainees;
- Developing highly effective TEVT instructors;
- Upgrading and harmonising TEVT curriculum quality in line with industry requirements; and
- Streamlining the delivery of TEVT.

Chart 5-8



Improving the Perception of TEVT and Attracting More Trainees

There is a huge untapped opportunity for both private and public TEVT providers to attract school leavers who do not pursue further education to take up TEVT training and increase the proportion of skilled workers in the workforce. The focus will be to improve the value proposition and attractiveness of TEVT to prospective students, providers and industry.

Throughout the Plan period, a national media campaign will be developed and rolled-out to improve public awareness and perception of TEVT. The main target group will be potential students and their parents. The campaign will emphasise the tangible benefits of entering the labour market with TEVT qualifications, such as starting salary, types of jobs and possible career paths, as well as new opportunities such as the public sector initiative to hire Malaysian Skills Certificate graduates. Various delivery



channels such as television, radio, magazines and celebrity endorsements will be used to reach the target group.

Counsellors in schools will be tasked to take on a multi-year responsibility for students, starting from Form 4 and continuing until these students have successfully transitioned into tertiary education. This is intended to ensure as many students as possible continue their education beyond the post-secondary level. School counsellors at district levels will form counselling teams and be responsible for establishing close relationships with TEVT institutes and employers as well as improving coordination among these stakeholders through the exchange of information. The teams will also be responsible for providing comprehensive career guidance to students and their parents, particularly on the various options in TEVT.

To provide more opportunities for technically inclined students and improve awareness of TEVT, vocational and skills streams in technical schools will be rebranded. A total of 69 out of 88 technical schools will be converted into vocational schools, and six

new vocational schools will be established by 2015, to allow greater focus and more targeted courses to be delivered to vocationally-inclined students.

A production and project based learning approach will be introduced to improve the quality and enhance the attractiveness of TEVT programmes to both employers and students. This will enhance the direct participation of industry in skills training programmes, apart from optimising the utilisation of facilities and equipment in TEVT institutions. This approach is expected to double the enrolment in vocational and skills streams by the end of the Plan period, which stands at 32,000. The increase will contribute significantly to the existing pool of skilled and semi skilled workers. In addition, the Government will encourage government-linked-companies to provide internships and employment for students from TEVT institutions.

Developing Highly Effective Instructors

The career progression path for TEVT instructors will be accelerated to make TEVT teaching

Box 5-5***Germany's Technical Education and Vocational Training (TEVT) System: Skilling the workforce of Europe's largest economy***

The dual system of TEVT is widely considered to be one of the biggest strengths of the German educational system, with 60–70% of all students (more than 1.6 million) attending vocational schools. The training provides great breadth, covering approximately 340 occupations, and is very popular among school leavers in Germany. It is also highly successful—the unemployment rate of graduates one year later is typically only 3%.

The most common vocational education is the apprenticeship training system, where the apprentice gets trained on his future job by the employer (3-4 days per week) and experiences further education in vocational schools (1-2 days per week). He also receives a small salary paid by the employer, in addition to a recognised qualification (chamber certificate) upon completion. Due to this system, where young people are engaged in paid employment and receive qualifying training that is aligned to the labour market, the share of unqualified workers and unemployed young people in Germany is relatively low.

Both the private sector (providing about 80% of financing) and the public sector are involved in financing and delivering TEVT. The private sector, in addition to providing and financing for the training, is involved in proposing changes to the training curriculum, drafting changes in training regulations, providing advice and supervision on training and administering examinations. In parallel, the government is actively involved in enacting training regulations, issuing curriculum and paying teaching staff in vocational schools. The government also plays a very active role in co-ordinating the supply and number of TEVT seats available.

an attractive career option. On meeting clear competency requirements for each grade level, instructors will be promoted irrespective of whether or not a vacant position is available.

Highly experienced industry personnel equipped with practical workplace skills will be encouraged to become instructors in TEVT institutions. This will both increase training capacity and help to ensure that instructors are familiar with workplaces. To facilitate this, flexible pathways of entry into the vocational instructor and trainer profession will be created, and any requirements that discourage mid-career entry into the profession will be removed.

To further increase the number of excellent instructors, part-time working arrangements will be expanded and encouraged to tap those who wish to develop a career as an instructor and at the same time retain a job in industry. This will provide the extra benefit of having instructors who are up-to-date with industry developments and technology to deliver the most relevant training so that graduates become more employable.

Moving forward, the interchange and partnership between TEVT institutions and industry will be strongly encouraged, so that vocational instructors spend substantial time in industry to update their knowledge, and vocational instructors in firms

spend some time in TEVT institutions to enhance their pedagogical skills. In order to deliver better training and increase the intake of instructors, the capacity of the Centre for Instructor and Advanced Skills Training will be expanded with new training approaches and methodologies. A new centre for instructor skills training will be developed to add a further training capacity of 800 instructors each year. In addition, the Department of Skills Development will coordinate the provision of instructor training programmes in other public skills training institutions.

Upgrading and Harmonising TEVT Curriculum Quality in Line with Industry Requirements

The development of TEVT curriculum has traditionally been undertaken by a number of agencies, each with their own capabilities, capacity and agenda. There is an opportunity to harmonise the quality of the curriculum, reduce curriculum development costs, improve alignment with latest industry requirements and to standardise the curriculum. The Department of Skills Development will be designated as the agency to develop and standardise TEVT curriculum starting in 2011.

The Department of Skills Development will ensure the TEVT curriculum developed meets the

minimum standard required and is fully aligned with national economic priorities. The curriculum will contain a proportion of general skills dealing with literacy, numeracy and languages. These basic and important skills underpin other learning areas including practical vocational skills and are also critical in building an individual's skills set and capacity to adapt to changing circumstances and skill requirements in the workplace. In addition, the Department will establish and maintain a curriculum bank to deposit all curricula developed.

