

























ANNUAL REPORT 2016

MALAYSIA EDUCATION BLUEPRINT 2013-2025

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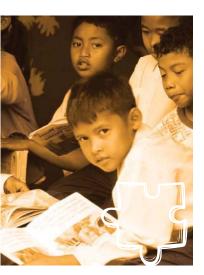
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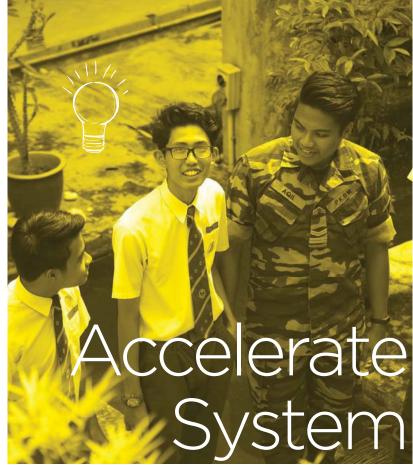
Education Performance and Delivery Unit (PADU)

Malaysia Education Blueprint 2013-2025 Annual Report 2016 August 2017 ISSN: 0128-0295

Published by: Ministry of Education Malaysia Block E8, Parcel E, Precint 1 Federal Government Administrative Centre 62604 Putrajaya, Malaysia www.moe.gov.my

















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FOREWORD: MINISTER OF EDUCATION MALAYSIA

2016 ANNUAL REPORT | MALAYSIA EDUCATION BLUEPRINT 2013-2025

The year 2016 was an eventful year for the Ministry of Education as we marked the first year of the Malaysia Education Blueprint (2013-2025) Wave 2 implementation. Spanning five years from 2016 to 2020, the Ministry will continue to roll out structural changes and accelerate the pace of transformation which had taken place during Wave 1 (2013-2015). The Ministry remains steadfast in implementing the initiatives and adapt necessary improvements to ensure the Blueprint is progressing on the right track.

The Ministry's strength and tenacity were tested in 2016 by the tumultuous global economic scenario which posed a challenge to our financial commitment in managing and developing the education in our country. Despite the challenges faced, we in the Ministry remain firm in implementing the initiatives under the Blueprint by realigning the financial allocation for high impact priority initiatives every year. In 2015, we managed to achieve the target set for budget realignment of 27%. In 2016, the percentage of budget realignment had surpassed our expectation of 30% to 77%, which demonstrated our assurance to fulfil the aspirations of the Blueprint. This commitment, coupled with the discipline of work inculcated in Wave 1 served as the basis to accelerate system improvements in Wave 2.

The Ministry of Education has been commended by the international community in meeting the targets set in Wave 1 of the Blueprint implementation. The appointment of Malaysia as a member of UNESCO Executive Board for the 2015-2019 term was an acknowledgement by the global community of our country's contribution in education transformation, among others, sharing of best practices and assisting less developed and small island nations through Malaysia Fund-In-Trust (MFIT). The confidence of other nations in Malaysia's ability to organise high level international conventions such as the 9th ASEAN Education Ministers and the Senior Education Officials Meeting (ASED), and the Asia Pacific Regional Forum on Early Childhood Care and Education (APFEC) both held in 2016 was testimony to the capability of the Ministry in driving the country's education transformation.

Our education aspiration of developing students in a holistic manner into individuals who are intellectually, spiritually, emotionally, and physically balanced are exhibited through the Ministry's efforts in striving towards excellence in sports, cultural and co-curricular activities. I wish to highlight that our Olympians and Paralympians who excelled in the Rio Olympics 2016 were products of the transformed education system which encourages and supports sporting excellence. Students from the Malaysia Art School in Sarawak also did the country proud when they won 2nd place



at the International Folklore Competition in Spain. Our students' continued success in the World Robotics Championship, a feat which obviously requires higher order thinking skills and esprit de corps, was an indication that the education transformation under the Blueprint has begun to show optimistic results.

The increase in scores for Malaysian students in the Trends in International Mathematics and Science Study (TIMSS) 2015 was further proof of our firm commitment in realising the goals set for the education transformation. Malaysia was ranked among the middle one-third of the 39 countries that took part in TIMSS 2015 compared to the bottom one-third in 2011. As for the Programme for International Student Assessment (PISA) 2015, Malaysia also showed an increase in scores for all three literacy domains – scientific, mathematics and reading – compared to PISA 2012. We are now moving towards the international average.

The delivery of 21st century education, which is essential for socioeconomic development and the wellbeing of Malaysians, requires huge and sustained investment. It will also require unprecedented co-operation and innovation in education from all stakeholders. The Ministry is currently working on multiple fronts to play our role in driving education transformation. The role includes promptness in working, understanding current scenarios impacting education and developing long-term plans which are closely guided by the Blueprint aspirations.

As a nation, we have progressed tremendously over the past few decades, and I attribute a major part of our progress to the advancement in our education system. The ability of our citizens to be united based on universal values and a strong national identity are also central towards the continued prosperity and harmony of the nation. Now, the time has arrived for us to accelerate system improvement and be more prepared to face the future.

The Rakyat now is waiting for the Government to successfully deliver the promised outcomes through consistent and well-executed implementation of initiatives. Thus, close collaboration among all concerned parties – students, teachers, parents, educational leaders, communities and the private sector – is vital and serves as a solid foundation towards the success of the education transformation. Although our transformation journey is still long and the change process will be full of challenges and obstacles, I am confident that the target to place Malaysia among the top one third of countries with the best education systems in the world will be a reality with enduring support from all parties.

YB DATO' SERI MAHDZIR BIN KHALID

MINISTER OF EDUCATION MALAYSIA



FOREWORD: SECRETARY-GENERAL

2016 ANNUAL REPORT | MALAYSIA EDUCATION BLUEPRINT 2013-2025

The Ministry of Education has successfully implemented its initiatives under the Malaysia Education Blueprint (the Blueprint) 2013-2015 in Wave 1 (2013-2015) with many encouraging results. Entering 2016, which was the first year of Wave 2 (2016-2020), challenges faced by the world due to the global economic volatility led by the decline in petroleum and commodities prices posed economic uncertainties for every country on the planet. However, Malaysia was lucky as with strong public governance, it weathered the economic storm through the 2016 Budget Recalibration as announced by the Prime Minister on 28 January 2016.

The Ministry decided to turn the bleak financial scenario in 2016 into an opportunity to revise educational operations and internal financial procedures to accelerate system improvements in Wave 2. The Ministry, through concerted efforts from all divisions, managed to optimise the reduced allocation provided and maximise outcomes. The initiatives planned under the Blueprint which were successfully implemented in Wave 1 continued to show significant achievements during the first year of Wave 2.

As stated in the Blueprint, the capabilities of our education officers must be enhanced to assure that the Ministry will continue to fulfil its role as a governing body for national education that is capable of continuous improvement. In 2016, the Ministry continued to provide professional development through the High Potential Project to qualified education officers identified in Wave 1 among the 15,000 officers previously profiled. The second phase of the project, which was a continuation from the previous training, was conducted to develop competencies essential for future educational leaders.

Efforts to empower the State Education Departments (JPN) and District Education Offices (PPD) remains as one of the focal points of the Ministry in 2016 to ensure a leaner organisation in line with international best practices. To achieve this purpose, the initiative to restructure the Ministry became a priority. The initiative is aimed at realigning and streamlining central functions from the Ministry level to JPN and PPD levels, and to develop



and strengthen leadership capabilities for 150 to 200 key leadership positions within the Ministry. The government, through the central agency, approved the proposal for the Restructuring of the Ministry of Education on 14 December 2016. The Ministry is currently reviewing the approved new organisational structure and finalising the macro and micro structures based on the approved overall number of posts within the organisation.

Infrastructure development in schools is crucial in driving the development and forward momentum of the country's education system. The Ministry is committed to ensure that school infrastructure requirements are fulfilled including wiring, building maintenance and other new infrastructure development. In 2016, the Ministry received a total of RM2.04billion under development expenditure to fund 1,047 projects which comprised 356 new projects and 691 projects from 2015.

The Ministry will, to the best of its ability, honour the commitment stated in the Blueprint to ensure the targets and aspirations set be achieved to ensure quality education for today's generation and future generations.

DATO' SRI ALIAS HJ. AHMAD

SECRETARY-GENERAL MINISTRY OF EDUCATION MALAYSIA



FOREWORD: DIRECTOR-GENERAL OF EDUCATION MALAYSIA

2016 ANNUAL REPORT | MALAYSIA EDUCATION BLUEPRINT 2013-2025

Our country is one of the fastest growing economies in Asia. The ever-improving education system, guided by the Malaysia Education Blueprint 2013-2025 (Blueprint), has played an important role in upscaling the nation's economic development with the existence of highly capable and knowledgeable human resource. Moreover, there is and rightly so, a greater appreciation towards the importance of education with emphasis on the quality of our students and educators.

Within a bigger context, the country's education system is aligned to Sustainable Development Goal 4 (SDG4) under the United Nations. As global citizens, we need to ensure the sustainability of our development in totality and the core of this development is quality education. We also need to be always prepared to face unpredictable and dynamic market environments, learning to manage by anticipating changes, leveraging on strong processes and imbuing sustainability into all that we do.

There is no education system in this world that remains stable. For an education system to be effective and able to deliver quality education, it needs to go through a continuous development and evolution process as well as transformation to meet the demands of current and future needs. Currently, the Malaysian education system is going through the transformational journey focusing on delivering the Five System Aspirations and Six Students Aspirations.

To ensure the successful inculcation of the Six Student Aspirations of the Blueprint, more classrooms are implementing 21st Century learning approaches with emphasis on students' active participation and application of Higher Order Thinking Skills (HOTS) in solving issues and problems. The atmosphere in the classrooms is now even more dynamic, interesting and conducive to instil learning across disciplines which enables knowledge sharing and experiential learning. This approach is an indication of HOTS application in the curriculum, assessment and co-curricular activities, coupled with the use of Information and Communication Technology (ICT) to prepare students for the changing landscape of higher education and future opportunities.

The quality of the education system is largely dependent on the quality of teachers; hence, the importance to upskill in-service teachers. More than 268,589 teachers were trained for the 21st century learning pedagogy, focusing on the inculcation of HOTS among students. The upskilling



of teachers to inculcate HOTS in their teaching had shown a profound effect on the teaching and learning process. Critical skills for the 21st century such as communicative competence and technological skills are now embedded in the curriculum. The Ministry has also taken concrete measures to ensure the delivery of the intended curriculum.

The School-based Assessment (SBA) is the catalyst to the transformation of the teaching and learning process in the classroom. The society now is demanding for a holistic education; one that can stimulate thinking among the students and not merely focused on the pursuit of a string of A's. Taking this into consideration, the Ministry ensured that students who underwent the Standard Curriculum for Primary School (*Kurikulum Standard Sekolah Rendah* - KSSR) were assessed holistically through the SBA and Primary School Assessment Test (UPSR) in 2016.

The Ministry is also sensitive towards the need for ICT in education. It is evident that our students are now more advanced in the internet of things, thus, our teachers need to be supported through the utilisation of the Virtual Learning Environment (VLE). The use of VLE enables our teachers and students to have access to learning no matter where they are. In 2016 alone, the Ministry managed to add more than 13,000 learning sites to be used by students and teachers in the teaching and learning process.

Students all over the country are continuously given access to quality education. Several initiatives under the Blueprint have exceeded the set target; among them was the attendance of Orang Asli students which achieved a record high of 86.3% in 2016 as compared to 82% in 2015. The enrolment of students aged 16+ in vocational field surpassed the target of 6% for 2016 to reach 6.2%. The overall enrolment for lower secondary recorded a significant increase from 92.5% in 2015 to 95.0% in 2016,

I am optimistic about the future of education in our country. It may be challenging but it offers many positive opportunities across the education landscape in Malaysia. We, in the Ministry, remain committed to all our stakeholders and to the communities we work with to ensure sustainable education improvement.

I would like to express my heartfelt gratitude to all in the education fraternity for their unwavering commitment in ensuring the success of our education transformation. Let us work together to prepare our children to be the highly skilled and knowledgeable nation builders of the future.

TAN SRI DR. KHAIR BIN MOHAMAD YUSOF

DIRECTOR-GENERAL OF EDUCATION MALAYSIA

MINISTRY OF EDUCATION MALAYSIA







EXECUTIVE SUMMARY

There are no shortcuts and magic pills in transforming our education system and more importantly, in retuning the education mindset of our stakeholders. Change can be a painful process if not planned and implemented well especially when it involves the whole nation. The Malaysia Education Blueprint 2013–2025 (Blueprint) is a comprehensive education plan but a plan without stakeholders' buy in, commitment and engagement is just words on paper. For change to be successful and sustainable, there must be a compelling reason, a clear vision of where we want to be, a definite plan on how to get there and a systematic way of measuring and monitoring the implementation of the plan.

The Ministry of Education Malaysia being the entity entrusted in leading this change is diligent in ensuring that this transformation process is a positive collaboration between the government, the private sector, the education fraternity and all levels of society. The main step which is crucial in achieving a balanced education system is in shifting the focus of the Rakyat away from the long-held practice of regarding examination oriented achievements as a measure of success.

This mind shift will enable the Ministry to work towards a more holistic development of our children based on the Six Student Aspirations as stated in the Blueprint. This effort is in line with the National Education Philosophy, which is to develop students who are wholesome and balanced with high moral standards. It is our ultimate aim to equip our future generations with knowledge, thinking skills, bilingual proficiency, leadership skills, ethics and spirituality, and a strong national identity.

The implementation of the Blueprint has been designed systematically in phases or Waves. In Wave 1 (2013-2015), the Ministry focused on turning around the system by supporting teachers and focusing on core skills, before accelerating system improvement in Wave 2 (2016-2020), and then moving towards excellence in Wave 3 (2021-2025). The methodical arrangement is vital to ensure the success of the Blueprint implementation and prioritization of initiatives based on importance, especially on those which will provide greater impact to student outcomes.

The global economic headwinds of 2016 resulted in uncertainties in many nations and we Malaysians were not spared from some of its effects. Our government took measures

to guard us from any major upheavals by its review of the nation's budget through the Recalibration of 2016 Budget as announced by the Honourable Prime Minister of Malaysia on 28 January 2016. However, the financial constraint was not a factor to discourage the Ministry from accelerating system improvement in the first year of Wave 2. The Blueprint initiatives were organised systematically and meticulously realigned with the recalibrated budget to ensure the intended outcomes could still be achieved. In 2016, the Ministry remained focused in increasing the momentum set through the implementation of the initiatives in Wave 1.



EXECUTIVE | SUMMARY 2016 ANNUAL REPORT

ACCESS: Expansion of Quality Education

The Ministry is steadfast in raising awareness on the importance of education from preschool to post-secondary by implementing various activities to provide more opportunities for all students to remain in schools and continuously excel.

QUALITY:

Raising the Quality of Education through the Inculcation of Higher Order Thinking Skills (HOTS), Student Outcomes, and Fervent Involvement of All Stakeholders

Inculcation of HOTS, encouragement towards higher student participation in Science, Technology, Engineering and Mathematics (STEM) education, enhancing teachers' and school leaders' competencies, improving students' proficiency in languages and encouraging immense involvement of stakeholders helped improve student outcomes.

EQUITY:

Empowerment of Educational Leaders at the State and District Levels To Ensure Equitable Support and Overall Increased in School Performance

States and districts were empowered to provide customised solutions and interventions, and support schools, regardless the type of schools and students' needs, to raise student outcomes and school performance based on local contexts.

UNITY: Inculcation of Knowledge and Morality Among Students through Co-Curricular Activity to Strengthen Unity

Unity among students of different ethnicities was nurtured not only in the classrooms but also highly encouraged outside the classrooms through the inculcation of the values of unity. Teaching and learning approaches which inspired collaborations among students, enhanced good moral values, fostered harmonious relationships, and built national identity were highly encouraged.



EFFICIENCY:

Enhancing the Ministry's Delivery System through Systemic Improvement which Focused on Outcomes

The main focus for the Ministry in establishing an efficient and effective delivery system was to narrow the gap between formulated policies and implementation. The Ministry practised prudent spending and prioritised education programmes and activities to centre on raising student achievements besides enhancing system capabilities by leveraging on technology.

ACCESS: Expansion of Quality Education

- Access to equitable education opportunities for Malaysian children remains as one of the major goals in education that leads towards achieving universal enrolment from preschool to upper secondary levels. In 2016, the overall preschool enrolment increased to 85.6%, in tandem with the increase in private preschools to 51.9%. The number of public preschools classes increased to an overall total of 49,851. The number of public preschools increased by 125, while the number of private preschools rose by 2,240 classes. Private preschools providers were continuously encouraged and supported to open more preschools to meet the high demand, especially in rural areas to increase children's readiness for formal schooling.
- The enrolment rate for primary education was at 97.2%, while the enrolment rate for secondary education was at 95.0%. The enrolment rate for upper secondary was at 85.8% in 2016. Overall, a total of 4,732,783 students registered for schooling in 7,772 primary schools and 2,407 secondary schools.
- The transformation of Vocational Education aims at making vocational education at par with main stream education. The transformation has successfully redesigned the landscape of the education system in the country with emphasis on two core areas - academic and skill competencies. In 2016, the enrolment in the Technical and Vocational Education and Training (TVET) increased significantly to 6.2% compared to 5.3% in 2015.
- The first cohort from 16 programmes at 15 pioneer vocational colleges successfully completed their programmes in April 2016. A total of 2,273 students were awarded with certificates in the First Vocational Colleges Convocation. A total of 1,643 (72.3%) graduates from the pioneer cohort received job offers from the industries. The job offers indicate that students who pursue skills training open themselves to wider career possibilities and opportunities.

• Access to quality education based on students' interest and talent was also provided to all children of Malaysia nationality through numerous and flexible pathways that lead towards lifelong learning. In 2016, 860 district training centres implemented the School High-Performance Sports Programme in 144 districts and 681 schools nationwide to identify and develop future national athletes in various sports. Students and former students of our sports schools also made Malaysia and the Ministry proud by participating in the Olympics and Paralympics in 2016 and with some coming home as medal winners. In addition to existing Arts schools, one daily school in Perak and another in Sarawak introduced the Arts Education Programme to cater to the high demand in the Arts.



QUALITY:

Raising the Quality of Education through the Inculcation of Higher Order Thinking Skills (HOTS), Student Outcomes, and Strong Involvement of All Stakeholders

- The increase in scores for Malaysia in the international assessments, TIMSS and PISA, was a testament of the concerted efforts from all stakeholders teachers, parents, communities and students with unwavering support from our education leaders. The Blueprint initiatives, which were comprehensively designed, cohesively and systemically implemented by all stakeholders proved that the system is on the right track towards achieving Malaysia's goal of being among the top third countries with the best education system in the world.
- Trainings were given to 6,000 secondary school Science teachers on new approaches in conducting science experiments as preparation towards the implementation of the SPM Science Practical paper in 2018. In 2016, a total of 2,681 Science teachers sat for the STEM Skill Competency Assessment. Results showed that 2,545 (94.9%) teachers achieved moderate to high competency levels.
- Collaborative networking with external agencies were formalised to embed HOTS in the curriculum as preparation for students to face the challenges in the 21st century.
 Ten schools were selected to participate in the International Baccalaureate Middle Years Programme (IBMYB), which aims to encourage students to be creative and critical thinkers, and schools as catalysts and agents of HOTS to other nearby schools to accelerate and increase the number of creative and innovative human capital.
- Futuristic thinking and 21st century skills are closely related to the current and future development and progress in science and technology. In line with the National Policy on Science, Technology and Innovation, the government intensified efforts to rouse interest in the STEM fields among Malaysians. Audit on the conditions of science

laboratories in all secondary schools was conducted to ensure their viability in conducting science experiments. Facilities that are in good condition can be a plus in our efforts to ignite curiosity and sustain students' fascination in the STEM subjects in addition to encouraging the use of innovative teaching and learning approaches in the classrooms.