TEVT certificates have yet to be fully recognised as entry qualifications into higher education institutions, and there is currently no single TEVT certification system in place. There is an opportunity to improve the acceptance of TEVT certificates among students, parents and employers by removing the uncertainty over the quality of training delivered by different agencies. Currently, Malaysian Skills Certificate, Diploma in Technology and Degree in Technology are not fully recognised by higher education institutions and the Board of Engineers Malaysia.

To enhance standardisation and recognition of TEVT certification, the Malaysian Skills Certificate will be adopted as the national certification for TEVT. Towards this end, the following measures will be undertaken to enhance the recognition of the TEVT certificate:

- Recognising and equating various levels of Malaysian Skills Certificate with certifications issued by TEVT providers by 2012;
- Mandating workers to have Malaysian Skills Certificate or equivalent in selected occupations; this will be implemented in stages beginning 2012; and
- Broadening Malaysian Skills Certificate as the entry qualification for more programmes in public service and courses in advanced technical, vocational and higher education institutions by 2011.

To accelerate the recognition of these certifications, a Board of Technologists Malaysia will be established. This recognition will encourage institutions of higher learning including TEVT institutions to offer technology-related courses in line with the requirements of a high income economy.

In order to upgrade technical programmes in line with industry requirements, the Malaysia-Japan International Institute of Technology will be established as an independent institute under the Universiti Teknologi Malaysia. The goal of this institute is to enhance collaboration and networking with Japan in the technical and engineering fields. This institute will expose the students to the latest



technological developments in the workplace, work ethics and Japanese management practices in a cost effective manner.

There is currently a need to reduce duplication of TEVT courses offered by different training institutions to optimise the overall TEVT capacity and avoid under-utilisation. This is important as enrolment rates across TEVT institutions are expected to increase. TEVT institutions will begin to review, rationalise and improve co-ordination of courses offered by the end of 2011.

Streamlining Delivery of TEVT

The current funding approach of TEVT will be reviewed to enhance the effectiveness and efficiency of public TEVT institutions. To encourage competition among public TEVT institutions, the funds allocation will be based on performance. The Government will also provide financial assistance to students to study at Malaysian Skills Certificate Level 3 and above at high-performing public TEVT institutions. Towards this end, a system will be introduced to rate the performance of public and private TEVT institutions.

The performance rating of TEVT institutions will be utilised when making decisions for buying places, where the Government finances students to study in private TEVT institutions. The approach

of buying places from private institutions will be increased and expanded during the Plan period, and will help to optimise the capacity utilisation across both public and private institutions.

School dropouts represent a large source of potential talent that if developed and equipped with the right skills, would add considerably and significantly to the pool of skilled talent. In 2007, a total of 20,000 students dropped out of the basic education system, and a further 30,000 dropped out in 2008. The National Dual Training System (NDTS) aims to expand the current curricula and provide specialised training to coaches to cater to the needs of school dropouts. Additional funds will also be set aside to provide allowances for apprenticeships and to cover their training costs incurred. A total of RM150 million will be set aside to train 20,000 school dropouts during the Plan period.

The NDTS emphasises the direct involvement of industry in training and stipulates that 70% of training must be conducted in the workplace. Therefore, in addition to institutional training, workplace training will be strongly encouraged during the Plan period as part of TEVT curriculum, since it provides:

- **A strong learning environment.** Workplaces provide a strong learning environment because they offer on-the-job experience. This makes

it easier to acquire both hard and soft skills resulting in improved employability;

- **Information flow to improve recruitment.** Employers learn about the performance of trainees and apprentices as potential recruits and are thus in a better position to make decisions on recruitment; and
- **Productive contribution.** Trainees undertaking useful work generate productive benefit for the employer, making TEVT beneficial to trainees and employers.

Under the NDTs, experienced employees in the workplace act as coaches to apprentice trainees. In order for this to happen, coaches must be well trained to deliver effective training in the workplace; instructors must also be adept at training these coaches. A total of RM7.5 million will be allocated to train these coaches, instructors, and facilitators.

Enhancing the Competency of Tertiary Graduates to Prepare Them for Entering the Labour Market

A knowledge and innovation-based economy requires a critical mass of knowledge workers such as scientists, engineers, patent agents and

‘technopreneurs’. As such, higher education institutions have an important role in producing highly skilled people, who are able to create, innovate, and exploit new ideas as well as apply and develop technologies.

The availability of competent graduates is a catalyst to not only attract foreign direct investment, but also to drive new sources of domestic growth. Employability issues, skills shortages and mismatches remain major issues of human capital development. As cited in many studies, graduates lack competencies in relevant technical skills required by industry, and most critically soft skills including professional work ethics, communications, teamwork, decision-making and leadership. Hence, concerted efforts will be undertaken to improve the competency of graduates, as well as enhance the funding cost-effectiveness of higher education through:

- Strengthening industry and research collaboration;
- Providing greater autonomy to universities and strengthening their performance cultures;
- Upgrading course curricula to balance academic content and soft skills; and
- Hiring and retaining the best faculty members.



Strengthening Industry and Research Collaboration

Industrial attachments are important as they help graduates to meet the evolving requirements of industry and new economic activity. In addition, market orientation of courses will be improved to ease student transition into the labour market and improve overall student employability. The involvement of the private sector in the provision of education through public-private collaboration will be improved to encourage industry participation in course provision and industrial attachments.

A standard policy framework for structured industrial attachment programmes will be implemented for higher education institutions in collaboration with industry players to improve the effectiveness of such programmes. This is intended to expand industrial attachment programmes for disciplines and courses beyond those with mandatory clinical training such as medicine, dentistry and nursing. In addition, industrial attachment programmes for faculty

members will be intensified to ensure that no less than 15% of faculty members gain at least six months industrial experience every five years.

To broaden the industry experience of faculty members, the Knowledge Transfer Partnership (KTP) programme will be introduced in 2011 to facilitate collaboration between industry and relevant universities. The KTP aims to facilitate the transfer of expertise and research findings through innovation projects undertaken jointly by faculty members and business partners from the industry. In addition, the KTP will also provide industrial-based training for graduates to enhance their practical knowledge, business skills and employability.