- The quality of teachers and school leaders continued to be improved as their roles are crucial towards the success of the education system. The Ministry took a bold step to strengthen the skills of in-service teachers through the development of the Continuous Professional Development Master Plan (PIPPK). School leadership competencies continued to be enhanced through the NPQEL and PRIme programmes.
- Engagements with parents, communities, and the private sector had significantly increased parents' attendance rate in the related six main activities at the school level. The percentage of parents' attendance in schools increased from 83.3% to 92.5% in 2016. The percentage of parents who became volunteers in schools had increased tremendously from 15.3% to 40.9%. The private sector too, showed great interest in helping to raise school achievements through multiple Public Private Partnership programmes and this was manifested in the increased number of schools receiving contributions.



EQUITY:

Empowerment of Educational Leaders at the State and District Levels To Ensure Equitable Support and Overall Increased in School Performance

- The District Transformation Programme (DTP), with support and assistance from the front-runners, managed to improve school performance and quality at the district level. The achievement gap between urban and rural schools decreased. The percentage of high performing schools (Band 1 and 2) consistently increased to 39.9% compared to 36.8% in 2015.
- The establishment of seven Comprehensive Special Model Schools (K9) near the residential areas of Orang Asli and indigenous students and the provision of appropriate and holistic education programmes had successfully raised the attendance and the transition rates. The average attendance rate of Orang Asli students increased tremendously by 7.1% to 86.3% surpassing the target set in 2016 of 82%. The transition rate of Orang Asli students also showed a significant increase to 83% in 2016 from 79% in 2015. Four K9 schools also offered Basic Vocational Education (PAV) to enable the Orang Asli students to receive the Malaysian Skills Certificate (SKM) and continue to higher levels of certifications in vocational colleges.
- Community awareness programmes on special education among agencies were highly beneficial in raising concerns towards the requirements of students with special education needs (SEN). The increase in the number of SEN students in inclusive education was a testimony to the increased awareness and sincerity of the community at large on their roles in helping this special group. The percentage of SEN students enrolled in the Inclusive Education Programme increased tremendously to 30.3% from 23.2% in 2015.
- Contributions and cooperation from the civil society and private sector in providing for special education are greatly welcomed to increase the number of facilities for



SEN students in schools. A wider opportunity in TVET was provided to SEN students with the introduction of vocational courses in two vocational colleges. The increase in the number of SEN students to more than 500 in vocational fields in the various Public and Private Skills Training Institutions in 2016 was very encouraging.

UNITY: Inculcation of Knowledge and Morality Among Students through Co-Curricular Activity to Strengthen Unity

- Efforts to strengthen unity and national identity started to produce results beyond the Student Integration Plan for Unity (RIMUP). However, RIMUP remained relevant with its implementation in seven priority states through participation from 7,107 students. Efforts to embed values and foster unity were also being done through co-curricular activities such as sports and games, societies and clubs, and uniform bodies. Students of various ethnicities could work together in a more relax and fun atmosphere, and they focused on the activities without being conscious of their backgrounds; instead, they worked as united Malaysians.
- Research to determine the level of unity amongst teachers and students in Malaysia was administered for the second time in 2016. Findings showed that the overall average unity index among teachers and students was at 6.6 (moderately high). Although the ability to respect and manage differences was quite high, the ability to accept differences in terms of race, culture, language and religious practice were still low. The challenge for the Ministry, and especially the community at large, is to educate our children to view the differences among them as strengths and work together to complement each other's limitations.

EFFICIENCY:

Enhancing the Ministry's Delivery System through Systemic Improvement which Focused on Outcomes

- Efforts to ensure the efficiency and effectiveness of the delivery system in facing the global economic downturn and reducing budget required some changes in the Ministry's internal administration and management. Among of the efforts implemented included realigning and optimising expenditure towards maximising student outcomes. The Ministry's proposal for ABM 2017 was also realigned resulting in a total of RM280 million reallocated to high impact programmes to raise student achievements.
- The proposal to restructure the Ministry was approved in December 2016 with the aim of streamlining the management and administrative functions and roles at the federal, state and district levels. The aspiration is to make the new leaner organisation more capable and viable in providing for an efficient and effective delivery system towards education excellence. The competencies of officers in key leadership positions continued to be enhanced through specialised professional development programmes. The building of school facilities and school maintenance were continued, resulting in the upgrading and maintenance of facilities in 43 schools.
- The introduction of the Single Sign-on (SSO) facility, which was started in Wave 1, by providing access the education databases using one ID managed to reduce the administrative inconveniences related to data management. In 2016, an additional seven systems were successfully integrated which made the total number of integrated systems to 35. The utilisation of VLE in the learning process increased among students and teachers. More than 13,000 learning sites had also been developed and uploaded in the VLE.

ONCLUSION

The Ministry continued steadfastly to transform the education system as planned in the Blueprint despite facing multiple roadblocks and challenges. The involvement and support from parents, community and the private sector has helped the Ministry to achieve the targets set in 2016. Every quick win and successes, however big or small, achieved along this education transformation journey will become a positive affirmation and stimulus for the Ministry in working harder to achieve the aspirations and ambitions, which have been declared to the Rakyat via the Blueprint.

CHAPTER 1 | ACCESS 2016 ANNUAL REPORT



Every Malaysian child deserves equal access to an education that will enable that child to achieve his or her potential.

Malaysia Education Blueprint (2013-2025), pg E-9

INCREASING ACCESS TO EDUCATION

In Wave 1 (2013-2015) of the Malaysia Education Blueprint 2013-2025 (Blueprint), various measures had been initiated by the Ministry to increase enrolment from preschool to upper secondary levels. Among the measures taken are such as improving vocational education pathway, providing fee assistance to attend private preschools, providing launching grants for private preschool operators, conducting nationwide awareness campaigns on preschool education and co-operation with the non-governmental organisation (NGO) and private agencies to minimise student dropout. To accelerate system improvement in Wave 2 (2016-2020), the Ministry will intensify efforts to be implemented in order to achieve universal enrolment, especially for preschool and upper secondary education by 2020.

The Ministry is committed to provide equal access to education for Malaysian children which will enable them to realise their full potentials. The Ministry is taking various efforts to increase access to education through the following main activities:

- Increasing access to quality preschool education.
- Ensuring participation in primary and secondary education.
- Transforming vocational education.
- Enhancing various education pathways.
- Providing education for specific groups.
- Providing post-secondary education.



INCREASING ACCESS TO QUALITY PRESCHOOL EDUCATION

Preschool education is aimed at encouraging social interaction among children from a young age and to acquire positive characteristics. A strong foundation in basic literacy and numeracy will prepare children before participating in formal education. Through holistic development and a strong foundation at an early age, children are better prepared to succeed in school and later in life.

Preschool education in Malaysia is offered by both the public and the private sectors. Public preschools are provided free or at a minimal fee with limited places. Private preschools provide the majority of seats and thus, play an important role in increasing access to education for students nationwide. The Ministry targets to achieve universal enrolment in preschool for children aged 4+ and 5+ by 2020.

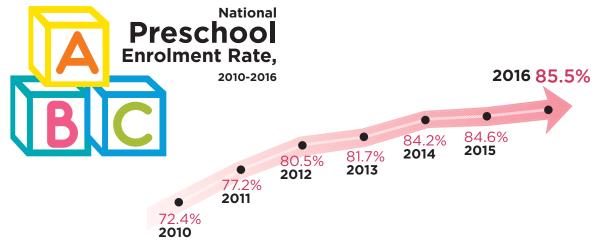
National Preschool Enrolment

In 2016, the preschool enrolment reached 85.6% (865,464), a slight improvement of 1% from 84.6% (839,921) in 2015 as illustrated in Exhibit 1-1.

Analysis by age cohort showed the enrolment rate for children aged 5+ was still higher than those aged 4+. In 2016, the enrolment rate for children aged 5+ and 4+ was at 92.1% and 79.4%, respectively as per Exhibit 1-2. The main challenge for the Ministry is to increase the enrolment rate for children aged 4+ into preschool.

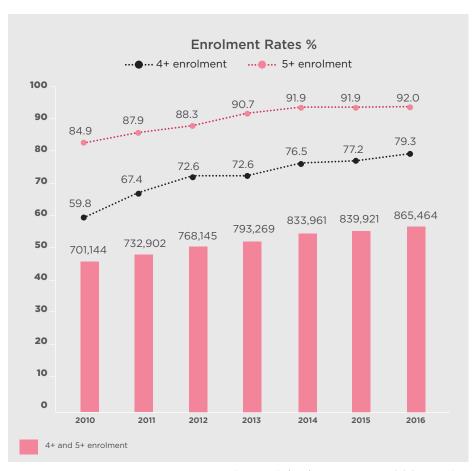
The target enrolment from the private preschools by 2020 is 60%, as aspired in the National Key Economic Area (NKEA). In 2016, the private preschool enrolment increased to 51.9% (448,885) as compared to 50.7% (426,246) in 2015 as illustrated in Exhibit 1-3. The data shows that the increase in the number of private preschools is slow and more effort is required to achieve the target.

Exhibit 1-1: National Preschool Enrolment Rate, 2010-2016

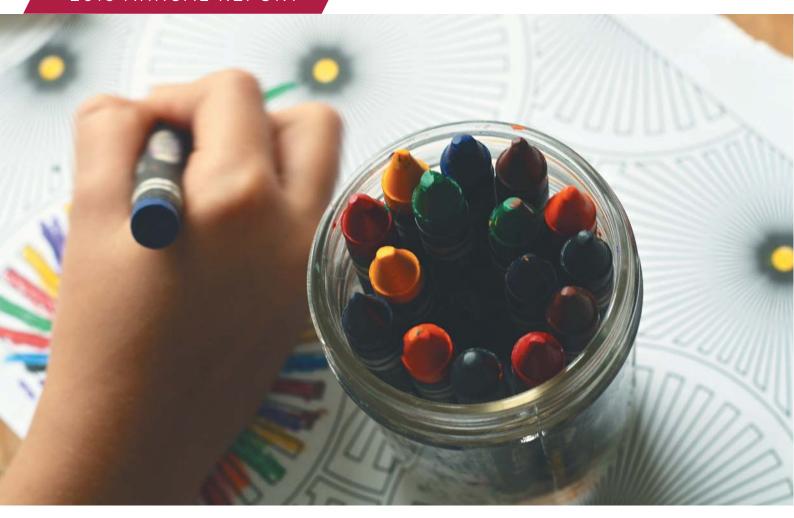


Source: School Management Division (BPSH)

Exhibit 1-2: Preschool Enrolment Trend by Age Groups, 2010-2016



Source: School Management Division (BPSH)

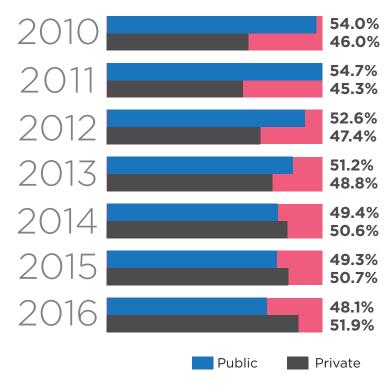


Increasing the Number of Preschool Classes

Since 2010, the number of preschool classes in the country has steadily increased. In 2016, the total number of preschool classes increased to 49,851 (Exhibit 1-4). The number of newly opened public preschool classes was 125 (89 by the Ministry and 36 by KEMAS) while the number of private

preschool classes rose by 2,240 classes (719 newly opened, 1,521 recently registered). The increase in the number of classes indicated that more children were given opportunities to prepare themselves for an early head start towards formal schooling.

Exhibit 1-3: Public and Private Preschool Enrolment Rate, 2010-2016



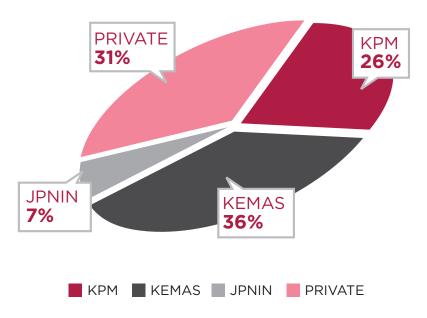
Source: School Management Division (BPSH)

Exhibit 1-4: Number of Public and Private Preschool Classes, 2012-2016

	YEAR	PUBLIC	PRIVATE	
	2012	• 21,368	• 22,965	
12 43	2013	• 21,729	• 25,153	
	2014	• 21,980	• 26,523	
	2015	• 22,066	• 25,928	
	2016	• 22,162	• 27,689	

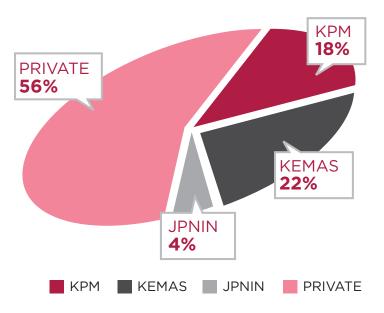
Source: School Management Division (BPSH)

Exhibit: 1-5: Distribution of Preschool Centres by Agencies, 2016



Source: School Management Division (BPSH)

Exhibit 1-6: Distribution of Preschool Classes by Agencies, 2016



Source: School Management Division (BPSH)



Private Preschool Launching Grant

In line with the NKEA and to address the challenge of limited seats in public preschools, the Ministry encourages the private sector to play a bigger role in providing preschool education. In the past, the Ministry provided launching grants to encourage the establishment of private preschools. Grants of RM10,000 and RM20,000 were provided for existing preschool providers to open one or more classes. Since 2010, a total of RM13.48 million was granted to 772 preschool providers nationwide.

The provision of grants for the opening of new preschools and additional places added financial strain to the Ministry, thus, the launching grant programme was discontinued in 2016. The Ministry is

looking into a better long term solution in raising awareness among current and new providers in the private sector on the necessity to assist the Ministry in providing early education and care for the young.

Increasing the Registration of Private Preschools

The registration of all preschools will enable the Ministry to have a comprehensive preschool database for planning and monitoring, and providing appropriate assistance to all preschool providers. Registration of private preschools remains a challenge, as the private operators are required to obtain various approvals to comply with requirements from local authorities, and these requirements may



Portal for the National Preschool Quality Standard

vary from one local authority to another.

With the assistance of Early Childhood Care and Education Council Malaysia, the Ministry managed to convince 124 unregistered preschools to register. Through the online National Preschool Information System (Sistem Maklumat Prasekolah Kebangsaan, SMPK), 7360 additional private preschools registered with the Ministry.

A comprehensive preschool database will also enable parents to make informed choices when choosing and enrolling their children into private preschools. The Ministry highly encourages the public to be cognisant of the quality of private education providers to ensure that every child receives access to quality early childhood education and care. The registration status of private preschools can be easily accessed via http://eprasekolah.moe.gov.my. Ministry conducts annual assessments on the quality of private preschool via the National Preschool Quality Standard (Standard Kualiti Prasekolah Kebangsaan, SKPK).

In order to raise awareness on the importance of early childhood education and to promote the registration of children at preschools, the Ministry organised the Running Kidz programme in August 2016. The nationwide convoy and promotional campaign were implemented together with various media engagements and public announcements to promote early childhood education.



Media Feature of Running Kidz Programme

Providing Preschool Fee Assistance

Since 2012, fee assistance is provided children from socio-economically disadvantaged families and children with special education needs (SEN) to ensure they receive quality preschool education. Families whose household income is less than RM500 per capita are eligible to receive the fee assistance. In 2016, an average of RM508.80 fee assistance was granted to 35,376 recipients, totalling RM18 million. To date, more than RM114 million has been distributed to 143,374 children nationwide. In 2015, 860 children with SEN were enrolled in 197 preschool classes. In 2016, 983 children were enrolled in 206 preschool classes, a 14.3% increase from the previous vear.

Improving the Quality of Preschools

The Ministry measures both the quality of the preschool programme and the teachers delivering the programme through the implementation of SKPK, an online self-assessment evaluation tool for preschool facilities and programme. The data is then verified by the School Inspectorate and Quality Assurance (*Jemaah Nazir dan Jaminan Kualiti, JNJK*) on an annual basis. In 2016, the Ministry required 23,171 preschools nationwide to evaluate the quality of their preschool via the SKPK. All public and private preschools completed the online self-assessment, and the results were as shown in Exhibit 1-7 below:

Exhibit 1-7: Number of Preschools with Minimum Standard of SKPK by Agencies

Agency	KPM	KEMAS	JPNIN	PRIVATE	TOTAL
Number of Preschools	6,025	8,531	1,781	6,834	23,171
Number of Preschools with Minimum Standard	6,022	8,510	1,779	6,239	22,550
Percentage of Preschools with Minimum Standard	99.9%	99.8%	99.9%	91.3%	97.3%

Source: School Inspectorate & Quality Assurance (JNJK)

The result of the SKPK assessment was highly encouraging where the percentage of preschools achieving the minimum standard increased by 6.3% from 91.1% in 2015 to 97.3% in 2016. The Ministry consistently monitors the quality of preschool programmes offered in the country, and will gradually increase the minimum standards set.

Raising the Competencies of Preschool Teachers

In April 2016, the Cabinet approved the proposal to set a minimum qualification for preservice and in-service preschool teachers in Malaysia to raise the quality of ECCE. The aim for setting a minimum qualification is to provide qualified and caring personnel who are competent to apply the appropriate methodologies and approaches to mould positive attitudes and readiness towards learning in our young children. The Ministry has set a target that by 2020, all public and private aspiring pre-service and in-service preschool teachers are required to have at least a diploma in ECCE.

Since 2013, the Ministry has been encouraging private preschool educators to improve their qualifications at accredited institutions of higher learning in Malaysia. The Ministry grants a tuition fee assistance worth RM1,000 per annum for eligible in-service preschool educators for the duration of the study. In 2015, a total of RM784,000 was provided to 784 aspiring in-service preschool teachers pursuing their Diploma in ECCE. This initiative was deferred in 2016 due to financial constraints. The Ministry has identified 28,870 (58.8%) out of the total 49,099 in-service experienced preschool teachers without the required minimum diploma qualification (Exhibit 1-8). The Ministry is exploring ways to promote the professionalism of early childhood and childcare teachers as it is vital for children's readiness to enter formal primary schooling.

Exhibit 1-8: Number of Private Preschool Teachers by Qualifications, 2016

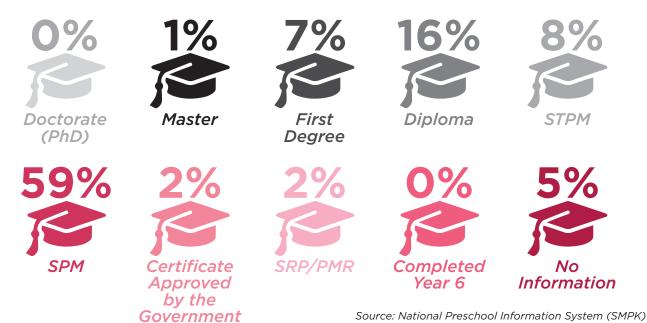


Exhibit 1-9: Percentage of Teacher with Minimum Diploma Qualification by Agencies, 2016



Promoting Best Practice Pedagogy via Flipped Classroom

The Ministry introduced the 'Preschool Flipped Classroom' in 2015. The classroom is an innovative approach in remodelling and rebranding existing public preschools by focussing on delivery and the setting of the classroom. The aim of the Preschool Flipped Classroom is to improve and enhance the delivery of early childhood education in public preschools by creating a conducive learning environment and fostering a student-centred approach. This initiative focusses on transforming teaching

and learning strategies, classroom setup and arrangements, and increasing parental involvement in the learning process to suit the 21st century learning experience. Preschoolers are exposed to creative play and are given freedom to explore various mediums, as teachers facilitate their learning. Continuing from the previous year, the Ministry managed to setup one Flipped Classroom for each district in Malaysia in 2016 as a model preschool classroom to be emulated by other classes based on the resources available.

Changing the Preschool Landscape through Flipped Classroom

The "Flipped Classroom" is a project implemented in preschools under the purview of the Ministry aimed at enhancing the preschool experience through a series of improvements. The traditional classroom is remodelled focussing more on situational-based learning. The children's learning is self-paced as teachers facilitate their learning experience through case studies and experiments. The preschool teachers are retrained and exposed to the latest advancements in preschool pedagogical approaches.

Puan Mujimah Mujim, a preschool teacher in Sabah, and Puan Balgis Kader Bawa who teaches in Penang, had fully embraced the new concept and applied it in their daily classroom activities. The results were remarkable: children became more proactive, interactive, and they enjoyed being in the classrooms. Teachers were more open towards new approaches, more flexible in their teaching strategies, and asserted that the approach encouraged them to be more creative and innovative. Parents also reported that they saw positive outcomes in their children's learning and became more involved in their children's education. These were only a few of the improvements noticed by the teachers.

Puan Balqis, a teacher with 25 years' experience in teaching, and 14 years' experience in preschool education had many praises for the method. She explained, "Flipped Classroom gives a very good impact, especially to the Ministry's preschool teachers. The children's outcomes are easily

realised as teachers change their pedagogical approaches and become motivated and happy with their work. The manuals provided for the implementation of the Flipped Classroom are very helpful as they are easy to understand, and the proposed activities are easily applied in the classroom. We can translate content knowledge into interactive classroom activities, which helps to sustain children's interest in learning."

Puan Balgis Haji Kader Bawa

SK Bertam Indah, Pulau Pinang

Puan Mujimah Mujim who has been teaching preschool children for 15 years believes that the method is the best so far, for it produces immediate impact on the students' development.

"I personally feel that the Flipped Classroom is one of the best approaches to enhance our preschools. I feel very fortunate to be selected for the programme, as it opens up endless opportunities and possibilities for teachers to create their own style of teaching."

Puan Mujimah Mujim

SK Bukit Padang, Sabah

SK Bukit Padang Sabah



Preschoolers learning to operate a washing machine while managing the 'daily laundry'



Simulation of managing a farm, from planting of seeds to harvesting and 'selling' of vegetables to fellow preschoolers

Enhancing Delivery of Preschool Education

Under the Education Act 1996 (Act 550), all preschool providers in Malaysia must adhere to the KSPK, as a general framework to deliver their curriculum. This is crucial to ensure all children are equipped with the basic skill sets and values required for formal schooling. Introduced in 2010, the KSPK sets the benchmark and the requirements for all preschool providers in the country.

In 2016, the Ministry revised the KSPK, which was due for implementation in 2017. The Revised KSPK 2017 is reflective of the

Ministry's aspirations to promote higher order thinking skills, develop problemsolving skills, and instil values and unity in children. It also places more emphasis on health and safety aspects besides introducing a more global perspective on ECCE. Extensive awareness campaigns and Training-of-Trainers (ToT) sessions were held throughout the country in 2016. This was to ensure the Revised KSPK 2017 is well received and understood by all preschool agencies and providers.



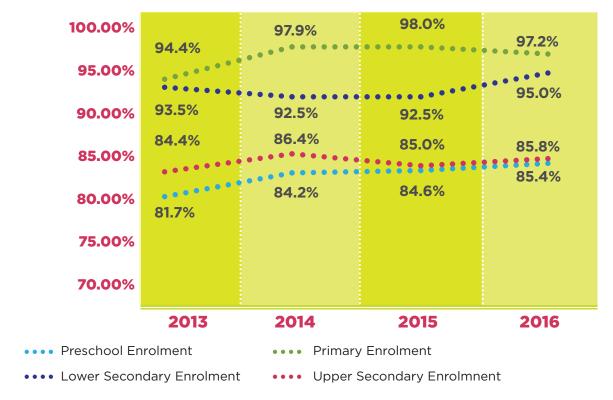
ENSURING PARTICIPATION IN PRIMARY AND SECONDARY EDUCATION

In 2016, a total of 4,732,783 students were enrolled in 7,772 primary and 2,407 secondary schools nationwide. The Gross Enrolment Rate for primary education was at 97.2% whilst for the secondary education. it was at 90.0%. The enrolment rate for lower secondary increased to 95.0% from 92.0% in 2015. At the upper secondary level (Form 4 and Form 5), the enrolment rate showed a slight improvement at 85.8% compared to the enrolment rate in 2015 at 85%.

As illustrated in Exhibit 1-10, the enrolment rate from lower secondary to upper secondary indicated that students tend to opt out from continuing their secondary education. This

trend is a cause for concern as it can affect their future and contribute to the lack of skilled human resource in the country. In view of this, the Ministry developed an instrument to identify students who are at risk of dropping out with the intention to provide immediate and differentiated intervention programmes. The instrument will identify the main underlying factors for students at risk of dropping out at the district and national level and will also supply information on the percentage of students who are at risk of dropping out from government schools. The instrument contains 31 items which are categorised into four domains - student. family, school and community.

Exhibit 1-10: Preschool, Primary, Lower Secondary and Upper Secondary Enrolment Rates, 2013-2016



Source: Education Planning and Research Division (BPPDP)

The instrument was piloted in 2016, involving 459 primary and 323 secondary schools across the country. The study discovered the following:

- 2.0% and 4.3% of primary and secondary students respectively, were at high risk of dropping out from schools.
- 55.2% and 54.5% of the primary and secondary students at high risk of dropout were male students.
- 79.3% and 95.5% of the primary and secondary students, respectively, at high risk of dropping out were from low income families with monthly salaries of less than RM1.500.

The main contributing factors for students at risk of dropping out centred around the student and family. Student factors included having low literacy and numeracy skills, failing in more than half or all subjects taken, absenteeism from 40 to 60 days, having disciplinary problems and no motivation to study. Family factors included poverty, parents with low academic qualifications, and non-involvement of parents in their children's education. Recommendations from the study include reviewing the existing interventions to arrest the dropout rate among at-risk students, designing new intervention programmes in co-operation

with other public and private agencies, and providing alternative education pathways which favoured students with different interests and talents. Thus, there is a need to

focus on a systemic change in the education system, especially to overcome dropout issues as envisioned in the Blueprint.

Teacher's Noble Gestures Bears Fruit



Photo/Facebook Suraya Abdul Rahim

Pn. Suraya Abdul Rahim, a discipline teacher at Sekolah Menengah Kebangsaan Seri Kota Puteri, Johor was willing to provide shelter and care to a student from an under privileged family by taking the student into her home. Due to Pn. Suraya's extraordinary dedication and kindness, 18-year-old Farah Marcella Bandie, achieved 6As in *Sijil Pelajaran Malaysia* 2016.

"Farah was expelled from school before when she was in Form 4 but she re-enrolled and continued her Form 5 schooling on her own initiative. Unfortunately, she was absent from school for nearly two months as she had to work at a burger stall nearby her house to help supplement her mother's income."

"I do believe there are many students with great potential out there who are struggling in life and facing family and personal issues which indirectly contribute towards them dropping out of school. This issue is serious and without immediate action, will involve more students at risk of dropping out."

Puan Suraya Abdul Rahman

Teacher, SMK Seri Kota Puteri, Johor

"I am grateful to Allah s.w.t. and to my teacher, Pn. Suraya, for without her I will not be able to achieve whatever I have today. The hardship in life had made me lose faith towards education, but Pn Suraya was the one who taught me that education is the best route to escape the hardship of life".

Farah Marcella Bandie

Ex-Student, SMK Seri Kota Puteri, Johor



TRANSFORMING VOCATIONAL EDUCATION

Technical and Vocational Education and Training (TVET) continues to play an important role in supporting the agenda for developing human capital with the right knowledge, skills and attitude under the Eleventh Malaysia Plan 2016-2020. It is expected that 1.5 million jobs will be created under the Plan and 60% of the jobs created are expected to involve TVET-related skills. To meet the ever-growing demand, Malaysia aims to increase its annual student intake in TVET from 164,000 in 2013 to 225,000 in 2020. In line with the nation's aspiration, the Ministry through its existing institutions, strives to increase its annual student intake in TVET from 20,289 in 2013 to about 84,000 by 2020.

The Ministry has collaborated with the private sector to provide cost-efficient solutions to vocational education through the buying seats programme since 2012. The objective of the programme is to rapidly increase the number of places and range of courses available in the vocational system to meet the demands of the future workforce in priority economic areas. However, due to the financial constraints attributed by the economic challenges in 2016, the number of students placed at ten private skills training institutions was reduced drastically to 442 as compared to 1,403 in 2015. To mitigate the adverse impact on the enrolment rate, the Ministry introduced more classes for the Upper Secondary Vocational Programme (*Program Vokasional Menengah Atas,* PVMA) at 269 secondary schools.

Pendidikan Asas Vokasional (PAV)

Basic Vocational Education (*Pendidikan Asas Vokasional*, PAV) is one of the programmes initiated under the Vocational Education Transformation. PAV is a three-year programme offered to lower secondary school students. The curriculum for PAV is based on the National Occupational Skills Standard (NOSS). Upon completion, students will be awarded with the Malaysian Skills Certificate (*Sijil Kemahiran Malaysia*, SKM) based on the results or skills achieved. Students who enrolled in PAV are also given the choice to further their upper secondary education either in the academic or vocational streams.

The pilot programme was launched in 2012 with 15 schools participating from all over Malaysia. Currently, there are 81 schools offering 12 PAV courses. Results indicated that PAV has successfully optimised student potentials and prepared them with work related skills needed by the industries. The performance of students under PAV for three cohorts had improved significantly since 2014. In 2016, 80.4% of the students achieved SKM Level 2 as compared to 62.3% in 2014 and 68.7% in 2015.

Program Vokasional Menengah Atas (PVMA)

PVMA was piloted in 2015 with the aim to provide more opportunities for students to participate in vocational education at the secondary level. PVMA was expanded in 2016 and contributed to the significant increase in enrolment of the student population aged 16 in TVET to 6.2% in 2016 as compared to 5.3% in 2015. In 2016, the enrolment of upper secondary students in TVET increased significantly due to the aggressive effort by the Ministry to expand the number of seats to 5,933 in 269 schools as compared to 343 students in 12 schools in 2015.

Employability of Graduates in *Diploma Vokasional Malaysia* (DVM)

The pathway for graduates of vocational education is the world of work. The Ministry targets that 70% of the graduates in TVET will join the workforce after completing their education and training at vocational colleges (*Kolej Vokasional, KV*) under the purview of the Ministry. The first batch of 2,273 students from 15 KV successfully obtained their DVM in August 2016. The graduates' employability stood at 83.1% in December 2016. A total of 1,982 (87.2%) graduates are involved in key economic areas, namely Manufacturing, Automotive, Electrical, Oil and Gas, Air-conditioning, Construction, Hospitality and Agriculture. A

total of 425 (26%) of the working graduates managed to obtain a starting salary ranging from RM1,500 to RM3,500. This was a good indicator of the demand for TVET graduates considering the current market volatility.

Ensuring Quality and Standard of Technical and Vocational Programmes

In 2012, 15 vocational schools were converted to KV offering 16 diploma programmes to the pioneer group of students. The number of KV increased to 80 with an additional 20 programmes being offered in 2016. Currently, there are 36 diploma programmes being offered from eight technical and vocational sectors comprising Electric & Electronics, Civil Engineering, Mechanical Engineering, Hospitality, Agriculture, ICT, Business, Social Services.

In ensuring quality compliance and the distinctiveness of the tertiary education pathway for the students, the diploma programmes were submitted for accreditation to the Malaysian Qualifications Agency (MQA). The MQA conferred provisional accreditation for the initial 16 diploma programmes offered at 15 KV between April and May 2016. The programmes were then submitted for full accreditation and the 15 KV were audited in September 2016. Full accreditation of the programmes

is expected to be awarded in 2017. Furthermore, this enables the graduates to further their studies at tertiary level locally and abroad. KV graduates are given opportunity for wider access to knowledge and education as well as lifelong learning.

Professional Development of TVET Teachers

A total of 213 teachers from PVMA successfully obtained SKM Level 2 from the Department of Skills Development (Jabatan Pembangunan Kemahiran, JPK) in 2016. In the same year, a total of 37 teachers from the DVM programmes received certification for the SKM Level 4 and SKM Level 5 from JPK. To date, there are 241 DVM teachers with SKM Level 5, 264 teachers with SKM 4 and 2,277 DVM teachers with SKM Level 3. A total of 1,110 DVM teachers are currently in the process of obtaining SKM Level 4 and SKM Level 5.



Vocational College: A Catalyst for the Development of Skilled Workers

Vocational Colleges (KV) was introduced by the Ministry of Education to increase the number of students in technical and vocational fields, and open wider opportunities for the school leavers in the job market. KV offers vocational education and skills training with 30% academic component and 70% practical component. The vocational stream leads to Malaysian Vocational Certificate (Sijil Vokasional Malaysia, SVM) and Malaysian Vocational Diploma (Diploma Vokasional Malaysia, DVM), while skills training offers the Malaysian Skills Certificate (Sijil Kemahiran Malaysia, SKM). There is high demand from the industries for semi-skilled and skilled graduates from KV. Some KV graduates have also started their own businesses and become young entrepreneurs after completing their TVET. Four graduates from KV have proven that the technical and vocational education received have benefitted them thus enabling them to contribute towards our nation's progress.



Mohd Qayyum Bin Mohd Shaimi, a graduate of Kolej Vokasional Muadzam Shah, Pahang, was confereed the DVM in Construction Technology in 2016, and currently is

a young entrepreneur in the construction field. Qayyum's interest in the construction field was nurtured by his father, a building contractor, since he was 13 years old. Not to delay his ambition, this young man started his company, Qsam Trading in his final year at the KV with financial assistance from his family. To date, his company has managed to employ ten workers, and he also employed two of his friends from the same KV to work with him. Currently, he is undergoing an intensive training at Tilista Feruni Tiling Academy to enhance his skills in professional tiling services.

Mohd Qayyum was grateful that he had managed to realise his ambition at a very

young age with the knowledge and skills learnt during his four-year study in KV. Qayyum highly recommended TVET and stated, "TVET is good for those who are interested in skills training. In KV, I learned to tie bricks, do tiling and various aspects of the construction techniques. TVET has changed me a lot; from knowing nothing about tools and construction to knowing a lot about the construction world. Without KV and TVET, students will not be able to increase their skills and interest."



Mohammad Khalilbari bin Mohd. Sunainibari was one of the pioneer graduates from Kolej Vokasional Dato' Lela Maharaja, Rembau, Negeri Sembilan in the

field of agro-industrial ruminat farming. Now, Khalil is managing his own breeding farm. Khalil stated, "I learned a lot of things in KV on animal husbandry. Among the knowledge

learned was on the rearing of buffaloes, cows, oxen, goats and deers. What I had learned previously in KV, I have managed to apply them now. The experience during KV is the same with what I am doing now in the world of work. Whatever I have learnt in TVET during my KV years is beneficial in my current work."

The two following female graduates from Kolej Vokasional Sg Petani 1, Kedah were the best students in the welding field. They had proven that female students could compete with male students and become skilled blue-collar workers in the oil and gas industry by joining the welding technology field. Both passed the Vocational Education Training Academy (VETA) leadership course during their study. The VETA certificate is recognised by the Ministry of Human Resource and the Department of Skills Training and also the industrywide renowned professional certification by Lloyd's Register, an international professional body.



Nurul Fatin Atikah binti Mohd. Zuljabar had previously worked for Sapura Kencana Berhad and was immediately introduced to the field of TVET

after registering at the KV Sg Petani 1, Kedah. Fatin informed, "My father was the main motivator who had encouraged me to enrol in the TVET field. My father taught me that success is not only achieved in the field of academics but also in the skills area. Working in the industry is very challenging as I am among the only five female workers in the welding field."



Siti Sarah binti Mohd. Samsuri, who was also a graduate of Kolej Vokasional Sg Petani 1, Kedah stated, "KV can guarantee my future. Among the main challenges I faced

during my study was having to compete with the boys. What I did was to familiarise myself with the workshop environment and the classes. Sarah's career in the welding field started when she passed the Lloyd's register test and was subsequently placed in Sapura Kencana Berhad. Sarah advised students who wanted to enrol in TVET, "When you have free time, go to the workshop and do your own training as we only have time during our study. Use the time that we have wisely."

Please scan the code to watch video



PVMA at SMK Putrajaya Precinct 11(1) Opens Doors to the Culinary World

"I am interested in the food catering course under the PVMA because it uses a hands-on approach and the focus is not solely on academics. Now, I have the skills on various food catering techniques and in depth information concerning the use of kitchen appliances and equipment in the food catering industry".

"I am very happy because through PVMA classes I am able to serve Western and local cuisine very well. I have the expertise to serve dishes which have been cooked to perfection and creatively as well as maintaining the quality of the food served".

Nurul Farhain Bt Zainudin

PVMA Student, Food preparation and catering course

"I am grateful to be in the PVMA stream because not all schools offer PVMA. I obtained good results in SPM and SKM Level 2. With SPM and SKM we are able to plan for our future to become successful chefs. Thank you to the school and all teachers who worked hard towards offering PVMA in this school."



Muhammad Hadzwan Asyraaf Bin Hisham

PVMA Student.

Food preparation and catering course

"We are given the opportunity to experience the kitchen atmosphere at par with industrial restaurants. The cost to enrol in PVMA is lower compared other colleges and universities. There are experienced teachers in PVMA. With the SKM certificate, I am able to find jobs and continue my studies."

Muhammad Shazwan Bin Mhd Shafiee

PVMA Student,

Food preparation and catering course











ENHANCING VARIOUS EDUCATION PATHWAYS

The Ministry offers various education pathways to students that best suit their talents and interests. Apart from mainstream national and vocational education, students

may opt to enrol in sports schools, art schools, or Islamic religious schools based on their preference and inclinations.

Sports Schools

Malaysia Sports School (SSM)

The main objective of Malaysia Sports School (Sekolah Sukan Malaysia, SSM) is to develop a world class talent pool in sports through rigorous selection process and training while ensuring the students attain strong academic credentials. The development of students in various sports fields strongly supports the national agenda of developing a sporting nation.

Currently, there are five SSM in Malaysia:

- Sekolah Sukan Bukit Jalil (SSBJ), the Federal Territory of Kuala Lumpur
- Sekolah Sukan Tunku Mahkota Ismail (SSTMI), Johor
- Sekolah Sukan Malaysia Pahang (SSMP)
- Sekolah Sukan Malaysia Sabah (SSMS)
- Sekolah Sukan Malaysia Kuala Terengganu (SSMT)

In 2016, 33 primary students and 286 secondary students were eligible to enrol into SSM through the Talent Identification Programme. SSM also offers preuniversity programme with 104 students in 2016. The

overall enrolment increased by 29% from 1,103 in 2013 to 1,423 in 2015 as shown in Exhibit 1-11.

Exhibit 1-11: Enrolment in Malaysia Sports Schools by Gender, 2013-2016

	YEAR	MALE	FEMALE	TOTAL	
	2013	751	352	1,103	
			388		
X	2015	889	494	1,383	
	2016	939	484	1,423	

Source: Education Planning and Research Division (BPPDP), 2016

In 2016, a total of 337 student athletes participated in 138 international competitions, while 1,363 students

participated in 183 national competitions (Exhibit 1-12).