Universities will be encouraged to develop strategic collaborations with international research institutions and foreign universities to enhance research and development (R&D) activities, especially in new emerging technologies by:

- Implementing more attachment programmes to enable lecturers to share knowledge, explore new ideas to raise their research quality and promote exchange of faculty members;
- Strengthening management of intellectual property developed in universities to improve the governance of research activities; and

- Strengthening centres of excellence in universities through industrial collaboration in R&D activities to support and accelerate the commercialisation of innovations and new technology.

Providing Greater Autonomy and Strengthening Performance Culture to Universities

Around the world, public universities are actively working with policy makers to develop models for tertiary institutions to be successful. It is recognised that autonomy together with greater transparency and performance accountability will be critical for universities in Malaysia to advance into institutions comparable with the world's best. Public universities must be held accountable for their performance, especially since they are heavily financed by public funds. Moreover, greater transparency in performance will provide the opportunity for interventions in areas that require attention and support.

Instituting Greater Autonomy in Universities

The best universities worldwide often possess significant autonomies in the following areas to enable innovation, encourage excellence and improve performance:

- **Funding.** Ability to allocate funds independently, decide priority areas of funding and set tuition fees within boundaries;
- **Faculty.** Freedom to attract and retain the best faculty members through attractive incentives and competitive remuneration;
- **Governance.** Greater responsibility and ownership of key decisions affecting the university including strategic direction, priorities and allocation of resources and increased decision rights; and
- **Admission.** Increased control over the quality and profile of students enrolled.

Under the Accelerated Programme for Excellence (APEX), an APEX university is granted autonomy in governance, human resource (selection of staff, faculty members and top management), finance and student admissions. The programme was initiated in 2008, when Universiti Sains Malaysia (USM) was selected as the programme's first participant. Currently, USM has autonomy on student admissions, and other areas will be considered once the university achieves certain preconditions and readiness. The autonomy will also be extended to research universities and other public universities when they have reached similar levels of readiness.

Strengthening Performance Culture in Universities

A Rating System for Malaysian Higher Education Institutions (SETARA) is being introduced for public universities and will be extended to all private degree-conferring tertiary institutions. The new standardised approach to performance rating is intended to produce a uniform and objective assessment to deliver greater transparency and enhanced pressure on performance to raise the overall quality of the education system. The rating system will be made public, and is based on the performance of institutions in terms of graduate employability and methods of teaching and learning and support services for students. During the Plan period, the rating system will go beyond institutional ratings to provide ratings for each institution's departments.

The vice chancellor of a university will be held accountable for the performance of the university, as determined by the performance assessment, with the consequence of non-renewal of contract in the event of poor performance. A clear set of Key Performance Indicators (KPIs) for vice chancellors of universities have been established, including a KPI on graduate employability. In turn, the vice chancellor will hold all university staff accountable for their performance, which will push the culture of accountability further through the institution.

During the Plan period, performance-based funding for public tertiary institutions will be implemented, with the intention of providing a transparent funding mechanism to catalyse improved performance. Specifically, this new approach will include the following components:

- **Government performance-based funding linked to SETARA rating.** Funding to a university will be explicitly linked to its overall and departmental performance. This will also provide a transparent mechanism for financing and encourage greater accountability in the expenditure of public funds. There will be two components to the performance based funding mechanism: fixed and variable. The fixed component does not vary with performance, and covers core operational items such as salary of faculty members and cost of utilities. The variable component, including intellectual development in R&D and student co-curricular activities, will be based on the SETARA performance rating to encourage greater accountability and performance;
- **Shift from supply-side to demand-side funding.** The Government seeks to harmonise tertiary education capacity and level the playing field for both public and private higher education institutions to enhance the performance culture, raise quality standards

and improve competitiveness in tertiary education. The existing approach of direct public funding or grants disbursed to public institutions will increasingly shift towards demand-side funding via student loans and scholarships in line with a more market-based approach; and

- **Reduction in proportion of Government funding to universities.** Public universities must increasingly seek alternative sources of funds, including from corporations, the private sector or alumni. This is intended to ensure greater collaboration of universities with industry to improve the quality and relevance of their teaching and research.

Upgrading Course Curricula to Balance Academic Content and Soft Skills

The quality and relevancy of curriculum and courses is an important factor to the employability of graduates. During the Plan period, higher education institutions will undertake an exercise to review their curricula and courses and seek to align programme and learning outcomes with requirements of industry and employers. A total of 2,730 existing programmes will be reviewed for compliance to Malaysian Qualifications Framework based on the following principles:

- Current content offered is benchmarked against nationally agreed criteria and standards in line with international best practices; and
- Incorporation of domains as stipulated in the Malaysian Qualifications Framework that includes soft skills, such as positive work ethics, communications, teamwork, and decision making and leadership skills.

In line with increasing demand for highly skilled workers and professionals, all polytechnics in Malaysia will be restructured to offer courses at diploma and degree levels while phasing out courses at certificate level by the end of the Plan period. Polytechnics will increasingly specialise to become centres of excellence. Three existing polytechnics will be upgraded to premier polytechnics to undertake applied research through collaboration with the relevant industry to nurture innovation and create home-grown new technologies.

Furthermore, in response to feedback from employers, the curriculum of tertiary institutions must place greater emphasis on soft skills development of students. The Generic Students' Attributes self-assessment test, also known as the Malaysia Soft Skill Scale or My3S, will be introduced as an instrument to assess graduate competency in soft skills, beginning in July 2010. The Malaysian Qualifications Agency (MQA) will



continue to play a crucial role in implementing the Malaysian Qualifications Framework as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. The MQA will also expand its collaboration with foreign quality assurance agencies by signing Memorandums of Arrangement to benchmark standards and help to raise the capabilities of its staff.

Hiring and Retaining the Best Faculty Members

Efforts will be intensified to raise the number of faculty members with PhD qualifications. The proportion of PhD faculty members across all public universities was 35.9% in 2009. The target is to increase this to 75% for research universities and to 60% for other public universities by the end of the Plan period. To meet this target, the MyBrain15 programme, which has the objective of having 18,000 PhD holders by 2015 and 60,000 by 2023, will be expanded to create a larger pool of qualified candidates to be appointed as faculty members. An allocation of RM2.26 billion will be provided in terms of scholarship to 16,800 faculty members to further their studies at the PhD level.

In addition, the recruitment process for faculty members will be refined and made transparent to attract top talent. Remuneration will be made

competitive to match benefits offered by the private sector, as well as non-financial benefits such as flexibility in teaching hours.

Career development support will be given greater priority. In this regard, basic training modules will be made compulsory for new faculty members. To ensure that new faculty member get proper guidance and support early in their careers, each new faculty member will be assigned to a senior mentor responsible for providing career advice with periodic checkpoints. In addition, the first three years of a faculty member's career will have a reduced teaching load to allow time for them to develop a solid research portfolio and to secure external grants for research.

To complement efforts to improve the quality of faculty members, retired faculty members and capable foreign lecturers will be encouraged to serve in public universities on a contract basis. For this purpose, better remuneration packages have been put in place for these lecturers. More visiting and part-time lecturers, especially from industry, will be drawn to teach in public universities by introducing attractive incentives. In addition, the scheme of service for faculty members will be reviewed to enable them to advance to the highest grade possible within their own scheme of service without holding administrative positions such as dean or head of department.

REFORMING THE LABOUR MARKET TO TRANSFORM MALAYSIA INTO A HIGH-INCOME NATION

Achieving a high-income nation requires, among other critical factors, an efficient labour market that is able to attract, develop and retain the best talent. Shortages of the required types of skills and talent will hamper the transformation to a knowledge and innovation-based high-income economy. Efforts to reform the labour market are necessary to ensure efficient matching of demand with supply, and to improve the retention of top talent and to enhance the attractiveness of Malaysia to local and foreign talent as well as the Malaysian diaspora.

The diversity of the Malaysian workforce remains an asset for the country. Malaysians have strong cross-cultural capabilities and are highly adaptable. The country's open and connected society has enabled the Malaysian talent pool to develop strong global and regional links, facilitated by their multi-lingual capabilities.

During the Plan period, the Government is committed to undertake a reform of the labour market, with special emphasis on improving job mobility and upskilling the current workforce, in particular those from the bottom 40% of households. This reform of the labour market will be critical to provide a platform for the nation's ongoing growth efforts towards a high-income economy. The focus of reform will be on three key areas:

- Making the labour market more flexible;
- Upgrading the skills and capabilities of Malaysia's existing workforce; and
- Enhancing Malaysia's ability to attract and retain top talent.

Making the Labour Market More Flexible

An efficient labour market system is a critical factor in reducing the costs of doing business in a country, in influencing the investment climate and boosting job creation. Based on the World Bank report on Doing Business 2008, Malaysia was ranked 43 in terms of ease of employing workers. In addition, Malaysia has an over-dependence on low-cost unskilled foreign workers, which has depressed wages and hampered the move of companies to higher value-added activities, as well as contributed to the continuing outflow of local talent.

Revising Legal and Institutional Framework to Provide Flexibility in Hiring and Firing

During the Plan period, efforts will be undertaken to review provisions of labour legislation in line with the needs of a knowledge economy and the

challenges of globalisation. The review will also ensure that industrial relations remain relevant to the current business environment, while balancing social stability as well as facilitate labour mobility.

The Government will undertake measures to improve the efficiency of the settlement of labour disputes in Malaysia. The dismissal cost of workers in the case of redundancies is relatively high in Malaysia compared with other Southeast Asian nations. In Malaysia, employers are required to pay an average 75 weeks of wages to employees who have worked for 20 years upon terminating a contract as compared to 56 weeks in Thailand and 4 weeks in Singapore. In addition, the resolution of labour disputes can be lengthy. Therefore, a review of labour legislation will be conducted, towards ensuring that Malaysia adopts an optimal balance between labour market flexibility and job stability and which provides for efficient and speedy settlement of labour disputes.

An increasing number of workers are being displaced due to the structural change in the local economy and exposure to external shocks. This has made the case even more compelling for establishing a comprehensive labour social safety net to support displaced workers. A labour safety net will provide flexibility for firms in managing their workforce during difficult times. The Relief

Fund for Loss of Employment will be introduced to provide financial assistance for workers who do not get due compensation from their employers upon retrenchment. The eligible retrenched workers will receive RM600 per month for a maximum of six months so long as they continue to be unemployed. An amount of RM80 million will be allocated to the Relief Fund over period from 2010 to 2012.

Enhancing Employment Services to Improve Job Mobility

A critical component of a flexible and adaptable labour market is its ability to conduct effective job-matching to resolve mismatches in the supply and demand of labour. There is a significant opportunity for industry collaboration and public-private partnerships to enhance employment services available to the Malaysian workforce to help remove distortions in the labour market.

The Government will enhance and modernise public employment services by upgrading existing public job centres to improve the delivery of career advice across different industries, provide industry-driven matching and placement services and conduct continuous community outreach or education programmes on employment trends and career opportunities. Potential job candidates and the community will be made aware of

employment opportunities available and potential career paths open to them. Employers will benefit from having access to an additional platform for sourcing their human capital requirements. The goal is to create an effective and efficient public clearing house operated jointly by the public and private sectors.

Reforming Unskilled Foreign Labour Policy

The influx of low-skilled foreign labour has more than doubled since 2000 to 1.9 million, as shown in Chart 5-9. The abundance of cheap low-skilled labour has delayed investments in mechanisation and innovation, particularly in the agriculture and manufacturing sectors, and thus lowered productivity growth and hampered Malaysia's aspiration to move the economy up the value chain. Sectors with the highest reliance on unskilled foreign workers have lower productivity, as highlighted in Chart 5-10.