Exhibit 1-12: Participations in National and International Competitions by Sports Schools, 2016

No	School	No. National Competitions	No. of Students	International Competitions	No. of Students	Total No. of Competitions
1	SSBJ	60	453	89	170	149
2	SSTMI	81	478	20	114	101
3	SSMP	14	284	11	32	25
4	SSMS	20	140	18	21	38
5	SSMT	8	8	0	0	8

Source: Sports Division (BSukan)

From a total of 31 main national and international competitions, SSM student athletes managed to secure 216 gold medals, 167 silver medals and 172 bronze medals.



Exhibit 1-13: Achievements at National and International Competitions, 2016

	of 1-13: Achievements at National and		NO. OF	ACHIEVEMENT		
NO.	COMPETITION	VENUE	STUDENTS	GOLD	SILVER	BRONZE
1	Olympic Games	Rio	3	0	0	0
2	Pontefract Open Junior Squash	Yorkshire UK	6	3	0	1
3	British Open Junior Squash	Sheffield UK	4	0	1	2
4	Germany Open Synchronised Swimming	Bonn	4	0	1	1
5	Oceania Junior Squash	Australia	4	2	0	0
6	Indonesia Badminton Circuit U15/U13	Riau	9	1	1	0
7	11th SEA Youth Athletics	Thailand	10	9	0	3
8	King & Princess Trophy Weight Lifting	Thailand	11	3	0	0
9	Pompui Badminton	Thailand	32	5	3	0
10	Vietnam Karate Open	Vietnam	4	1	0	2
11	Asia Junior Track & Field	Vietnam	9	2	1	1
12	South East Asian Karate	Malaysia	4	1	1	2
13	Track & Field Asian Junior	Vietnam	9	2	1	1
14	Singapore Diving Open	Singapore	5	6	3	0
15	South East Asian Table Tennis Cadet	Cambodia	4	1	0	4
16	ASEAN School Games	Thailand	48	2	6	7
17	International Little Athletics	Singapore	14	5	7	0
18	West Australia Little Athletics Championship	Australia	3	1	3	3
19	44th Asian School Football U18 Championship 2016	Korea	20	0	0	1
20	Asian Netball	Thailand	3	1	0	0
21	South East Asian Squash Junior	Malaysia	10	1	2	2
22	World Junior Wushu	Bulgaria	5	2	3	5
23	Commonwealth Gymnastic Junior	Namibia	6	4	0	0
24	Commonwealth Weight Lifting Junior & Senior	Malaysia	4	2	0	1
25	Malaysian Schools Sports Council (MSSM) Championships	Malaysia	572	84	70	72
26	Malaysian Games (Sukan Malaysia, SUKMA)	Kuching	344	62	54	63
27	Tun Razak Cup Hockey	Kuala Lumpur	9	1	0	0
28	Badminton GP Final	Kuala Lumpur	54	8	6	0
29	Sepak Takraw GP Malaysia	Kuala Lumpur	15	1	1	0
30	Malaysia Open Netball	Bukit Kiara	10	1	1	1
31	Squash Grand Final National CIMB	Bukit Jalil	10	3	4	0
	TOTAL			216	167	172

Source: Sports Division (BSukan)

Exhibit 1-14: Student Athletes Achievements in Sukan Malaysia (SUKMA), 2016

SCHOOL	ATHLETE ATHLETE	GOLD	SILVER	BRONZE	NEW RECORD	NATIONA RECORD	AWARDS
SSBJ	160	52	41	46	5	0	
SSTMI	128	9	10	12	3	1	
SSMP	10	1	1	1	1	0	
SSMS	46	0	2	4	0	0	Best Male
TOTAL	344	62	54	63	9	1	Athlete SSTMI

Source: Sports Division (BSukan)

Notable achievements of students and former students of the SSM in 2016:

- Khairul Hafiz bin Jantan, Sekolah Sukan Tunku Mahkota Ismail, Johor, broke the national record for the 100m track and field, and was also named as the best male athlete for Sukan Malaysia (SUKMA).
- 22 members of the Malaysian Olympic

contingent qualified for the 2016 Olympic Games in Rio, Brazil. Some of the sports personalities included Pandelela Rinong, Nur Dhabitah Sabri, Welson Sim, World Keirin Champion Azizulhasni Awang, and the national badminton double champions Tan Wee Kiong and Goh V Shem.



Pandelela Rinong and Cheong Jun Hoong, represented and won Malaysia's first medal at Rio 2016 Olympics



Tan Wee Kiong & Goh V Shem making the nation proud by clinching the silver medal for Badminton doubles in Rio Olympics 2016



Nur Dhabitah Sabri with her parents after her medal winning performance at the Rio Olympics

Student Athlete Set a New 100m Sprint Record



Source: National Sports Council (MSN)

Khairul Hafiz Jantan officially carved his name in sports history after breaking Watson Nyambek's national 100-metre sprint record of 10.30s with an incredible time of 10.19s. The Malacca-born sprinter, currently a student in Sekolah Sukan Tunku Mahkota Ismail (SSTMI), Johor finished in first place ahead of the likes of Sarawak's Jonathan Nyepa (10.36s) and national hero Badrul Hisyam Abdul Manap (10.36s), who came in second and third place respectively, at the 18th edition of the SUKMA Games in Sarawak.

"I am thankful to Allah s.w.t., and would also like to credit my teachers and the staff at SSTMI. Without their support and guidance, it wouldn't have been possible"

"I personally believe that the school provides a very good platform for students with a strong inclination towards sports, as the programme, expertise and facilities are very conducive for the students' sporting development. In shaa Allah, my school will continue to produce more world-class athletes for the nation."

Khairul Hafiz Bin Jantan

National 100m sprinter, Sekolah Sukan Tunku Mahkota Ismail (SSTMI) Johor

State Sports Schools

State Sports Schools (Sekolah Sukan Negeri, SSN) started their operations as sports schools in 2009 with the intake of Form 1 students in stages. SSN conducts planned, systematic and full-time sports training sessions. However, each SSN is still considered as a daily school under the supervision of the JPN. SSN is also considered as the main sports excellence centre at the state level. The best student athletes are placed in SSN and then the enrolled in one of the five sports schools in Malaysia.

Currently, there are 15 SSN throughout the country. The training sessions in SSN are conducted by 68 full-time coaches and 155 part-time coaches in addition to the teachers in SSN. All sports coaches are highly skilled and fully qualified.

High Performance Sports Programme in Schools

Apart from sports schools, students who are inclined towards sports yet still wish to pursue a similar academic path as their peers in the mainstream schools can choose to participate in the School High Performance Sports Programme (Sukan Prestasi Tinggi Sekolah, SPTS). This programme aims to scout and train young athletes as early as 6 years old up to 18 years

old, as well as to develop a pool of certified SPTS coaches among teachers. The SPTS is implemented in the Sports Excellence Centres (Pusat Kecemerlangan Sukan, PKS) and District Training Centres (Pusat Latihan Daerah, PLD) in each state. Sports that are listed for the SPTS include sepak takraw. archery, football, badminton, athletics, hockey, artistic gymnastics and rhythmic gymnastics. Proactively, the Ministry has also expanded the SPTS to include squash, in line with the new infrastructures built to accommodate the development of the sport in schools.

District Training Centres (PLD)

SPTS programme is implemented in all 16 states in Malaysia for eight selected sports. Each PLD is responsible for only one SPTS sport. Qualified coaches among teachers are placed in PLD. In 2016, a total of 860 PLD implemented the SPTS programme in 144 districts and 681 schools nationwide.

The Sports Divison also introduced a new instrument to monitor and evaluate the quality of management and administration of PLD. The Sports Division, in collaboration with JPN and PPD, successfully monitored and graded PLD in Kedah, Pahang, Sarawak, Selangor dan Federal Territory of Putrajaya. The distribution of PLD natiowide is shown in Exhibit 1-16.

Exhibit 1-15: List of State Sports School, 2016



Source: Sports Division (BSukan)

Exhibit 1-16: Number of District Training Centres by State, 2016

Perlis	14			Terengganu	46
Kedah	51	Negeri		Kelantan	63
Pulau Pinang	32	Negeri Sembilan	45	Sabah	120
Perak	64	Melaka	26	Sarawak	115
Selangor	68	Johor	97	Federal Territory of Putrajaya	6
Federal Territory of Kuala Lumpur	32	Pahang	75		
ot Kuaia Lumpur				Federal Territory of Labuan	6

Source: Sports Division (BSukan)





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Arts Schools

The Ministry is on the right track in providing avenues for students to enhance and refine their creative potential and talent in arts and culture. This effort is aligned with the aspiration of the Eleventh Malaysia Plan which recognises the role of arts, culture and civilization in a developed nation. Arts Schools are introduced with the vision to groom future heirs of cultural heritage, and aim to develop the potential and talents of students of the arts to the optimal level through quality education. These schools aim to produce artistically inclined and creative young citizens who will promote and preserve the rich culture and heritage of the nation. Ultimately, the talent pool will support the growth of creative human resource and the tourism industry in Malaysia.

Currently, there are three Arts Schools in Malaysia offering specialisation in the fields of Music, Dance, Theatre and Visual Arts. The schools are:

- Sekolah Seni Malaysia Johor (SSeMJ)
- Sekolah Seni Malaysia Sarawak (SSeMS)
- Sekolah Seni Malaysia Kuala Lumpur (SSeMKL)

In 2016, due to increasing demand for the provision of arts pathway, the Ministry introduced the Arts Education programme implemented exclusively in Perak and Sarawak. The schools are:

- Sekolah Menengah Kebangsaan Muhibbah, Sungai Siput, Perak
- Sekolah Menengah Kebangsaan Elopura, Sandakan, Sabah

Exhibit 1-17: Enrolment by Gender in Arts Schools & Arts Education Programme, 2013-2016

ARTS SCHOOL AND ARTS EDUCATION	YEAR	MALE	FEMALE	TOTAL
PROGRAMME ENROLMENT	2013	250	323	573
Control 1	2014	298	363	661
	2015	317	403	720
	2016	496	679	1,175
	*includes e	enrolment in A	Arts Education P	rogramme

Source: Co-curricular & Arts Division (BKK)

Enrolment from Form 1 to Form 5 in arts schools and arts education programme more than doubled to 1,175, an increase of 105% as compared to 2013 (Exhibit 1-17). This significant increase in enrolment is a testament that the schools have managed to gain parents' confidence in enrolling their children in the field of arts and culture, and thus signifies the demand for arts education in Malaysia.

A total of 80 students from Sekolah Seni Malaysia Johor and Sekolah Seni Malaysia Sarawak are currently enrolled in institutions of higher learning after their SPM results,

and more than 80% of these students have remained in the arts field. Based on a tracer study done in 2015, 85.2% of Arts School graduates have remained in the arts industry; built careers as arts coaches; and even continued their studies in their respective fields at Universiti Teknologi MARA (UiTM), Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Pendidikan Sultan Idris (UPSI), Universiti Malaysia Sabah (UMS), Universiti Malaysia Sarawak (UNIMAS), Akademi Seni Budaya Warisan dan Kebangsaan (ASWARA), as well as Institute of Teacher Education (IPG).

Bringing the Malaysian Arts and Culture to the World

The International Folklore Competition 2016

The Malaysian team from Sekolah Seni Malaysia Sarawak made the nation proud in the International Folklore Competition 2016 in Costa Brava, Spain. The Festival was a real marathon of various kinds of creativity and art. The main aim of the Festival was to bring together artistic groups from around the world to present and showcase their achievements, to explore the cultures of other nations, to promote understanding and tolerance among different cultures and to form international cooperation and networking. The Malaysian team proudly presented the Gawai traditional dance 'Ngajat' with grace and precision, and dazzled the jury to secure second place among 40 other teams from all over the world.





Malaysia-Indonesia International Art Collaboration

The Malaysian team, Sekolah Seni Malaysia Kuala Lumpur, participated in the Malaysia-Indonesia International Art Collaboration held in Jogjakarta, Indonesia. The team clinched a few titles, including winner for



the Best Story for the Theatre category, the runner-up for the Music category and the Visual Arts, as well as the winner and runner-up for the Dance category. The event was aimed at fostering closer ties between the two countries in the field of arts & culture.



The 44th International Children's Exhibition of Fine Arts Competition, Lidice 2016

Organised by the Ministry of Culture of the Czech Republic, Ministry of Education, Youth and Sports of the Czech Republic and UNESCO, the event aimed to present interesting children's works of art and to award the best of them, to help foster children's creativity in the field of art and to enhance international co-operation.

A total of 27 Visual and Arts students from Sekolah Seni Malaysia Johor participated in this competition. Other participating countries in the competition were Egypt, India, Russia, China, Lithuania, Kazakhstan, Bulgaria, South Korea, Romania, Poland and Latvia. Four students had won awards for their creative work, as shown below.

Muhammad Ikhwan **Akid bin Zairul** Shah Rizan. SSeMJ



Mifdal Afkar bin Basri SSeMJ



Danish Svamil bin Mat Yasir SSeMJ





Muhammad Nuril Mustoffa Khalis bin Khalid SSeMJ



Islamic Religious Schools

The Islamic Religious Schools under the purview of the Ministry are Sekolah Menengah Kebangsaan Agama (SMKA) and Sekolah Agama Bantuan Kerajaan (SABK). These schools offer academic subjects and subjects in the field of Islamic education. A school is categorised as Sekolah Agama Bantuan Kerajaan (SABK) or Government Aided Religious Schools when Sekolah Agama Rakyat (SAR), or privately owned religious schools or schools built under the 'wakaf' principle by contributions from individuals or public subsequently registered as schools under the Ministry. These may also include Sekolah Agama Negeri (SAN)

which were initially religious schools built and developed by state governments.

Upon converting into SABK, the Ministry provides the necessary educational assistance to these schools such as maintenance of physical infrastructure, employment of teachers and support staff, per capita grant and textbooks. In 2016, there were 58 SMKA and 220 SABK with the total enrolment of 109,933.

Islamic Religious Schools received some great accolades at national and international levels in 2016, specifically in the area of

Exhibit 1-18: Number of SMKA and SABK, 2013-2016

RELIGIOUS SCHOOLS

	SMKA	SABK	TOTAL
2013	57	203	260
2014	57	215	272
2015	57	216	273
2016	58	220	278
	2014 2015	2013 57 2014 57 2015 57	SMKASABK201357203201457215201557216201658220

Source: Islamic Education Division (BPI)

innovation. These achievements included SMKA Kedah securing three medals in the National Innovation & Invention Competition Through Exhibition 2016, and SMA Madrasah Alawiyyah Ad Diniah securing bronze medal in the Innovative

Research, Invention & Application 2016 held at Universiti Teknologi MARA, Perlis. At the international level, Islamic schools made the country proud by winning awards and special recognitions for their contributions (Exhibit 1-19).

Exhibit 1-19: Achievements at International Level by SMKA and SABK, 2016

Nia	Data	Duranya wa wa da a a a a a a a a a a a a a a a	Vanua	Achieveme	nt
No	Date	Programmes / Activities	Venue	Champion / Gold	Special Award
1	8-10 April 2016	International Engineering Invention & Innovation Exhibition 2016	UNIMAP	 SM Imtiaz Kuala Terengganu SM Imtiaz Kuala Berang SM Imtiaz Besut SMKA Kedah SMKA Arau SMKA Al-Irsyad SAM Tengku Ampuan Jemaah Sungai Besar 	Spice booth
2	1-7 February 2016	Bangkok International Intellectual Property Invention Innovation and Technology Exposition 2016	Bangkok	SM Imtiaz Kuala Terengganu	Special Award from KIA
3	19-21 May 2016	The 8th European Exhibition of Creativity and Innovation (Euroinvent) and the International Conference on Innovative Research (ICIR) 2016	Lasi, Romania	SM Imtiaz Kuala Terengganu	Special award (new research invention for young inventor) from the Corneliu Group Romania
4	21-23 July 2016	World Invention Creativity Contest 2016	Seoul, South Korea	SM Imtiaz Kuala Terengganu	Grand Award WICC

Source: Islamic Education Division (BPI)

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SABK Excels on the World Stage



Sekolah Menengah (SM) Imtiaz Kuala Terengganu continued to excel at the international level when it clinched the Gold Medal and the Special Jury Award in a creative and innovative competition in Bangkok, Thailand in 2016.

Dr. Duster With Green Cleaner, the product which they created and showcased in the Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition (IPITEX) 2016, repeated the success gained in Taiwan at the end of 2015. A group of Form 4 students who called themselves the AI Fateh Inventors emerged champions among the groups of 25 teams from countries such as Turkey, Russia, Canada, China, United Kingdom, and the United States of America.

"Participation in the innovation competition at the international level is part of the High Performing School (HPS) Internationalisation Programme to achieve the KPI set for the HPS Ethos for Creativity."

"The status of the school as a Government-Aided Religious School (Sekolah Agama Bantuan Kerajaan, SABK) helps to provide opportunities for teachers and students to get international exposure through such competitions. Among the benefits of becoming an SABK is getting the comprehensive education network and opportunities which are provided by the Ministry of Education."

En Mohd Yusoff Othman

Principal
SM Imtiaz Kuala Terengganu





PROVIDING EDUCATION FOR SPECIFIC **GROUPS**

The Ministry consistently ensures that the less fortunate children of Malaysia are given equal access to quality education to ensure they are not marginalised in whatever circumstances they face and to enable them to become productive individuals to self, family and the nation.

Sekolah Dalam Hospital

School in Hospital (Sekolah Dalam Hospital, SDH) is a collaboration between the Ministry of Education and the Ministry of Health. The purpose of SDH is to provide education for students undergoing longterm or repeated treatment in government hospitals. Launched in 2011, the number of SDH has increased from 8 schools to 15 schools in 2016 as illustrated in Exhibit 1-20. The number of students who benefitted from the learning sessions increased from 19,276 in 2013 to 41,452 in 2016.

Exhibit 1-20: Locations of Sekolah Dalam Hospital in Malaysia, 2016



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Sekolah Bimbingan Jalinan Kasih

Sekolah Bimbingan Jalinan Kasih (SBJK) is in Chow Kit, Kuala Lumpur. SBJK started operations in 2013 to provide access to formal education in a safe environment for marginalised street children. The aim for the establishment of SBJK is to ensure these children continue pursuing their education besides protecting them from various social vices. The teachers and staff were specially trained to provide academic and emotional support to the students.

SBJK practices multi-grade classrooms as student enrolment is relatively low and are of various age groups. Specialised learning modules are used to ensure children of various age groups and ability can learn at their own level and pace. Recognising the importance of SBJK in providing education to this specific

group, in 2016, the Ministry, allocated an additional RM30 million for the construction of a hostel for the school. The enrolment in SBJK was 148 in 2016 as illustrated in Exhibit 1-21.

Exhibit 1-21: Enrolment in SBJK, 2014-2016



Source: Special Education Division (BPKhas)

Getting Children Out of the Streets, the SBJK Way

Sekolah Bimbingan Jalinan Kasih (SBJK) is the only school in the country which uses a special module prepared by the Education Ministry to help street children continue their studies.

SBJK principal, En. Zulkernai Fauzi, informed that the school uses the 'Multi-Grade Learning' format which saw children being placed into classrooms according to their level of skills, and not strictly according to age.

"Many of the children here have never been to school. If a student is aged 17, we cannot put him or her directly into Form Five as he or she may not even be able to read well. This is how the special module comes into play"

"I hope to see more schools such as SBJK in other parts of the country to allow more

children of different backgrounds to get access to quality education. This is a good example for the Ministry to cater to all children, regardless of their backgrounds"

En Zulkernai Fauzi

Principal,

Sekolah Bimbingan Jalinan Kasih

"SBJK provides access to formal education in a conducive environment for homeless or underprivileged children. SBJK allows them to sit for public examinations based on their ability to read, write and count regardless of their age. All the 11 teachers practise a fun learning concept for our students aged between four and 19, to ensure they are interested to attend school on a daily basis"

Pn Raihan Abd Hamid

Teacher,

Sekolah Bimbingan Jalinan Kasih



Sekolah Integriti and Sekolah Henry Gurney

Sekolah Integriti (SI) and Sekolah Henry Gurney (SHG) were established with the collaboration between the Prisons Department and the Ministry of Education. The objective of the schools is to provide educational services to juveniles and young inmates who are under 21 years old. The programme benefits these youngsters as they can obtain the same level of education as their peers who are in regular schools. Students in SI and SHG are allowed to sit for the public exams.

Exhibit 1-22: Number of Schools, Inmates and Teachers of Sekolah Integriti and Sekolah Henry Gurney, 2016

SEKOLAH INTEGRITI

Number of Schools Inmates Teachers

8 166 64

SEKOLAH HENRY GURNEY

Number of Schools Inmates Teachers

4 249 31

Source: Malaysian Prisons Department

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A total of 100 students from SI and 57 students from SHG sat for the 2016 SPM examinations, and the results were commendable. In 2016, ten schools

achieved a 100% pass for SPM in Bahasa Malaysia, and History as compared to only five schools in 2015.

Exhibit 1-23: Percentage Passes for SPM by Subject, 2014 - 2016



BAHASA MALAYSIA

2014 2015 2016 **94.9% 95.0% 99.2%**

HISTORY

2014 2015 2016 **88.8% 89.0% 97.0%**

Source: Malaysian Prisons Department

In 2016, the SPM National Average Grade (*Gred Purata Negeri,* GPN) for schools was 5.1. Commendably, six schools scored

higher than the GPN, as compared to only two schools in 2015.

Exhibit 1-24: SI and SHG with above SPM National Average Grade (GPN), 2015 - 2016



2015 4.7	SHG Wanita Kota Kinabalu	2016 4.9
2015 4.8	SHG Telok Mas	2016 4.6
2015 Na	SI Bentong	2016 3.5
2015 Na	SI Kajang	2016 4.9
2015 Na	SHG Keningau	2016 4.6
2015 Na	SI Kuching	2016 5.1

Source: Malaysian Prisons Department



POST-SECONDARY EDUCATION

The post-secondary education pathways provide a wider choice for students to prepare them for a solid foundation before pursuing their higher education. The post-secondary education pathways provided by the Ministry comprise:

- Form 6
- Form 6 (Religious Stream)
- Matriculation Programme
- Foundation and Undergraduate Programme in Education

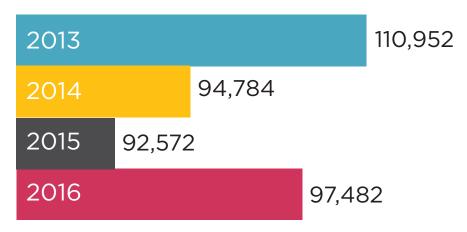
Form 6

Form 6 qualification will allow students to pursue undergraduate studies at tertiary level or to enter the job market. The Malaysia Higher School Certificate (*Sijil Tinggi Persekolahan Malaysia*, STPM) is acknowledged as equivalent to A-level and is recognised for entrance into undergraduate programmes at local and international universities. The STPM is also recognised by the JPA, Malaysia and Cambridge Assessment, England.

The Ministry initiated the transformation of Form 6 education in 2014 to enhance the image and increase the quality of education to mirror pre-university education offered by public and private higher education institutions. The transformation involves using a semester based system to complete their education within one and a half years (3 terms) compared to the previous two-year duration. The syllabus and learning environment have been transformed to prepare and familiarise students with the university campus life. In 2016, the Ministry issued the Guidelines on the Management of Form 6 (Garis Panduan Pengurusan Tingkatan Enam - GPPT6) as a reference for quality management in schools and centres which offered Form 6. In 2016, the enrolment for Form 6 showed an increase of 5.3% from 2015 indicating that more students and parents opted for Form 6 for postsecondary education.

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Exhibit 1-25: Form 6 Enrolment, 2013-2016



Source: Education Planning and Research Division (BPPDP), 2016

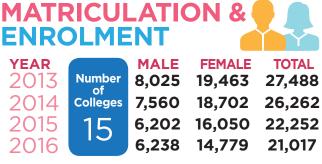
Form 6 (Religious Stream)

Students who opted for post-secondary education in religious schools will sit for the *Sijil Tinggi Agama Malaysia* (STAM) examination. STAM is a certificate introduced in a collaboration between the Ministry and Al-Azhar University in Egypt. STAM is recognised for admission into higher education institutions in Malaysia and internationally, especially among universities in the Arab region. In 2016, a total of 8,784 students registered for STAM. The percentage of students achieving Excellent grade (*Mumtaz - Cemerlang*) in STAM 2016 improved by 1.3%.

Matriculation Programme

The Matriculation Programme prepares students for entrance into local universities and abroad. The programme is benchmarked against international education bodies to enhance and enrich its curriculum and assessment standards to be at par with international standards. Commencing in 2016, the Ministry initiated the process of certification for Matriculation graduates and the recognition of the certificate by the JPA as a qualification for appointment to the public service through *Pekeliling Perkhidmatan Bilangan 3 Tahun 2016* (SPP Bil. 3/2016) dated December 14, 2016 effective from January 1, 2017.

Exhibit 1-26: Number of Matriculation Colleges and Enrolment, 2013-2016



Source: Matriculation Division (BMatrikulasi)

Commencing in 2017, Matriculation graduates can apply and be accepted for public postings.

Foundation and Undergraduate
Programme in Teacher Education

The Ministry is responsible for supplying teachers in various fields of specialisation at the primary level through 27 Institutes of Teacher Education Campuses (Institut Pendidikan Guru Kampus, IPGK). To be accepted into the Bachelor of Education programme (Program Ijazah Sarjana Muda Pendidikan, PISMP) candidates must obtain excellent grades in SPM with at least 5As in any subjects and credits in Bahasa Melayu, English Language and History. From 2014 onwards, selected candidates must complete a one year foundation programme, which is the Program Persediaan Ijazah Sarjana Muda Perguruan

(PPISMP). Upon completion, the students will be placed in the IPGK nationwide for a 4-year PISMP programme.

Exhibit 1-27: Number of Institutes of Teacher Education (IPGK) and Enrolment, 2013-2016

YEAR 2013 Number of Campuses 2014 2015 27 2016 PROCESS PROCESS

Source: Teacher Training Institute of Malaysia (IPGM)

SUMMARY

The Ministry strives to ensure universal access and full enrolment of all children from preschool to upper secondary school level by 2020 by developing attractive and viable education pathways for our students. To cater to different interests and talents of students, the Ministry

constantly works towards providing the best education pathways possible. This has been proven through focussed efforts in developing various education pathways without compromising on quality, safety and the future of our children.



"All children will have the opportunity to attain an excellent education that is uniquely Malaysian and comparable to the best international system"

Malaysia Education Blueprint (2013-2025), pg E-9

IMPROVING QUALITY IN EDUCATION

The Ministry's unwavering commitment to improve the quality of the education system has resulted in significant positive developments in the first three years of the Malaysia Education Blueprint (Blueprint) implementation. To provide access to quality education, the Ministry has set a solid foundation in Wave 1 which saw notable changes taking place in the classrooms.

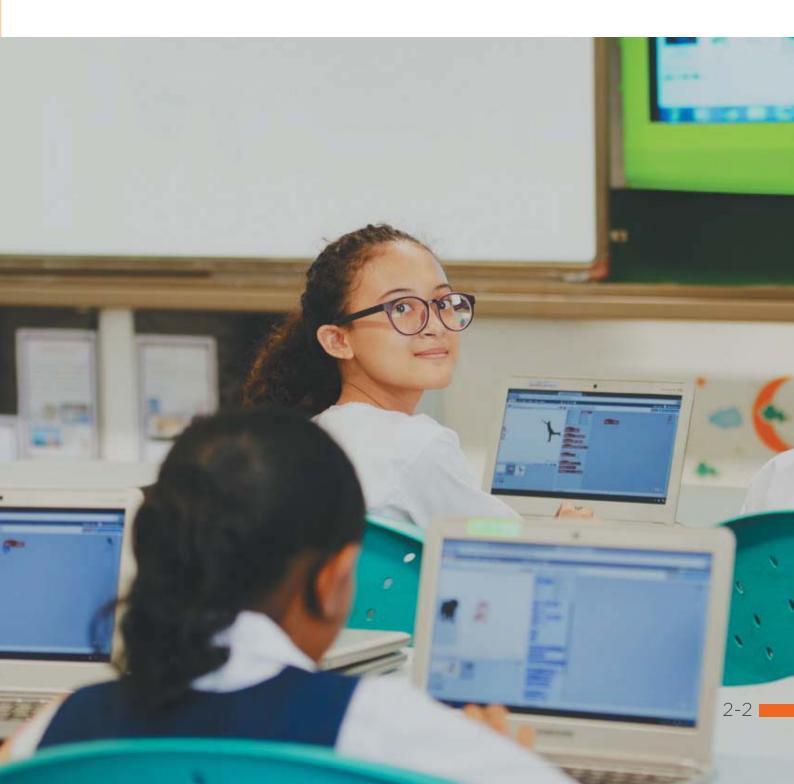
To ensure the Six Student Aspirations are realised, pedagogical approaches of the 21st century are applied in the teaching and learning process both in and outside the classrooms. Students are now more

responsible towards their own learning and are assessed based on their continuous progress, not only academically but also in co-curricular activities and sports. The Ministry continues to provide training for in-service teachers and upskilling programmes for school leaders to ensure their leadership quality is enhanced. Continuous professional development for teachers and school leaders will enable the preparation of students for the changing landscape of higher education and for their future undertakings. Engagement with parents, community and private sectors are intensified to develop a learning system within the community.

Progressing into Wave 2 of the Blueprint in 2016, the Ministry increased its efforts to improve accessibility to quality education through various initiatives, which included:

- Integrating Higher Order Thinking Skills (HOTS) in the teaching and learning process
- Promoting Science, Technology, Engineering and Mathematics (STEM) education

- Strengthening bilingual proficiency among students
- Strengthening teacher quality
- Enhancing school leader quality
- Engaging parents, community and private sectors to create a learning system.



INTEGRATING HIGHER ORDER THINKING SKILLS (HOTS) IN THE TEACHING AND LEARNING PROCESS

Since the implementation of the Blueprint in 2013, one of the important elements in providing quality education is the integration of HOTS in the teaching and learning process. Students with HOTS will be able to think critically and creatively, and to problem solve and be innovative in the ever-changing landscape of the future. These skills are sought after by the public and private sectors which constantly seek adept and adaptable employees.

The Ministry continued to strengthen and implement programmes and activities related to HOTS in the teaching and learning in 2016 through the following activities:

Intensifying Training in HOTS at All Education Levels

A total of 9,116 school leaders and teachers completed the i-THINK online training. Briefings by all relevant divisions related to the implementation of HOTS in the classrooms were held for 425 School Inspectorates. The information would help the inspectorates to have a clear understanding on the integration of HOTS





during their inspection in schools. A total of 270 lecturers from the Institutes of Teacher Education (*Institut Pendidikan Guru*, IPG) were trained to use the HOTS training modules to better impart the knowledge and increase the readiness of trainee teachers once deployed to schools. To better assist teachers in activities related to Mathematics, Science and Reading Literacies for Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA) in schools, 260 Master Coaches were trained.

Providing Guidelines on the HOTS Application and Assessment

Guidelines on the application of HOTS was provided to assist teachers in the teaching and learning process. The Guidelines were based on Form 4 and Form 5 textbooks. Manual on HOTS Assessment was also provided to assist teachers in developing HOTS questions. The percentage of HOTS questions included in 2016 UPSR and SPM remained at 20%. Questions on HOTS were incorporated into Form 3 Assessment (Pentaksiran Tingkatan 3, PT3) to assess student academic performance at the lower secondary level.

Developing PISA Reading Resource Materials

A total of 62 modules, specifically, for the teaching of Mathematics and Science were developed and distributed. The modules serve as teaching aids for teachers to effectively enhance students understanding of topics tested in the TIMSS and PISA curriculum framework. For Reading Literacy, 40 modules were developed and distributed to increase students' understanding and familiarisation on the format and style of the PISA reading items. Additionally, strategic guidelines for HOTS-PISA items development was also published as reference for teachers to design items for the Reading Literacy Diagnostic Test.

Conducting Feasibility Study for TIMSS 2019 Grade 4

The Ministry plans to participate in TIMSS Grade 4 (Year 4) in addition to TIMSS Grade 8 (Form 2) assessment in Wave 2 as envisioned in the Blueprint. This measure will allow the Ministry to benchmark the Mathematics and Science performance among the primary students against the international standard. However, based on the findings from the feasibility study, recommendations were made to defer the participation for Malaysia in the TIMSS 2019 Grade 4 to ensure students and system readiness - the teaching and learning process, curriculum, and facilities.

The Feasibility Study of TIMSS 2019 Grade 4 in Malaysia are centred on six key areas which any country participating in TIMSS needs to fulfil. The study discovered the following:

- Teaching and Learning: teachers' readiness towards incorporating HOTS in the teaching and learning process, and developing questions for student assessment was 'Average'.
- Professional Training: The percentage of teachers who attended courses on the HOTS assessment and ICT integration was at 66%.
- Curriculum: The percentage of Mathematics and Science items for TIMSS assessment covered in current Standard Curriculum for Primary School (Kurikulum Standard Sekolah Rendah, KSSR) were at 95.8% and 36%, respectively.
- HOTS Assessment: The percentage of primary school students who were able to answer HOTS questions for Mathematics range between 11% to 51%. while for Science between 46% to 51%.
- Technology Capability: The percentage of students who used computers range between 11% to 15%.
- Infrastructure: The percentage schools which had set up a Mathematic classroom was at 21.5%.

The level For Malaysia to be ready to participate in TIMSS Grade 4, recommendations were as followed:

- HOTS elements must be instilled in all students, regardless of their performance at the primary level.
- The involvement of TIMSS Mentors and School Improvement Specialist Coaches+ (SISC+) at the primary school level must be increased to strengthen the mastery of the subject and teachers' pedagogical skills.
- Professional development training on HOTS assessment and integrating technology in teaching and learning process must be provided to all primary school teachers.
- Schools need to be monitored to ensure maximum utilisation of the learning facilities to impact on student outcomes.
- Efforts towards providing opportunities for students to use computers during curricular and co-curricular activities must be intensified.



TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY (TIMSS)

Trends in International Mathematics and Science Study (TIMSS) is an international comparative study conducted by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS is more than an assessment of students' knowledge in mathematics and science, as it also considers the context in which learning occurs. Students, teachers, and schools are asked about a variety of aspects of the environments in which content is taught, learned, practiced, and applied. TIMSS results provide each country with a rich source of information on the factors influencing mathematics and science achievement enabling countries to further improve their systems.

The main goal for Malaysia's participation in TIMSS is to assess the effectiveness of learning mathematics and science among students compared to their peers in other countries. The findings are used to provide input for improvements in curriculum, teaching and learning approaches, and assessment at the school and national level. Malaysia was involved in the TIMSS 2015 cycle which began in 2013 and ended in December 2016. TIMSS 2015 saw the participation of 9,726 Form Two students.

326 teachers, and 207 administrators from 207 sample schools. TIMSS 2015 was administered on 28 – 31 October 2014. This was followed by the scoring process in December 2014.

Malaysia showed tremendous improvement in both Mathematics and Science TIMSS 2015. The score for both subjects improved compared to TIMSS 2011 assessment as shown in Exhibit 2-1 below.



The Director-General of Education Malaysia announced TIMSS 2015 results

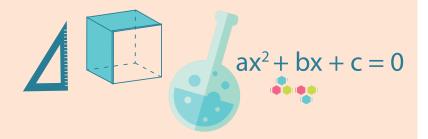


Exhibit 2-1: Malaysia's achievements in TIMSS 1999 - 2015

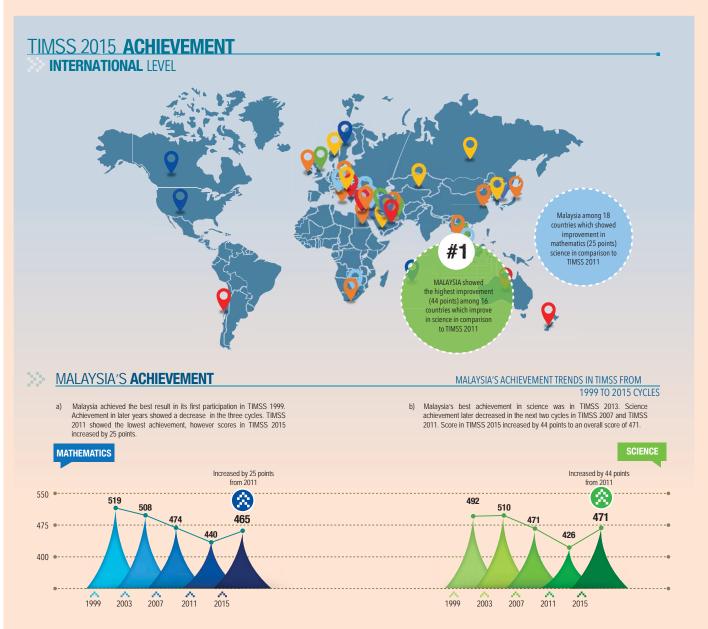
TIMSS	MATH SCORE	SCIENCE SCORE	NO. OF SCHOOLS	NO. OF STUDENTS
TIMSS 1999	519	492	150	5577
TIMSS2003	508	510	150	5314
TIMSS2007	474	471	150	4466
TIMSS 2011	440	426	180	5733
TIMSS 2015	465	471	207	9766

Malaysia's Ranking

	Mathematics	Science	
TIMSS 2011	26	32	
TIMSS 2015	22	24	

Source: Education Planning and Research Division (BPPDP), 2016

Exhibit 2-2: TIMSS 2015 Achievement and Ranking by Countries



Source: Education Planning and Research Division (BPPDP), 2016

The results for Malaysia in the TIMSS 2015 study showed the following:

- students with more learning materials at home scored higher than students who had less.
- students performed better than the international average in schools with a positive environment, and principals who genuinely focused on academic achievement.
- students' confidence level in Mathematics correlate with their performance in the subject, while in Science, there was no correlation between students' confidence level and students' achievement.
- In general girls performed better in both cognitive and content domains.
- the gap between urban and rural schools was narrowed.

Other positive improvements include:

 Malaysia was the top most improved performer in Science (44 points increase)

- as compared to 16 other countries which has improved in TIMSS 2015.
- Malaysia was also among the 18 countries which has improved their performance in Mathematics (25 points increase) as compared to TIMSS 2011 performance.

The critical success factors contributing to the improved performance among Malaysian students include having a better school environment, increased student socio-economic background, better teacher readiness and commitment of school principals. The majority of the mathematics and science teachers and principals hold higher academic qualification (Masters and Post Graduate degrees). More than 50% of the teachers who were involved in the study were senior teachers with over a decade of teaching experience. Teachers in Malaysia also received professional development, especially in areas related to new pedagogical approaches and assessment.



PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA)

The Programme for International Student Assessment (PISA) is a worldwide assessment programme and is also an international comparative study sponsored by the Organisation for Economic Co-operation and Development (OECD). Malaysia first participated in the PISA study in 2010. PISA is administered every three years and measures 15-year-olds in the fields of Mathematic, Scientific and Reading literacies.

In PISA 2015, 72 countries and nearly 540,000 students took part in the study to determine students' level of mastery and literacy in Mathematics, Science and Reading. Students were also assessed in their ability to solve problems collaboratively. PISA 2015 marked Malaysia's inaugural participation in computer-based assessment, a challenging shift from the normal written assessment.