The dependence on unskilled foreign labour will be gradually reduced. However, sectors where labour shortages persists, such as construction and plantation, will be allowed to employ foreign labour based on needs. Measures will be put in place to ensure employers improve the working conditions and welfare of these workers, including providing better housing and basic amenities.

A new multi-tiered levy system will be implemented for employers of unskilled workers to encourage the move towards a highly-skilled workforce. This will incentivise companies to upgrade their workforce or hire skilled foreign labour. In doing so, foreign labour demand can be managed, as the cost of skilled foreign labour would closely reflect local labour market wages.

Under the new levy system to regulate the entry of unskilled foreign labour, the levies will be borne by employers and not by employees. The new system will be based on three principles namely, the levy will be proportionate to the ratio of foreign to total workers, the rates will increase over time, and will vary according to the level of skills of the foreign workers.

Encouraging Greater Participation in the Workforce

The trend towards double-income households has increased demand for more flexible working arrangements. In light of this, the Government will introduce Part-Time Work Regulations under the Employment Act 1955. This initiative is aimed at encouraging greater participation of the untapped talent workforce such as housewives, retirees and disabled persons. Arrangements for working from home, teleworking, and part-time or flexi-time will be encouraged. In addition, to fully

leverage the availability of women as a source of untapped labour, measures will be undertaken to increase the female labour force participation rate from 46% in 2010 to 55% in 2015.

The life expectancy of Malaysians is now comparable to that of developed countries. Adoption of flexible and part-time working practices and policies will encourage post-retiring age Malaysians to continue contributing to the economy, particularly in sectors and occupations where their specific expertise is needed.

UPGRADING THE SKILLS AND CAPABILITIES OF THE EXISTING WORKFORCE

Currently in Malaysia, only 28% of the total workforce is employed in the higher skilled jobs bracket reflecting the low level of educational attainment among a large segment of the workforce. There is an urgent need to upgrade and re-skill the existing workforce, to move the economy up the value chain. The Government aims to achieve a target of 33% of the workforce being employed in the higher skilled jobs bracket by 2015, and up to 50% by 2020. This will require greater involvement of the private sector.

Encouraging Cost Sharing for Training

The coverage of the Skills Development Fund will be expanded to promote upskilling and retraining of the workforce. It will be extended beyond school leavers to include existing workers. Recognising that not all workers have enough funds to pay for their own training, preferential loans will be provided by the Fund to pay for training costs incurred in skills upgrading. A total of RM500 million will be allocated to provide loans to workers, with a separate amount of RM500 million for loans to school leavers.

Small and medium enterprises (SMEs) play a critical role in driving economic growth. The SME Corp. will assist in the development of capable and resilient SMEs to be competitive in the global market. In addition to providing infrastructure facilities, financial assistance, advisory services, market access and other support programmes, SME Corp. will also implement a Skills Upgrading Programme. This programme is aimed at enhancing the skills and capabilities of workers of SMEs at technical, supervisory and managerial levels, particularly in areas such as electrical engineering and electronics, information technology, industrial design and engineering. Under this programme, SME Corp. will finance 80% of the training cost paid by employers to train their employees in accredited training centres.

Cost sharing will also be intensified through extending the coverage of the Human Resource Development Fund (HRDF) from 44 to 70 subsectors. The HRDF is a pool of funds where employers contribute levies for retraining and skills-upgrading of their employees. During the Plan period, an allocation of RM50 million will be provided to continue the matching grants for training and skills-upgrading for employees in SMEs. In addition, RM50 million will be allocated to fund apprenticeships involving more than 8,000 students. The allocation will be used for the allowances and course fees of apprentices in vocational training.

The Government will encourage all levels of the workforce to continuously upgrade their qualifications and capabilities to higher levels. During the Plan period, a programme will be introduced to promote participation from the industry to co-sponsor employees to obtain industrial PhDs. The industrial PhD programme will involve job-related research projects and training programmes with an industrial focus, conducted jointly by a company and a university. It is an effective approach for stimulating innovation and knowledge sharing that contributes to growth and development within enterprises, creating new knowledge at universities and industrially relevant research in the country. A total of RM50 million will be allocated for this purpose.

In addition, the Government will continue the successful programme introduced under the economic stimulus package in 2009 to provide partial financial assistance for candidates pursuing PhD programmes at local universities. A total of RM350 million will be allocated to this programme to benefit 5,000 PhD candidates.

Leveraging the Industry to Upskill the Workforce

Delivery of training directly by companies operating in specific industries will ensure that the training content best matches the needs of the industry. Towards this end, vocational training will increasingly be integrated with and driven by the private sector. The Government will encourage and intensify the involvement of the private sector to establish accredited in-house training programmes and to extend these programmes beyond their employees to produce qualified skilled workers who are employable across the industry. A 'buying places' approach will be adopted for these programmes, particularly for specialised skills in priority sectors. These courses will be formally certified either under the Malaysian skills certification system or by an international certification body.

The Industrial Skills Enhancement Programme (INSEP) is a training and development programme in the engineering, ICT and management fields to

Chart 5-9

Number of foreign workers in Malaysia has increased significantly over the past decade