PISA 2015 results announced by Deputy Director General, YBhg. Datuk Amin Senin in Putrajaya

Malaysia showed significant improvement in the PISA 2015 assessment:

- Mathematics Literacy: 446 points, a jump of 25 points from PISA 2012.
- Science Literacy: 443 points, an increase of 23 points from PISA 2012.
- Reading Literacy: 431 points, an increase of 33 points from PISA 2012.

Exhibit 2-3: PISA Score and Rank by Domains, 2009+, 2012, 2015

SCIENCE LITERACY



OECD AVERAGE

2009+ • 501

2012 • 501

2015 • 493

MALAYSIA

2009+ • 422

2012 • 420

2015 • 443



READING LITERACY

OECD AVERAGE

2009+• 494

2012 • 497 **2015** • 493

MALAYSIA

2009+ • 414

2012 • 398

2015 • 431

MATHEMATICS LITERACY



OECD AVERAGE

2009+ • 496

2012 • 494

2015 • 490

MALAYSIA

2009+• 404

2012 • 421

2015 • 446

PISA 2009 • 404 2012 • 421 2015 • 446

SCIENCE 2009 • 422 2012 • 420 2015 • 443 READING 2009 • 414 2012 • 398 2015 • 431

Source: Education Planning and Research Division (BPPDP), 2016

The key factor contributing to the improved performance in PISA 2015 was the inculcation of HOTS across the curriculum. Findings from the Student Survey showed more than 80% of students had high interest in the science

field. Students had fun learning and gaining new knowledge in science. Almost 80% of students said they like to read and do assignments related to science.

2-12

INTERNATIONAL BACCALAUREATE MIDDLE YEARS PROGRAMME (IBMYP)

The Ministry continues to work together with other agencies in inculcating HOTS and international best practices into the school curriculum to prepare students for the challenges of 21st century. The Middle Years Programme (MYP) is aimed at encouraging students to be creative and critical thinkers. MYP offers a curriculum framework, where students are required to study at least two languages, humanities, sciences, mathematics, arts, physical education and technology. As part of the assessment, students are required to undertake an independent personal project in the final year to demonstrate the development of their skills and understanding.

In 2016, SMK Sungai Tapang, Sarawak was the first public school to be awarded the International Baccalaureate World School Authorisation offering IB Middle Years Programme in Malaysia. This achievement was later followed by seven other schools in 2016 (Exhibit 2-4). The Ministry acknowledges the role of Agensi Inovasi Malaysia (AIM) in the introduction of the International Baccalaureate (IB) Middle Years Programme (MYP) in ten government schools across the country since 2014.

Exhibit 2-4: Schools involved in the IB Programme



The International Baccalaureate Middle Years Programme (IBMYP)



Exhibit 2-5: International Baccalaureate Middle Years **Programme Curriculum Framework**

http://www.ibo.org/programmes/middle-years-programme/curriculum/ Source: © International Baccalaureate Organization 2013

The IB project in Malaysia managed to identify four In-Country Consultants (ICCs) who were retired expatriate teachers from IB schools to conduct face-to-face workshops in schools to complement the online training for teachers. The ICCs also carried out coaching and mentoring sessions for the leadership team, school MYP coordinator and teachers.

The Ministry introduced the IBMYP to help students develop holistically and be able to potentially contribute significantly to the global economy and promote understanding and mutual respect between different cultures. The programme focuses on inquiry-based learning and questioning techniques, and developing HOTS (critical thinking, creative thinking, problem solving, entrepreneurial skills, skills for collaboration, reflection, global awareness, and the ability to adapt) to connect the knowledge and skills learnt in the classroom with their surrounding and daily lives.

To understand what students have learned and to monitor their progress, teachers use a range of assessment strategies. Constant feedback from teachers enable students to understand ideas, explore innovations and make connections between the two and applying them in new contexts. The IBMYP unique approach allowed students to participate in an international perspective of learning while teachers worked with an international network of leading experts in the field education to facilitate learning which will encourage a holistic education experience for students. The Ministry hopes the introduction of IBMYP into Malaysian schools will accelerate the transformation agenda of establishing schools of excellence. These schools will thereon share the strategies and approaches with other schools, and produce students who are competitive internationally with strong national identity.

SMK Sungai Tapang receives International Baccalaureate certification

SMK Sungai Tapang was the first public school to be awarded the International Baccalaureate (IB) World School Authorisation offering IB Middle Years Programme in Malaysia.

With the certification, the school now joins a community of nearly 1,149 schools in 101 countries offering MYP to students aged 11 to 16 years.



noted that there were many improvements noticed ever since they decided to pursue the IB Certification.

"IBMYP promotes understanding and mutual respect between cultures and helps students develop the intellectual, personal, emotional and social skills to live, learn and work in a world that is constantly changing. The programme focuses on inquiry-based learning and questioning techniques and the ability of students to think at higher levels, enabling them to see the relationship between different disciplines."



"Students are more proactive, inquisitive and are getting more involved in the teaching and learning process, and even the attendance rates are showing improvements! It has increased from 95% to 98% post certification, and in general students feel more

excited to be in class. Their potentials are a lot easier to be developed."

"Teachers are more invested in their daily lessons; they prepare many activities before hand, and interact more with students. The facilitation-based method also allows them to be more connected and familiar with the students' characters and styles."

"Teamwork is key in our achievement. All the teachers, staffs and students are made aware of the objective, and are instilled with a sense of ownership for respective areas. Most importantly, the teachers' welfare needs to be addressed. As a leader, you need to be with them in all the programmes, read a lot and be their reference point, and apply best practice methods wherever you can."

Certificate of Recognition Award Giving Ceremony to Eight IB World School Middle Years Programme

19 September 2016 SMK Sultanah Bahiyah, Alor Setar, Kedah



The Minister listening and assessing students' ability to explain and elaborate the importance of the project.



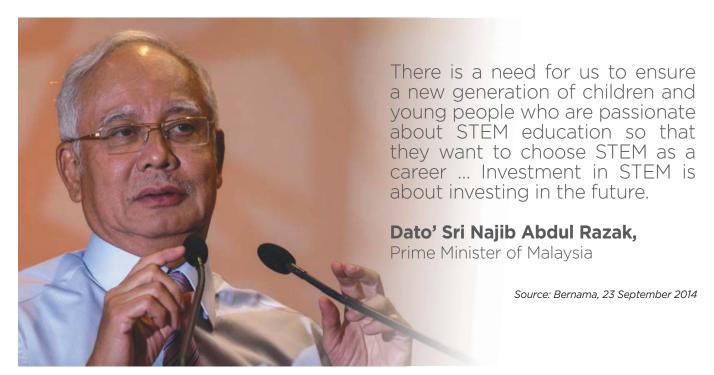
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The Director-General of Education Malaysia getting feedback from the students who were involved in the IBMYP.

Students explaining the projects which they have developed to fulfil the IBMYP criteria for Design subject.



PROMOTING SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATION



STEM education plays a critical role in developing Malaysian students as the next generation of innovative thinkers in a competitive global economy. It sets a platform for Malaysia to develop a supply of talented and skilful workforce to ensure sustainable economic growth and meet the demands in these fields. STEM education aims to equip students with the necessary knowledge and skills to meet the challenges of the advancing fields of science and technology.

In Wave 1 (2013-2015) of the Blueprint, the Ministry managed to create awareness on the importance of STEM education to teachers and students, among others, by developing a resource centre to

develop STEM contents, providing STEM infrastructure and facilities in schools, and using a more hands-on and practical approach to STEM learning.

In Wave 2, the goal is to further ignite students' interest in STEM education and enhance teachers' pedagogical skills in the relevant subjects. Several programmes and activities were carried out in 2016 which included the following:

Modernising and upgrading school science laboratories

The Education Planning and Research Division (EPRD) conducted an audit on the condition of science laboratories (lab) in all

secondary schools and divided them into four categories: good, satisfactory, poor and dilapidated. Findings from the audit showed that 3,609 labs (29.4%) needed immediate repair, of which 513 (4.2%) were dilapidated and 3,096 (25.2%) were in poor condition while 8,665 labs were categorised as fully functional to conduct science experiments (3990 or 32.5% were satisfactory and 4675 or 38.1% were in good condition). It is highly important that all science labs are operational and fully equipped with the relevant science apparatus to enable students to better understand scientific concepts and apply their knowledge through conducting science experiments.

Designing and Producing STEM materials and videos

The Ministry successfully designed and produced a total of 18 interactive STEM videos which contained topics on Biology, Physics, ICT, Chemistry, Technical Drawing, Mathematics, Additional Mathematics and Science.

A total of 15 key facilitators and 60 secondary school teachers were trained to develop these interactive videos. A total of eight interactive STEM videos were produced on a quality level benchmarked to international standards. Training was provided by the officers and teachers trained by Universiti Teknologi Malaysia and Massachusetts Institute of Technology, USA under the Blended Learning Open Source Science and Mathematics Studies (BLOSSOMS) project.

As a result of the interactive video projects, STEM teachers managed to strengthen their critical thinking skills and content knowledge by integrating ICT to produce videos; STEM teachers used the videos to strengthen their pedagogical approaches which meet the demands of the 21st century learning; and students' interest and curiosity on STEM subjects could be reignited and misconceptions avoided using the videos in their learning process.

Activities to develop the STEM Interactive Videos



Development of the video storyboard.



Students in action for the video.



Video shooting in the science lab.

Increasing the Capabilities of Science Teachers and Lab Assistants

Planning ahead for the reintroduction of science practical examination at the SPM level in 2018, the Ministry intensified trainings to 6,000 secondary science teachers on new approaches in conducting practical science. A total of 2,681 teachers sat for the STEM Skill Competency Assessment. Results showed that 24 (0.9%)

teachers achieved Level 4 (highest level of competency); 1,299 (48.5%) were at Level 3; 1,246 (46.5%) achieved Level 2, while 112 (4.2%) teachers achieved Level 1 (lowest proficiency). Besides providing training to teachers, 5,000 lab assistants nationwide were trained to assist teachers in the preparation of science experiments, the safekeeping of science apparatus, and the overall safety of students during science experiments.

Level 4 (Score: 25-32)

able to integrate STEM examination content explicitly in the engineering contexts and to also include design thinking or scientific creativity in their lesson



Level 3 (Score: 17-24)
able to analyse or evaluate
the content when integrating
the STEM content but do not
have the elements of design or
scientific creativity

Level 2 (Score: 9-16)
able to understand or apply content
which they learnt segmentally for
subjects such as Biology, Physics,
Chemistry and Mathematics

Level 1 (Score: 0-8)

able to know or understand the content which they learnt segmentally for subjects such as Biology, Physics, Chemistry and Mathematics

Description of the STEM Skill Competency Assessment

Conducting Thematic Inspection for STEM Education in Secondary Schools

The School Inspectorate (Jemaah Nazir dan Jaminan Kualiti, JNJK) comprising of 129 officers in the fields of Mathematics, Science, and Technical and Vocational conducted inspections on 83 secondary schools (42 urban schools and 41 rural schools) to assess the level of implementation of STEM education. These inspectorates also observed 417 lessons on subjects such as Additional Mathematics. Mathematics. Biology, Physics, Chemistry, Information Communication and Technology, Technical Drawing, Engineering Technology and Agricultural Science.

The inspection focused on two main areas which were the management of STEM education which include school accountability, students interest, teacher capability, management of science labs, school workshops, and school studios. The second main area involved the teaching and learning of STEM subjects including observations on the teaching and learning process in the classroom, the use of STEM related teaching aids, the inculcation of 21st

learning skills and values, and the teacher's ability to relate students' classroom learning to their everyday lives.

Findings from the inspections indicated that schools leaders were ready and able to implement STEM education effectively. The teachers were competent and able to teach STEM subjects effectively. Additionally, various pedagogical skills and approaches were successfully used to increase students' interest in STEM education.

Developing the Format for Assessment Instruments for the Centralised Examination SPM 2018 Practical Science

Activities in the development of the Format for Assessment Instruments included developing and designing new assessment concept for practical science in Biology, Chemistry, Physics and Additional Mathematics subjects, preparing sample instruments for Biology, Chemistry, Physics and Additional Mathematics subjects, and disseminating information to schools and public at large on the format for SPM 2018 Practical Science.

School Lab Malaysia 2016: Incite Interest in STEM education



School Lab Malaysia 2016 is a science communication competition aimed at promoting STEM education among lower secondary school students under the purview of the Ministry of Education Malaysia. School Lab aimed to help students understand and appreciate the exciting challenges of science, develop critical and creative thinking skills, as well as gaining the confidence and skills required to present and demonstrate their understanding of scientific concepts.

The inaugural competition was a collaboration between British Council Malaysia, Ministry of Education Malaysia, and the Malaysian Industry-Government Group for High Technology (MIGHT). A total of 162 teams submitted their videos for the competition.

After a stringent selection process, five teams were selected to present live at the finals on 23 April 2016, namely Psycho Science from SMK Agama Tun Datu Mustapha (Papar, Sabah), The Ingenious from Sekolah Tinggi Kluang (Kluang, Johor), St Teresa 1 from SMK St Teresa (Kuching, Sarawak), N7T from SMK SANZAC (Kota Kinabalu, Sabah), and Speed C from SMK Taman Desa (Kuala Lumpur). In preparation for the final, the Top 5 Teams attended a Science Communication Workshop led by BBC presenter Dallas Campbell and received mentoring by FameLab 2015 alumni. N7T from SMK SANZAC, Kota Kinabalu, Sabah won the inaugural School Lab Malaysia 2016 competition.

National School Lab Champion 2016 - N7T from SMK SANZAC, Sabah.



Sharing experiences with visitors at exhibition booth.

"It was a great opportunity being one of the finalists for School Lab 2016 as I could attend the workshop organized by the British Council. I enjoyed doing the tasks in the workshop sessions conducted by Mr. Dallas Campbell as we must present it in a very short time. I never thought that communicating Science can be so relaxing and fun! From the experience I gained from the workshop and my participation in School Lab 2016, I was able to enhance my ability to communicate Science in English. I also managed to expand my network by collaborating with other participants from other states during the training."

Nur Dania binti Adnan

"I actually don't expect our group to be able to enter the finals and later emerged as the champion! In our very first video submission, we only used simple props and submitted our video after the fifth time shooting. I was so excited when my classmates and schoolmates came together to help prepare the props and willingly became our audience during practice sessions. They told us they enjoyed learning science concepts delivered in such a way as it is very engaging and interesting. From their feedback, I realized the importance of communicating Science to inspire more students to embrace science in their life. I am so excited to encourage younger friends to join School Lab next year!"

Nur Fathiha binti Osman

"I built my confidence in communication whenever I share recent news related to science to my friends in school. I am also able to share my passion for arts as my teammates and I created the props for our final School Lab competition in the school compound. As I look back, my participation during School Lab 2016 has enabled me to enhance my creative and innovative mind during the preparation of our storyline. We have to think of ways to keep our audience engaged during our performance. From the experience, we are able to share our knowledge and experience gained from this competition with our friends."

Nur Muzhirah binti Jalalemping

Nurturing Creative and Innovative Future STEM Leaders



(Dakshayanie a/p Maniaruse - the driving force of the team)

I still remember the first day I met Dakshayanie, coming into our robotic workshop in school, begging to be a part of the team. But, nonchalantly. I just left her there with Python on Codecademy, an online platform on coding. However, she came back the following week and showed me her work on JavaScript, which totally blew my mind. She showed me something which I was not familiar with and more difficult than the earlier language I asked her to learn - Python. She was only 13 years old back then. From then on, I was determined to work with Dakshayanie on multiple projects within and outside our school, from Young Innovate Competition to Career Talk, both projects organised by the local Rotaract Club. Dakshaynie put in tremendous effort in all projects to ensure their success, always putting high expectations on herself, refusing to give up when faced with failures. She grew from a shy girl who often scolded herself for every little mistake to a girl full of confidence to address a hall full of professional adults when she pitched her projects. I honestly thought she would break down from the endless stream of questions from the panel of judges. She proved me wrong.

Dakshayanie emerged among the top 10 out of 33 talented young makers and maker competition winners from all over Malaysia in the #mydigitalmaker Global Exchange 2016 competition. (#mydigitalmaker movement is an initiative to create a nation of digital makers. This movement, in partnership with Ministry of Education and the support of private sector and academia, will expose Malaysian youths to the creative and innovative aspects of digital technology).

When she was chosen as a participant of the Digital Maker Global Xchange (DMGX), an international STEM programme, she was jumping with joy and called me. Her mother, however, was hesitant to allow her participation in the programme as PT3 was coming - the family placed great emphasis on academic achievement. The teachers, as well as the DMGX's co-ordinator from MDeC and I had to reassure her mother that Dakshayanie had huge potential to excel. Non-participation in the programme would curb her potential and waste the knowledge learnt. Her mother finally relented and then became her biggest supporter.

Now that Dakshaynie has won the opportunity of a lifetime to see Silicon Valley and learn what her future could look like, she has certainly become the beacon of hope and inspiration in the single-parent family. Those sleepless nights perfecting her codes and robotic prototypes now prove to be totally worth the effort.

Mr. Chong Zhi Xiong

Teacher, SMK Puchong Batu 14, Selangor





STRENGTHENING BILINGUAL PROFICIENCY AMONG STUDENTS

Literacy and Numeracy Programme (LINUS) Programme

Early acquisition of basic literacy and numeracy skills in Bahasa Melayu (BM) and English language will help in student's learning as well as improve their academic achievement throughout their formal education. The Literacy and Numeracy Screening or LINUS, is an intervention programme targeted at Level 1 (Years 1, 2 and 3) primary school students who have not acquired basic literacy (reading and writing) and numeracy (counting) skills.

Following the successful implementation of LINUS1.0 (2010-2012), which consisted of BM (literacy) and Mathematics (numeracy), LINUS2.0 was introduced in 2013 as an expansion of the existing programme to eradicate English language literacy

problems among Level 1 primary school students. This move is part of the key feature for Shift 2 in the Blueprint which seeks to ensure that every child is proficient in both languages. LINUS2.0 has now added English language literacy as one of the components. The Ministry's aspires that through the LINUS Programme, students will make a smooth transition to Year 4 with a firm grounding in basic literacy and numeracy skills.

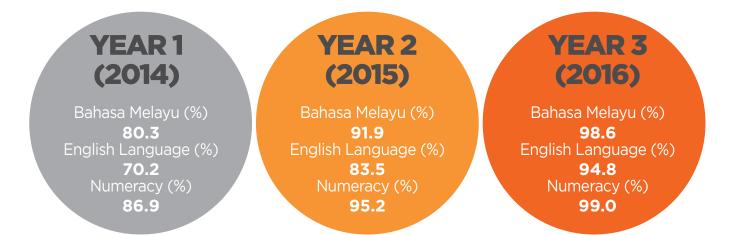
In 2016, 98.6% Year 3 students achieved the BM literacy target, 99.0% in the English language literacy and 94.7% in Numeracy as shown in Exhibit 2-6. Students who do not master the basics in literacy and numeracy will undergo further intervention programmes including remedial lessons in the following year.

Exhibit 2-6: Achievement Levels in LINUS2.0, 2016

LINUS 2.0 Component	Year	Total Students	1st Screening (%)		2nd Screening (%)	
			Target	Achieve	Target	Achieve
Literacy in BM language	3	436,087	100	94.8	100	98.6
Numeracy	3	436,087	100	96.4	100	99.0
Literacy in English language	3	436,087	90	86.4	95	94.8

Source: Curriculum Development Division (BPK)

Exhibit 2-7: LINUS Achievement of the Same Cohort, 2014-2016



Source: Curriculum Development Division (BPK)

Based on the data presented in the Exhibit 2-7, at the end of 2016, students of the same cohort who had gone through various screening processes from Year 1 to Year 3 improved significantly in BM and English language literacy and numeracy. Students who did not achieve basic literacy and numeracy would undergo intervention programmes, which include receiving remedial lessons in the following school years. Strong mastery in literacy and numeracy will increase students' readiness in the Level 2 of their primary education.