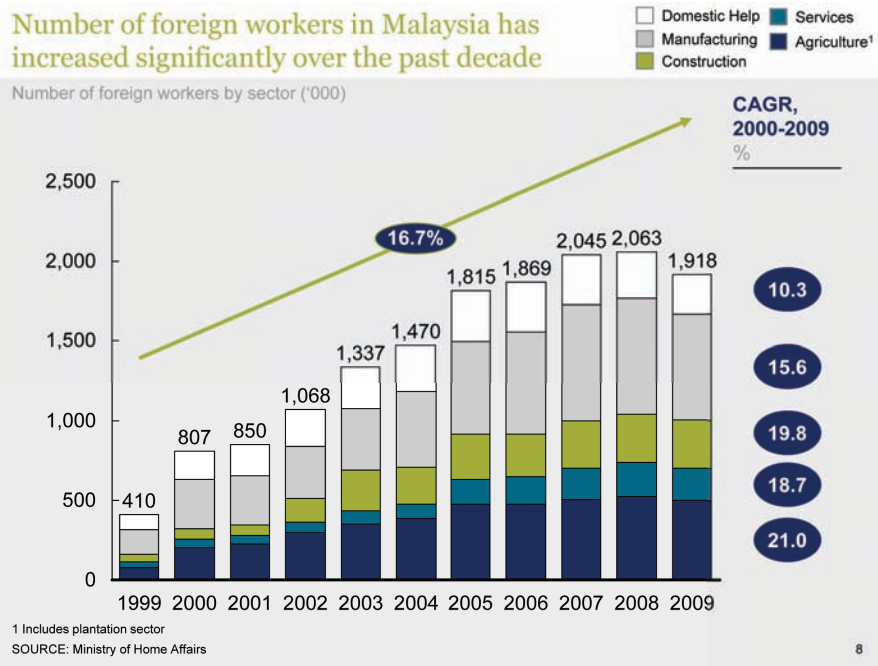
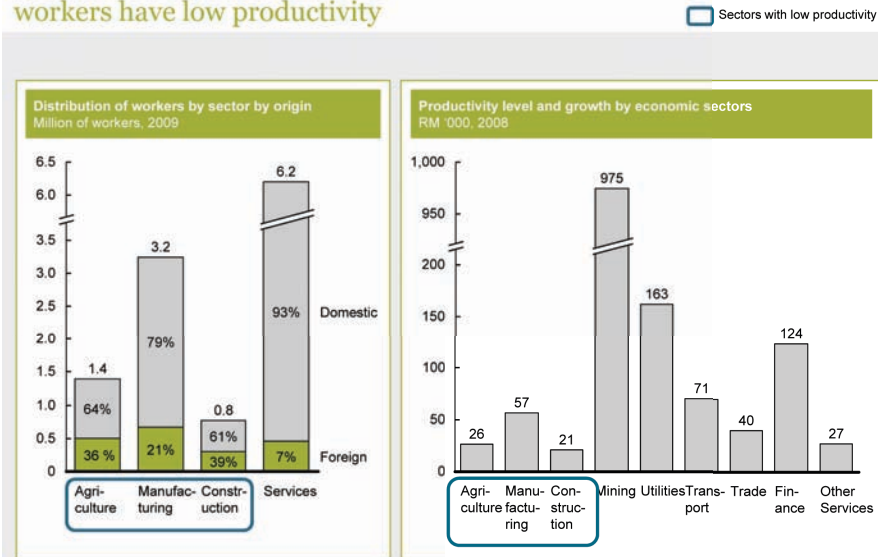


Chart 5-10

Sectors with high reliance on unskilled foreign workers have low productivity



enhance the employability of graduates. It is run by the eleven state skills development centres in collaboration with employers. This bridging programme aims to provide recent graduates with specific skills and the right competencies as well as industry-relevant capabilities to improve their employability.

Collaboration on career building and coaching between universities and industry to enhance graduate employability will be encouraged. The Graduate Employability Management Scheme (GEMS), managed by the Putrajaya Committee for Government-Linked-Company High Performance, will continue to be implemented and expanded to enhance the employability of unemployed graduates. The objectives of this initiative are to facilitate job-matching between graduates and employers, to equip participants with the most commercially relevant knowledge, skills and attitude for targeted job positions, and to improve the assimilation and integration of graduates into the workplace. Participating organisations now include not just government-linked companies but also SMEs, government agencies and private companies. Since the inception of this initiative in March 2009, a total of 5,000 graduates have gone through the GEMS programme.

The Recognition of Prior Learning (RPL)

programme will be expanded with the goal of formally recognising the experience and expertise of workers, as well as to encourage and reward lifelong learning among the workforce. The programme will enhance the career prospects of the workforce by conferring the Malaysian Skills Certificate on workers who do not have any formal certification, but who have obtained relevant knowledge, experience and skills in the workplace. It is expected to benefit more than 60,000 workers annually. Financial assistance for workers to undertake training to qualify for the Malaysian Skills Certificate will commence in 2011. In addition, a skills credit bank will be established by the Department of Skills Development to maintain a database for training records and facilitating the certification of skilled workers.

Upgrading and Broadening Access to Community Colleges

The community college system in Malaysia provides a wide range of vocational and technical post-secondary education courses within the Malaysian Qualifications Framework (MQF). The 59 community colleges nationwide play critical roles in providing upskilling and retraining for the community in diverse disciplines as well as encouraging lifelong learning across all population segments and age groups.



During the Plan period, the Government will implement a new and innovative approach for community colleges by rolling out modular programmes that allow students to complete multiple short modules at their own pace. These modules can be combined towards achieving the Malaysian Skills Certificate qualification. Around 70% of these training modules will be practical-based training on the factory floor or in work-places. In particular, these programmes will cater to the upskilling of technically or vocationally-inclined students who did not complete eleven years of basic education. This highly flexible modular approach will deliver a total of 135 different courses by 2015 from a total of 52 courses in 2010. The targeted total enrolment for community colleges will increase from 31,000 students in 2010 to 120,000 students by 2014.

Attracting and Retaining Talent

Increasing globalisation has escalated the mobility of talent to the industrialised countries, lured by better salaries, working conditions and quality of life. The best global talent are able to operate anywhere in the world, and many countries are competing to attract and retain this global talent pool. Concerted efforts will be undertaken to improve the attractiveness of

Malaysia as a destination for top talent, both Malaysian and foreign, as well as to actively source for talent that the country most critically needs.

Simplifying Procedures and Providing Better Incentives to Attract Skilled Foreign Talent

The Government will improve the current procedures for approving the hiring of skilled foreign talent in Malaysia to enhance the flexibility and reduce the complexity, the number of stages and regulatory bodies involved. The objective is to align with the more liberal work permit requirements of other high income countries. The process of hiring foreign talent will be simplified, with current practices reviewed and streamlined to reduce the requirements for approval, the number of application stages and the turnaround time for making a decision.