In 2016, supports for students and teachers in the LINUS2.0 programme in increasing literacy and numeracy levels as targeted were:

Developing LINUS Resource Materials

To identify students' basic literacy and numeracy level, one of the main activities under LINUS was to prepare the instruments for two screenings for 1,320,000 Level 1 students. Besides that, teaching and learning LINUS2.0 modules were developed and distributed to all primary schools across the nation. For students who did not meet the required level of basic literacy and numeracy after being screened, teaching and learning aids for remedial instruction were prepared to help them improved.

Enhancing Capabilities among Teachers

The success of LINUS leveraged on the teachers' capability to facilitate learning and acquisition of basic literacy and numeracy among students who just entered formal schooling. Various trainings were targeted towards different groups of teachers and those related to primary education. The trainings were:

- Training on pedagogy for 981 FasiLINUS (BM, English language and Numeracy).
- Training for 7,766 Year 2 English language teachers and 327 FasiLINUS for English language.
- Training for 800 remedial teachers, 284 FasiLINUS and State Education office (*Jabatan Pendidikan Negeri*, JPN) officers for remedial instruction.
- Training for 426 in-service FasiLINUS.
- Training for remedial pedagogy for Year 4 English language teachers in hotspot schools.



• Training for familiarisation of LINUS2.0 Programme (BM, English language, Numeracy and Remediation) to 108 lecturers in 27 Institute of Teacher Education (IPGK).

Strengthening LINUS Implementation at School and District Level

The Ministry aspires that all students at primary Level 1, can read, write and count in both BM and English language. Thus, the Ministry adopts a holistic approach in implementing LINUS. A total of 300 school heads in hotspot schools were trained in LINUS2.0 Management and Intervention. Outreach programmes were also conducted to 5,175 Year 3 students who did not achieve the minimum requirement after the second screening process. Intervention dialogues were held with PPD with low achievement in LINUS to assist them in developing better interventions. To ensure schools abide by the screening procedures and the LINUS results reflect true achievement of students, special inspections were conducted in 300 primary schools all over the country.



LINUS2.0 PROGRAMME: A Beacon Of Hope For Weaker Students

SK Sungai Judah is an under-enrolled Orang Asli school located in **Carey Island, Kuala Langat, Selangor**. Mastery of the 3M was a big challenge for the Orang Asli students. The introduction of





LINUS programme since 2013 helped teachers design better interventions to increase literacy and numeracy rate in the school.

Mdm. Priyatharisini a/p Jeyabalan, an English language teacher, was involved with the implementation of LINUS2.0. She understood the importance of LINUS and used various approaches and techniques proposed by FasiLINUS to facilitate and assist students in the classroom.

"I feel LINUS helps teachers to identify the weak students who struggles to read, write and count. LINUS gives teachers opportunities to find new methods and best solutions to improve the delivery quality of teaching and learning."

Mdm. Priyatharisini suggested, "LINUS should focus on group work based on students' abilities. More teaching aids should be provided to English language teachers, especially for remedial classes, to ensure students can effectively acquire constructs for English language literacy."

To ensure Orang Asli students master the 3M, all relevant stakeholders should contribute towards the success of its implementation. Schools should arrange suitable timetables for the LINUS class, teachers should work together to develop suitable and effective teaching aids, while other teachers should also assist in the coaching process for the students.

Mdm. Priyatharisini A/P Jeyabalan

Teacher, SK Sungai Judah, Selangor



SJKT Sungai Sedu, Kuala Langat Selangor is also an under-enrolled school. Mdm. Punita a/p Sinnaraju,a remedial teacher for BM and Mathematics attest to the importance of the LINUS2.0 programme.

"LINUS2.0 focuses on increasing mastery in two basic skills - reading and writing. LINUS2.0 is a very beneficial programme as students can learn to read and write at a faster rate."

"This programme focuses more on the individual students without compromising their learning achievement. Students who have yet to master the 3R receive greater attention from teachers who use multiple techniques and approaches to ensure mastery of the 3R."

Mdm. Punitha suggested the use of *Mari Belajar Bersama* method, where a language proficient student would be paired with a peer who needs help. Teachers will provide guidance and suitable learning materials. Graded Reading activity is another good activity to teach students to read in a short period of time.

Mdm. Punitha A/P Sinnaraju

Remedial Teacher for BM and Matematics, SJKT Sungai Sedu, Kuala Langat, Selangor



Upholding Bahasa Malaysia, Strengthening English Language

Upholding Bahasa Malaysia, Strengthening English Language (Memartabatkan Bahasa Memperkukuh Bahasa Malaysia dan MBMMBI) was introduced in Inggeris. 2009 to elevate the status of our national language and enhance the proficiency in BM and English language among students. One of the Six Student Aspirations in the Blueprint is bilingual proficiency which is the mastery in BM and English Language. The acquisition of an additional language is highly encouraged as it will enrich students' lives and career marketability.

Bahasa Melayu Initiatives

The BM subject is consistently the subject with highest passing rate comparatively to all the other core subjects in UPSR and SPM. Moving forward, students' achievement in BM still needs to be improved to achieve the aspiration set in the Blueprint in ensuring that 90% students achieve at least a Credit in BM at the SPM level by 2025. Currently, 72.2% of students obtained a Credit in BM for 2016 SPM. The Ministry has implemented various programmes and activities to achieve the ambitious target including:

Enhancing the Professionalism of Bahasa Melayu Teachers

In 2016, the Ministry conducted two courses to help improve BM proficiency among the option and non-option teachers. The course to enhance the professionalism of BM teachers was targeted to BM teachers who obtained Level 5 of the BM proficiency Test (Ujian Kecekapan Bahasa Melayu, UKBM) conducted in 2015. The course was divided into two phases. The first phase of the training comprised completion of six online modules and face-to-face sessions. The online modules focused on 21st century teaching and learning; techniques and approaches towards teaching and learning; higher order thinking skills; fun learning; grammar; and application of web technology. A total of 1,938 BM teachers participated in the online course, while 3.378 teachers attended the face-to-face sessions. Analysis on the outcomes of the courses displayed better understanding and greater improvement in teachers' knowledge and skills pertaining to

the 21st century teaching and learning in BM than before attending the courses.

The second phase of the training was implemented with the cooperation of University Putra Malaysia. Participants were 90 non-option BM teachers and the training mode was a five-day face-to-face session. Five modules were used in the training, which include the following topics: grammar, listening and speaking skills, reading skill, and writing skills. All participants were required to sit for the UKBM at the end of the training. Results of the UKBM tests showed that only four non-option teachers (4.4%) reached Level 7, 73 teachers (81.1%) achieved Level 6, while 13 teachers (14.4%) managed to reach Level 5 of almost proficient in teaching BM (Exhibit 2-8). More support and coaching will be given to non-option teachers at Level 5 UKBM to increase their competency and pedagogical skills in teaching the subject to avoid adverse effect on students' learning.

Exhibit 2-8: Bahasa Melayu Proficiency Level Among Non-Option Teachers, 2016

(UKBM) LEVEL OF PROFICIENCY

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
Definition Very Limited	Definition Limited	Definition Almost Limited	Definition Sufficient	Definition Almost Proficient	Definition Proficient	Definition More Proficient	Definition Very Proficient
No. of Teachers	No. of Teachers	No. of Teachers	No. of Teachers	No. of Teachers	No. of Teachers	No. of Teachers	No. of Teachers
0	0	0	0	13	73	4	0

Source: Teacher Education Division (BPG)

Bahasa Melayu Lab

To further improve the mastery in BM, beginning with Wave 2, the Ministry executed the initial plan designed in 2015 under the MBMMBI policy which was *Program Menyemarakkan Inisiatif Memartabatkan Bahasa Melayu*. In Wave 2, the plan focuses on placing greater emphasis on improving the acquisition and usage of BM among students. One of the activities under this programme was to produce a detailed Strategic Plan to Uphold Bahasa Melayu (*Pelan Strategik Memartabatkan Bahasa Melayu*, PSMBM).

A BM lab was organised in 2016 to develop action plans for all the nine strategies formulated under the PSMBM. The lab was conducted at the Institute of Teacher Education Malaysia (*Institut Pendidikan Guru Malaysia*, IPGM) Cyberjaya in two phases: Phase I from April 4 - 15, and Phase II

from May 9 - 20. Two main goals of the BM lab were to develop strategies to accelerate the acquisition and competencies of BM at all levels of education, and to explicate the nine key strategies of PSMBM aligned to the Blueprint aspirations (Exhibit 2-9). A long-term strategic plan for BM was also developed to ensure 90% of students achieved at least Credit for the SPM BM paper in 2025.

The scope of the BM Lab was to realign the existing BM initiatives and programmes and to propose new programmes to improve language proficiency. The Lab deliberated on efforts to further enhance content knowledge and teaching skills, especially for non-option BM teachers. The Lab also focused on efforts to increase students' interest in learning and using BM and to enhance the function of BM as a language of unity and national integration.



Exhibit 2-9: Bahasa Melayu Lab 2016: Five Focus Areas and 14 Main Activities

Bahasa Melayu Standard Framework • a tool to measure the competency and usage of BM

Strengthening the BM Education

Increasing BM Teaching Professionalism Research and Innovation, and External Relations The BM Education Roadmap 2016 -2025

Activities

Developing:

- i. the BM Standard Framework
- ii. the BM Standard Framework Manual
- iii. the BM Standard Framework Instrument

Activities

- i. Strengthening BM Oral Proficiency teaching strategies in all types of schools
- ii. Strengthening BM Oral Test (ULBM) at the primary and secondary levels
- iii. Developing a new format of assessment for SPM BM paper
- iv. Rebranding Malay
 Literature as
 Communicative Malay
 Literature (Kesusasteraan
 Melayu Komunikatif, KMK)
 in secondary schools
- v. Developing a BM Test to assess students' proficiency level as an entrance requirement at tertiary level
- vi. Developing a toolkit for Interactive BM Skills Programmes (Program Interaktif Kemahiran BM, PIKeBM)

Activities

- i. Selecting BM teachers with Credit in Malay Literature to teach the KMK subject
- ii. Developing a Holistic Framework for Professional Development of BM Teachers and Lecturers
- iii. Establishing BM centres of excellence
 - Transforming IPGKBM as the Malay Language Education Centre of Excellence (Pusat Kecemerlangan Pendidikan BM)
 - Establishing BM Education Accreditation Council (Lembaga Pengiktirafan Pendidikan BM, LPPBM)

Activities

- i. Enhancing Dewan Bahasa dan Pustaka (DBP) roles and functions as the custodian of BM focusing in:
- promotingresearch and innovation on BM and Malay Literature
- being the sole agency responsible to authorise and accredit MUNSYI for BM Language, Literature and Malay Culture
- ii.Promoting BM as the language of economy and trade

Activities

i. Planning and developing strategic directions and action plans of programmes and activities to enhance BM education from primary to post-secondary education

Source: Teacher Education Division (BPG)



Deputy 1, Minister of Education, YB P. Kamalanathan attending and officiating the opening ceremony of the BM Lab 2016



Participants contributing ideas in their respective groups

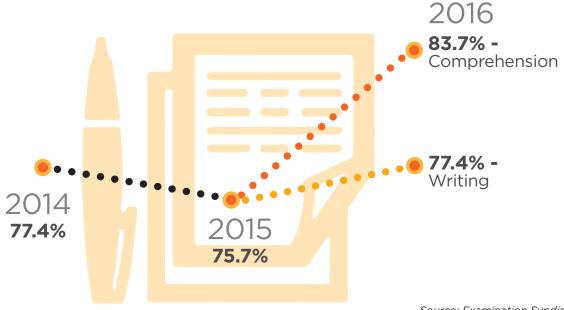
English Language Initiatives

The Ministry has invested heavily to strengthen the English language proficiency among students and enhance English language teachers' pedagogical skills. Efforts to raise the acquisition of the English language focused on assessment, teacher training, and increasing exposure of students to the usage of the language.

Achievement in 2016 UPSR English Language Papers

In 2016, the English language paper for the terminal examination UPSR at Year 6 of primary education was separated into two papers to assess students' understanding and writing ability in the language. Each paper, Comprehension and Writing, is given a different grade. This is a departure from previous years UPSR English language paper where the two components were graded as one examination paper with one grade. The shift in the format of the UPSR English language papers was designed to increase students' mastery in the language. Teachers will be able to better assess students' language skills in listening and speaking, reading, and writing and provide specific interventions during formative evaluations and school-based assessment. The initial results in UPSR 2016 English language paper showed promising improvement where the average national passing rate increased for the Comprehension Paper from 75.7% in 2015 to 83.8% in 2016. The average national passing rate for the Writing paper was at 77.4% as shown in Exhibit 2-10.

Exhibit 2-10: UPSR 2016 Achievement in the English Language Papers: Comprehension and Writing



Source: Examination Syndicate, 2016

Professional Upskilling of English Language Teachers (ProELT)

ProELT is an integrated training model which combines face-to-face interactions and virtual learning modules. In 2016, ProELT marked its fourth cohort since its first inception in 2012. The programme aims to increase the proficiency of English Language teachers who do not meet the minimum Common European Framework of Reference for Languages (CEFR) of Band C1.

Since 2012, 16,000 English language teachers have been trained. This number includes the 500 teachers who were in Cohort 4 in 2016. Six English Language Teaching Centre (ELTC) lecturers were tasked to train Cohort 4 teachers who were divided into 20 groups. To maximise the training outcomes of Cohort 4, the previous training modules were refined. At the end of each training session, teachers sat for the Aptis test to determine the outcome of the training. The Aptis test is a proficiency test administered at the beginning and at the end of the training programme to gauge teacher's improvements in the four English language skills; reading, writing, speaking and listening.

Conclusively, the Aptis test results for Cohort 4 were very encouraging as they matched the performance of previous cohorts. The results showed that 85% of the teachers in Band B1 and 43% of the teachers in Band B2 managed to improved their proficiency band. Indirectly, the results also implied that the quality of training provided by ELTC lecturers in Cohort 4 was at par with those provided by external native speakers in Cohorts 1, 2 and 3.

ELTC also developed ProELT Refresher Course in 2016 to help teachers from the previous cohorts to improve and reach the minimum of Band C. A total of 30 teachers enrolled in the refresher course and sat for the Aptis test. The result showed that two teachers achieved CEFR Band C2 and 15 teachers achieved Band C1. Continuous efforts are being undertaken by ELTC to support teachers who have not achieved the minimum CEFR Band C1.

Information on the ProELT Refresher Course

- Course application is done online
- Teachers are required to complete a set of online tasks prior to signing up for the Aptis test.
- The online tasks mirrored the Aptis test format.
- The tasks were moderated by trainers who were involved in the ProELT training.
- Guidance will be provided to participants, if required.









Improving Teachers' Language Proficiency through ProELT

The Professional Upskilling of English Language Teachers (ProELT) was successfully conducted from Feb to April 2016. During the time period, the participants comprised junior and senior teachers were exposed to a variety of language activities which were carefully planned and implemented to meet the specific needs of the teachers. The trainers from ELTC demonstrated tremendous effort throughout the course. They portrayed a positive attitude and consistently assisted the teachers by providing constructive feedback.

ProELT enabled teachers to carry out conversational interaction, thus enriching the learning environment. The course provided a platform for both the junior and senior teachers to discuss and share their work and provide feedback interactively.

"I personally improved my knowledge in the teaching and learning approaches. Hence, I highly recommend for ProELT to continue as I am confident that through such a course, teachers would certainly be equipped with the tools needed in their daily classroom tasks."

Balvir Kaur

Teacher, SMK USJ 4, Selangor

"After the course, I have improved my speaking, reading, writing and listening skills in English. From this course, I know how to overcome my weakness in teaching English. I also have improved and upgraded my teaching skills in English language. From the course, I can easily teach my students in English writing skills. I am also confident in speaking fluently with accurate English. This course has widen my knowledge in English grammar and writing skills."

Lim Pek Lin

Teacher, SJKC Su Lai, Sibu, Sarawak

The English Language Upskilling Programme in School

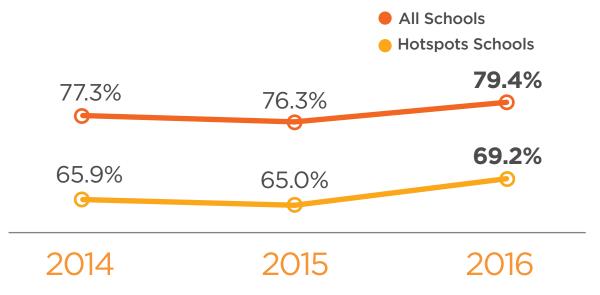
Upskilling The English Language School (Program Programme in Peningkatan Kemahiran Bahasa Inggeris di Sekolah, PPKBIS) is an English language improvement programme aimed at English language teachers. This programme has been ongoing since 2014. The programme is targeted at 1,191 schools which performed below the national average in the 2013 SPM English Language paper. These schools have been identified and classified as "hotspot schools".

PPKBIS ensures that interventions are conducted in all hotspot schools through School Improvement Specialist Coaches+ (SISC+) while a select group of hotspot schools are given direct interventions by ELTC lecturers through the School Support Plan. In 2016, 169 teachers from selected hotspot schools participated in the programme. All participants were required to produce the following deliverables by the end of the course:

- A seven-week self-developed intervention plan for students.
- Activities and exercises designed to treat gaps in students' knowledge and skills.
- A reflective report detailing the intervention process.

Because of the intensive intervention of PPKBIS, the average SPM English Language passing rate of hotspot schools increased from 65.0% in 2015 to 69.2% in 2016. The increase in performance directly contributed to the increase of the national average passing rate from 76.3% in 2015 to 79.4% in 2016 (Exhibit 2-11).

Exhibit 2-11: Comparison between Hotspot Schools Passing Rate and the National Average Passing Rate in SPM 2016 English Language



Source: Examination Syndicate (LP)

Dual Language Programme (DLP) and Highly Immersive Programme (HIP)

The Dual Language Programme (DLP) and Highly Immersive Programme (HIP) are programmes initiated under the English Language Lab conducted in 2015 as part of a radical proposal to increase English language proficiency in schools. The aim of the programmes is to increase the exposure of students to the English language by increasing the number of contact hours the students have with the language.

Dual Language Programme (DLP)

The DLP focuses on increasing student contact hours with the English language through the teaching of STEM subjects. In 2016, a total of 379 schools which consisted of 296 daily schools, 68 residential schools

and 15 religious schools, participated in the pilot programme. The 379 schools comprised 246 secondary and 133 primary schools, of which 37.8% were rural schools. In total, 39,474 students from Year 1, Year 4 and Form 1 participated in the DLP.

A study to ascertain the initial impact of the DLP on students' English language proficiency was conducted by Cambridge English in July 2016. The respondents for the study consisted of 3,520 DLP and non-DLP Form 1 students from 110 secondary schools nationwide. The objectives of the study were to establish students' respective levels of achievement, and to determine the difference in English language performance between the DLP and non-DLP students. Results from the study were very encouraging.





A Radical Plan to Increase English Language Proficiency

English language proficiency has become a basic skill that is required by an increasing number of employers. Graduates who are unable to attain basic proficiency often find themselves left out and are left with limited choices of employment. The level of English language proficiency amongst our students, therefore, has become a crucial concern.

Findings show a huge gap between the levels of English language exposure between primary and secondary school students; and tertiary education – especially in the areas of STEM. While English language is being taught as a subject in schools, that alone is not enough. Students require more exposure and engagement time with the English language

to enhance their comprehension and mastery of the language.