To further attract skilled foreign talent, incentives and employment conditions will be improved. This will include flexibility in employment where a skilled foreign talent is allowed to change jobs with the first employer's approval, an exemption to bring in foreign domestic help and permission for their spouse to take up paid employment while still holding a dependent pass.

For skilled foreign talent earning more than RM8,000 per month, there will be no time limit for their employment visa, to allow for greater flexibility and mobility. Open visas will be issued to highly skilled foreign professionals, without the need for the visa to be tied to or conditional upon employment with a particular company or employer. They will also be allowed to acquire residential units costings RM250,000 and above.

Malaysia crucially needs an increased inflow of highly-skilled foreign talent in the professional services sector, to help plug the shortage of skilled local talent. To date, ASEAN has concluded Mutual Recognition Arrangements on engineering, nursing, architectural, medical and dental practitioners and signed for quantity surveying and accountancy practitioners. These efforts were undertaken with the overall objective of facilitating the mobility of ASEAN professionals. By 2015, under the ASEAN Framework Agreement on Services (AFAS), Malaysia together with other ASEAN member countries will liberalise the entry of skilled professionals. Coupled with Malaysia's ability to improve the country's attractiveness to talent in the professional services sector in ASEAN, this will attract the entry of high-skilled foreigners to contribute towards the development of the services industries in Malaysia.

Making Cities More Liveable for Global Talent

The quality of life in destination cities is a primary consideration for global talent in deciding where to live and work. Kuala Lumpur is currently Asia's 11th-most liveable city, and it has the potential to be among the top 5. Kuala Lumpur occupies a niche position as a vibrant and cosmopolitan Asian city that is a microcosm of Asia in general. In order to attract skilled foreign talent, Kuala Lumpur will be positioned as a city for people seeking quality and diverse lifestyles, close proximity to nature, cultural richness and a modern metropolis with excellent infrastructure.

In addition, the Government will undertake concerted efforts to make other major cities, such as Georgetown, Johor Bahru, Kuching and Kota Kinabalu more liveable and vibrant. Initiatives include expanding open spaces such as parks, public squares and sidewalks, restoration of waterfronts, and enhancing the arts and culture scene, as well as to improve the safety, security, transport and healthcare services in these cities.

Creating a Pipeline of Talent for the Future

Although much of the focus has been on attracting existing skilled foreign talent, there is

a significant source of untapped budding talent. Foreign students in local universities are potential sources of talent. To retain these students, the existing mandatory procedures requiring them to return to their home countries immediately after completing their studies will be reviewed to facilitate their employment in Malaysia, particularly in critical areas.

Scholarships will be given to the best students from across the world to pursue postgraduate and post-doctoral studies in Malaysia in fields critical for the nation. Upon completion of their studies, they will be given the opportunity to work in Malaysia, to make an immediate contribution to the talent pool.

During the Plan period, the top 5% of students every year for the Malaysian Higher School Certificate (STPM) will be provided with scholarships to pursue further studies in local universities. The Government will also identify top Malaysian students studying in the renowned foreign universities and will provide sponsorship for their final year fees on condition they return to serve. In addition, steps will be taken to ensure Malaysians studying overseas on scholarships return to Malaysia upon completion of their studies.

Engaging the Diaspora of Malaysians

The diversity and size of the community of Malaysians abroad represents a valuable asset to be tapped to accelerate Malaysia's push towards a high-income economy. More than 700,000 Malaysians are estimated to be working and living abroad, and many of them are highly skilled professionals. The Government will undertake consistent efforts to identify talented Malaysians



overseas, to engage with them and excite them about contributing to national development via the following actions:

- **Maintain relationship.** The Malaysian diaspora will be actively engaged to build and strengthen relationships. The Government will actively seek out, convene and network with them. A detailed database of the diaspora, containing information such as expertise in priority economic sectors and background of skills, will be created and maintained so that the right people can be engaged;
- **Acknowledge and recognise contributions.** A set of highly regarded awards and events will be created to recognise and celebrate significant achievements by members of the Malaysian diaspora community. In addition, Malaysian diaspora associations will be established to provide networking opportunities via both online channels as well as physical chapters in cities with the largest concentrations of Malaysians abroad to provide greater visibility on the activities and opportunities for them;
- **Seek ideas and advice.** Regular dialogues will be set up between government representatives and the Malaysian diaspora in major cities, where members of the diaspora

can exchange ideas and provide input on policy formulation, particularly technology and industrial policy. In addition, prominent members of the Malaysian diaspora recognised as authorities on certain topics, will be consulted and invited to be part of advisory boards; and

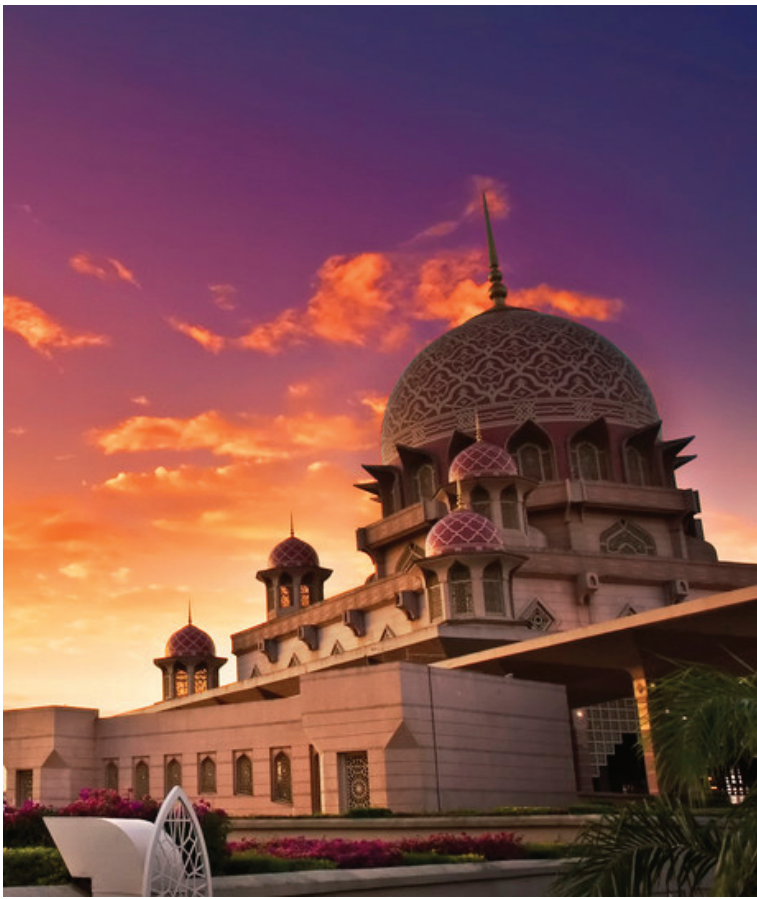
- **Source capital investment.** The Government will encourage the Malaysian diaspora to invest in Malaysia. Given their expertise in certain areas, the diaspora will be invited to invest in specific projects in partnership with local businesses or public sector agencies through joint ventures.

Creating a Talent Corporation to Deliver the Talent that Malaysia Most Needs

While efforts to attract investment have been undertaken by the Malaysian Investment Development Authority with great success, there is no single agency responsible for sourcing top global talent to fill skills gaps and to deliver the human capital that Malaysia most critically needs, from both overseas and locally. As such, a new Talent Corporation (TC) will be established in 2011 under the Prime Minister's Department with the mandate to attract, motivate and retain the talent needed for a high-income economy. It is envisaged that the TC will have three key roles:



- **To Catalyse.** The TC will develop and drive specific catalytic and innovative national talent management initiatives to attract and develop world-class talent in collaboration with both the public and private sectors. This will include initiatives to engage the Malaysian diaspora, to actively identify and convene high potential Malaysian talent pools, to uncover ‘hidden gems’ and accelerate the development of top young leaders in Malaysia;
 - **To Facilitate.** The TC will facilitate industry and private sector efforts in creating, motivating and retaining a skilled workforce. It will convene stakeholders across different agencies and companies to ensure alignment and stronger co-ordination of national talent management efforts. In addition, this role will be supplemented through the provision of incentives and support for connecting and deploying talent pools; and
 - **To Deliver.** The TC will be responsible for ensuring the delivery of major national initiatives on talent across the human capital development pipeline to develop and retain talent in Malaysia and to address the biggest gaps and bottle-necks in the ‘flow’ and ‘stock’ of talent. It will be responsible for program-managing and tracking the impact of major national talent initiatives.
- The TC, in collaboration with the public and private sectors, will jointly develop an integrated National Talent Blueprint by 2011, which will identify and quantify talent needs of priority economic sectors over time, and develop specific initiatives to accelerate the pipeline of these types of critical talent. The Blueprint will:
- Provide an end-to-end view by tackling talent issues from pre-school to retirement, and will be demand-driven in collaboration with



industry to ensure relevancy to the needs of the market and the knowledge economy; and

- Contain a detailed fact base of the talent pipeline for all priority sectors and NKEAs, a quantification of supply and demand gaps in the present and the future, an integrated portfolio of initiatives to ensure delivery and the necessary programme governance.

As the competition for global talent intensifies, there is a need to be much more proactive in not only attracting, but actively seeking skilled foreign talent. The approach will be to attract foreign talent just like attracting foreign direct investment. The TC will collaborate with the Immigration Department and Malaysian missions to actively plan and execute strategies to attract foreign talent and the diaspora to Malaysia, especially those with expertise in priority economic sectors

or those about to graduate from top universities worldwide. In addition to broad initiatives such as conducting road shows and organising career fairs for skilled talent, the Government will also scout, identify, and tap individual skilled foreign talent that can meet specific skills or knowledge shortfalls in Malaysia.

Existing talent attraction and retention programmes such as the Returning Expert Programme and the Brain Gain Programme will be consolidated under the TC and enhanced to ensure better co-ordination, more focus and greater impact. The incentives under these programmes will be reviewed and expanded to make them even more attractive to the targeted talent groups overseas.

CONCLUSION

Human capital development is an economic imperative and lies at the foundation of transforming Malaysia from a middle income to a high income nation. Achieving a globally competitive and innovation-led economy requires a systematic and comprehensive approach to nurturing, attracting and retaining top talent for the nation. Malaysia must close the gap to achieving a first-world talent base. The Government will undertake a complete reform across the entire life-cycle of human capital development, from upgrading early childhood education right through to upskilling the existing adult workforce.

Developing and enhancing the quality of teachers will be the focus towards driving improvements in student outcomes. Schools and principals will be made increasingly accountable for student performance, and will be provided with the corresponding support and autonomies. Skills training will be given a special emphasis during the Plan period, to ensure Malaysia develops the necessary human capital to meet industry requirements, drive productivity improvements and enable moving up the value chain. Technical education and vocational training will be mainstreamed, and tertiary education will be significantly upgraded via greater institutional

autonomy and performance management, with the ultimate focus towards enhancing graduate employability and job mobility.

During the Plan period, resources will be focused and targeted at developing and retaining the very best world-class talent. The TC will be established with the primary mandate to source and deliver top talent from overseas and within the country, that are most critical for the key economic sectors. At the same time, significant efforts will be made to ensure equitable access to opportunities for upgrading skills and supporting those that need help the most. In this regard, skills training initiatives will be focused on the bottom 40% of households, the school improvement programme and LINUS initiative will aim to close the achievement gap for disadvantaged students and low performing schools to ensure every student in Malaysia can succeed.

Developing human capital is an economic imperative and is central to the journey towards a high-income economy. Achieving a first-world talent base for Malaysia requires nothing less than consistent, co-ordinated and concentrated efforts to leverage our diversity internationally as well as to nurture, attract and retain top talent in Malaysia.