Taking into consideration the concerns of educators, parents and industry stakeholders, two English Labs were conducted by the Ministry to identify a radical solution to accelerate the English language proficiency of our students. As a result, the Ministry introduced the DLP and the HIP in January 2016. Beginning with 367 pilot schools for DLP and 1,200 schools for HIP, the programmes has been a success with the continued support from educators, school leaders, teachers, parents, students and industry stakeholders.

Scan the code to witness the transformation that is taking place in our schools across the nation through DLP and HIP:

Accelerating English language mastery through Science and Mathematics



Fundamental factors in building a highly immersive environment in schools



Best Practices in creating a highly immersive environment in schools



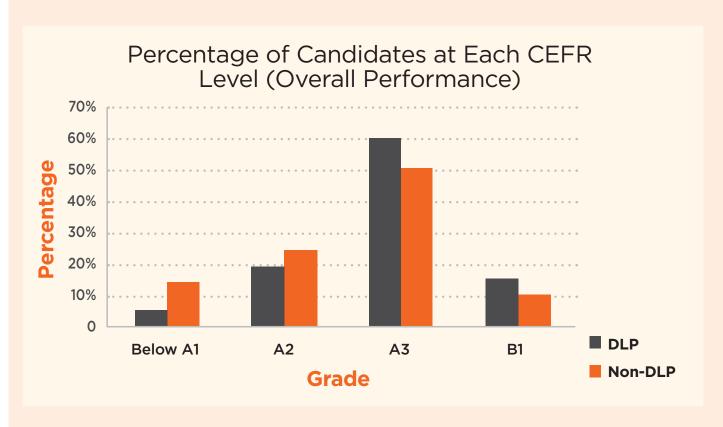
Video link: https://www.youtube.com/watch?v=3WVXmUVjYEE

Video link: https://www.youtube.com/watch?v=GEIM41vOwmc

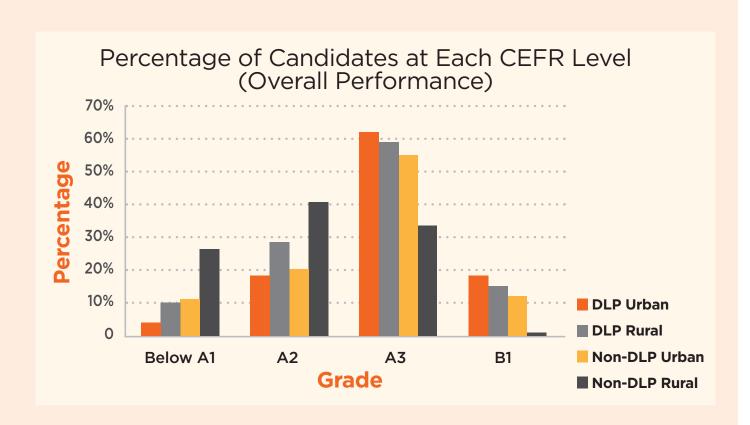
Video link: https://www.youtube.com/watch?v=yldU1kRDmAw

Baseline Study on English Language Performance between DLP and Non-DLP students, 2016

"In general, the students involved in the DLP do appear to benefit in terms of the strengthening of their English language ability. Three quarters of the DLP students were placed at or above the target level of the test (60% at A2 and 15% at B1), as compared to 61% of non-DLP students." (p.9)



"In terms of overall performance, some 62% of rural DLP students performed at or above the level of the test (57% at A2 and 5% at B1). While this was below the performance of urban DLP students (61% at A2 and 18% at B1), it was closer to the performance of non-DLP urban students (54% at A2 and 13% at B1)." (p.15)



"Within the partial DLP schools, 890 students were being taught in DLP programmes and 518 were not. Comparison of the performances of these two groups of candidates again suggest that the DLP students do gain from their involvement in the programme. The DLP students performed at or above the target level (79%) of the paper as opposed to 53% of the non-DLP students." (p.17)

"DLP students clearly did better, both in terms of higher numbers achieving the standard and also in having fewer students performing notably below the target, that is to say, not achieving A1 level. Given that the control group was specifically drawn from schools having an equivalent Grade Point Average in the SPM Bahasa Inggeris in 2015, this difference is noteworthy, although the strong prior record in English language of the schools chosen for the DLP programme may still be a factor." (p.20)

Source: Language Programme: Baseline Study 2016, English Language Teaching Centre (ELTC), 2016

Highly Immersive Programme (HIP)

HIP focuses on increasing the level of English language immersion of a school through inclass, out-of-class, extra class and outreach activities. In 2016, HIP was piloted in two phases, Phase I (January – June 2016) involved 94 primary schools while Phase II (July – November 2016) targeted an expansion to an additional 1,106 schools nationwide. By November 2016, HIP surpassed its initial implementation target of 1,200 schools. In total, 1,226 schools (873 primary and 353 secondary schools) implemented HIP nationwide.

HIP aims to inculcate positive behaviour towards the learning and usage of the English language. It is hoped that the increased exposure to the usage of the language will improve the English language proficiency of students. HIP is implemented based on the Whole School approach to create a highly immersive English language environment in schools. HIP activities are geared towards better achievements among students, increased partnership among schools as well as improving parents and community involvement. HIP activities are classified into four main categories:



Purpose:

To create effective & engaging in-class teaching and learning



Purpose:

To provide additional support for highneed students and high achievers to reach their highest potential



Purpose:

To encourage and increase the usage of the English language



Purpose:

To increase English language level of immersion through community outreach and various collaborations The level of English language immersion is measured against the following scale:

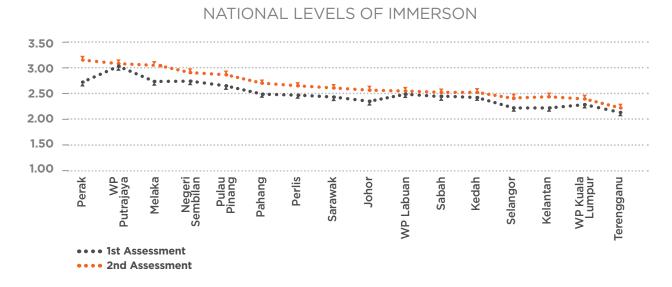
against the following scale:						
Level of Immersiveness	Description	Level of Immersiveness	Description			
4	 The school community as a whole engages the students in a highly meaningful and immersive English language environment. Students are provided with highly challenging and enjoyable learning experiences. All students have the opportunity to participate in English language activities both in and out of class. The School Head is very active in creating an immersive English language environment, is a constant motivator and ensures sustainability of ELT activities. Teachers are frequently and systematically exposing students to English language learning activities both in and out of class. This is done by creating varied enrichment and remedial activities that are used to address the diverse abilities of students and to strengthen students' confidence in using the English language. Teachers are excellent role models of language use. The school actively engages in Outreach activities through the alumni, engagement with ELT experts from higher learning institutions and corporate bodies. Parental involvement is clearly seen in planning, organising and supporting the school in ELT activities. 	2	 The school community as a whole tries to engage the students in an immersive English language environment but may not be consistent. Students are provided with some English language activities but these may not be challenging and may not create enjoyable learning experiences. Only few students have the opportunity to participate in English language activities both in and out of class. The School Head attempts to create an immersive Englishlanguage environment with minimal success. Activities in English are carried out but there is little evidence of their sustainability. Teachers attempt to expose students to English language learning activities both in and out of class, however they lack the knowledge on how to organise the activities to improve students' outcomes. The activities used do not always strengthen students' confidence in using the English language. Teachers and students communicate minimally in English. There is evidence of the school's engagement in Outreach activities but with a limited scope (involving only one party). Parental involvement is not frequent in supporting the school in ELT activities. 			
3	 The school community as a whole engages the students in an immersive English language environment. Students are provided with some challenging and enjoyable learning experiences. A large number of students have the opportunity to participate in English language activities both in and out of class. The School Head manages to create an immersive English language environment. There is evidence of the sustainability of some ELT activities. Teachers manage to expose students to Englishlanguage learning activities both in and out of class; however this may not be varied in terms of enrichment and remedial activities. The activities used are sometimes able to strengthen students' confidence in using English language. Teachers and students do not communicate in English frequently. There is some evidence of the school's engagement in Outreach activities through the alumni, engagement with ELT experts from higher learning institutions and corporate bodies. Parents' involvement is sometimes seen in supporting the school in ELT activities. 	1	 The school community as a whole lacks the development of an immersive English language environment. Students are provided with very little English language activities and have little or no opportunity for extensive participation in English language activities both in and out of class. The School Head is hardly involved in English language activities and is not actively creating an immersive English language environment. The school Head plays a minimal role as a motivator for ELT activities. Most English activities conducted in the school are one off and do not show evidence of sustainability. There is a lack of frequent and systematic exposure for students to use the English language in and out of class. There is also a lack of awareness of students' diverse abilities in English. There is hardly any evidence of enrichment and remedial activities to address students' participation in English language use. 			

To measure the level of English language immersion of a participating school, principals, teachers, students and parents are tasked with completing a self-assessment instrument twice in a year. The first self-assessment serves as a baseline to track the progress of the school. The second assessment is conducted to validate the impact of HIP.

To ensure the validity of the data collected in 2016, a monitoring team comprising members of the HIP taskforce led by ELTC

and the English Language Officers from the JPN visited each participating school. Findings from the assessment showed that the average level of immersion improved from 2.42 (Assessment 1 - June 2016) to 2.61 (Assessment 2 - October 2016) as shown in Exhibit 2-12. Schools in Perak, Putrajaya and Melaka achieved the highest scores while schools in Kelantan, Kuala Lumpur and Terengganu showed the lowest scores. Schools in Perak, Melaka and Pahang showed the largest improvement within the year.

Exhibit 2-12: Level of English Language Immersion under the Highly Immersive Programme by State, 2016



Source: Highly Immersive Programme Phase 1 and Phase 2 Reports, ELTC 2016

Perceptions of Students and Teachers Towards HIP

A survey was conducted amongst teachers and students covering four thematic areas of HIP to identify the effectiveness of HIP implementation in 2016. With over 1,000 questionnaires analysed, the results showed the strengths and weaknesses of the programmes

A: Perception of Students and Teachers Towards HIP, 2016





Source: Highly Immersive Programme Phase 1 and Phase 2 Reports, ELTC 2016

Development of Highly Immersive Environment

The mean scores (3.17) for student questionnaire was relatively high. It was evident that students were responding positively towards the development of a highly immersive environment which was supportive of students' learning.

Development of Whole-School Approach

The mean scores was the lowest (2.60) for student questionnaire. The items which contributed to the low scores were on parental involvement, community engagement and alumni in HIP activities. More effort was needed to engage with the wider community to ensure the 'Whole-School Approach' became a reality.

Student Learning Outcomes

The overall analyses for the teacher and student questionnaires generated average scores of 2.74 and 2.69, respectively. The score implied that the HIP implementation which aimed at improving students' learning outcomes was still an on-going process as most schools had only implemented the programme for six months.

Student Behaviour Change

The mean scores for students (2.83) was higher than the teachers'. This indicated that students were beginning to experience positive change in their behaviours towards English language in their schools.



What School Heads Said about HIP

'HIP is a very good programme. It helps students' proficiency in English through a variety of fun learning activities. I remember the first time I introduce HIP, I as an anchor tuned the teachers and reminded that HIP is a 'whole-school approach'. I feel we should create more activities especially the outreach activities'.

SJKC Simanggang Seri Aman Sarawak

HIP is a good programme because it helps create an environment for students to use the English language in school and learn English in a fun way through language games.

SK Sg. Lesung, Perak; SK Gunung Panjang; SJKT Slim River, Perak

HIP reinforces English language programmes that were carried out years ago such as DEAR programme and The Walking Dictionary.

SK Bangsar, Kuala Lumpur

It is my responsibility to monitor HIP to ensure the activities run efficiently in my school.

SMK Pak Badol, Kelantan

What Teachers Said about HIP

'HIP is very good programme that can help our teachers and students proficiency especially in a rural school like ours. When students like English language they will use it in their house and society. HIP is very flexible and enjoyable with all the activities and I am so excited to do the programme and hope HIP will continue to go on. This programme also helps us to improve our English language. The focus on community also helps the community come together to help our students'.

SK Pulau Rusa

We conducted meetings and Professional Learning Community (PLC) among English language teachers at school-level to resolve problems faced by students and challenges in the implementation of HIP. We also discussed ideas with the school head and other teachers before implementing the HIP activities.

SJKT Jalan Sialang, Johor

We have Journal Writing for Form 1, 2 and 4 students which helps improve students' writing skills.

SMK Presint 11(1), Putrajaya

HIP encourages all other subject teachers to speak in English language.

SJKC Chung Huah, Perak

HIP helps to build the confidence of weak students. With HIP, we can create out of class activities for students to use the language.

SK Sacred Heart, Sabah

In this school, with a little push from us, students will have more confidence to speak and discuss in English language.

SJKC Khai Chee, Selangor

What Students Said about HIP

'HIP started last year. HIP encourages students to use the English language in their day to day life. So what I can see in the HIP is that it incorporates the English language in our daily life in school such as Assembly in English language and English week. So students get more exposure to English language'.

Form 5 student SMK Putrajaya Presint 9 (1)

The English Language Roadmap

In 2013, a baseline study to determine students' and teachers' proficiency in the language was jointly conducted with Cambridge English (CE). The study focused on the teaching, learning and assessment of the English language subject in Malaysian schools from preschool to pre-university level. The study highlighted five important findings which warrant urgent attention:

- Improvement in the overall language skills among students.
- Improvement in English language teaching skills among teachers.
- Alignment of the English language curriculum with international standards.
- Alignment of the English language assessment with international assessments standard.
- Improvement in the quality of teaching and learning materials.

To address the findings from the study, the English Language Standard and Quality Council (ELSQC) developed the English language education development plan called The Roadmap 2015-2025: English

Language Reform in Malaysia which was officially launched in 2016. This plan detailed the systematic changes required for English language education starting from preschool to university levels, including professional development for teachers which covers transformation and alignment to the international standards of CEFR in terms of the curriculum, teaching and learning materials, assessment and teacher training.

To implement the recommendations in the Roadmap, the Ministry has collaborated with CE to ensure that the education level of English language in Malaysia is at par with or exceeds international standards. CE, an affiliate of the Cambridge University, has extensive experience in the management and assessment of English language education in line with the CEFR. The collaboration between the Ministry and the CE will span five years starting in 2016 until 2020. The collaboration demonstrates the Ministry's underlying commitment towards English language education reforms to achieve the following deliverables:

Deliverable 1: Roadmap Review

Deliverable 2 : CEFR-Malaysia development and adoption

Deliverable 3 : Curriculum evaluation, revision and rollout

Deliverable 4: Learning Materials

Deliverable 5: Assessment evaluation, development and capacity building

Deliverable 6: Teacher development programme evaluation

Deliverable 7: Baseline studies and monitoring standards



Additional Languages in Schools

The acquisition of a third language after BM and English language is greatly encouraged among students to become competitive multilingual human resource at the national and international stage. The implementation of the Foreign Language Programme was headed by two divisions. The School Management Division (*Bahagian Pengurusan Sekolah Harian*, BPSH) ensures the programme is implemented in the national daily schools, while Fully Residential and Excellence Schools Management Division (*Bahagian Pengurusan Sekolah Berasrama Penuh dan Kluster Kecemerlangan*, BSBPKK) is responsible for the implementation of the programme in residential schools.

Foreign language Programmes in Daily Schools

Currently, there are 142 national daily schools offering third language classes comprising 70 for Japanese language, 40 for French language and 32 for German language. Exhibit 2-13 illustrates the number of schools, teachers and students involved the foreign language programme in 2016.

Exhibit 2-13: Foreign Language Programmes under the Purview of the School Management Division, 2016

FOREIGN LANGUAGE PROGRAMME

JAPANESE LANGUAGE

Schools 70 Teachers 70 Students 6096 Classes 345

FRENCH LANGUAGE

Schools 40 Teachers 40 Students 2229 Classes 117

GERMAN LANGUAGE

Schools 32 Teachers 32 Students 1944 Classes 91

Source: School Management Division (BPSH)

Support programmes involving students and teachers were also carried out in partnership with the *Goethe-Institut* Kuala Lumpur, Japan Foundation Kuala Lumpur and the *Alliance Française* Kuala Lumpur. These agencies provide programmes to improve the competency of teachers and programmes in the form of competitions for students to strengthen their language proficiency. Exhibit 2-14 presents the programmes participated by the teachers and students in 2016.

Exhibit 2-14: Participations in Language Programmes, 2016

JAPANESE SPEECH CONTEST Focus: Language acquisition

STUDENTS

JAPANESE LANGUAGE FESTIVAL

Focus: Language and cultural appreciation **STUDENTS**

JAPANESE SPEAKERS FORUM

Focus: Japanese language teaching and learning **STUDENTS & TEACHERS**

REGIONAL SEMINAR FOR JAPANESE LANGUAGE TEACHER

IN SECONDARY SCHOOL Focus: Pedagogical Skills

TEACHERS

JFKL-MOE JLT PROFESSIONAL **DEVELOPMENT PROGRAMME** (J-PRO)

Focus: Pedagogical Skills **TEACHERS**

INTERNATIONAL GERMAN CAMP

Focus: Language acquisition **STUDENTS**

GERMAN LANGUAGE WEEK Focus: Language acquisition

STUDENTS

GERMAN SCHOLARSHIP PROGRAM (PRÄMIEN **PROGRAMME)**

Focus: Language and cultural appreciation **STUDENTS**

GERMAN LANGUAGE TEACHER SEMINAR

Focus: Pedagogical Skills TEACHERS

FRENCH LANGUAGE WEEK (FRANCHOPONIE)

Focus: Language acquisition STUDENTS

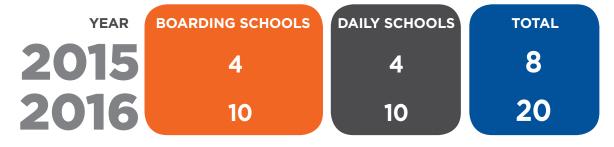
FRENCH SEMINAR Focus: Pedagogical Skills TEACHERS

MASTER'S DEGREE **SCHOLARSHIPS Focus: Profesional development TEACHERS**

Note: All the programmes conducted would involve teachers and students from schools under the purview of BPSH, BPSBPSK, and BPI Source: School Management Division (BPSH)

In support of the teaching of Japanese language, Nihongo Partners Programme was introduced in 2015. Nihongo Partners are placed in selected schools for a period of 10 months to provide assistants to the local Japanese language teachers in enhancing their teaching skills of the Japanese language. Two major activities in the programme are language learning enhancement through activities such as origami, ikebana and calligraphy; and Japanese culture learning activities such as tea ceremony session, Tanabata Festival and Japanese food making. A total of 120 native speakers of Japanese language volunteers (Nihongo Partners) would be placed in schools (residential and daily schools) until the year 2020. Exhibit 2-15 illustrates the number of schools involved.

Exhibit 2-15: Nihongo Partners Programme 2015 - 2016



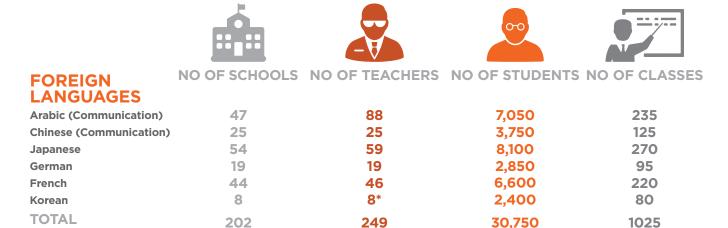
Note: The programmes conducted would involve teachers and students from schools under the purview of BPSH, BPSBPSK

Source: School Management Division (BPSH), 2016

Foreign Language Programmes in Residential Schools

In 2016, there were six foreign languages taught in residential schools throughout the country. The demand for foreign languages is very encouraging and continue to increase annually. The Ministry has seen a rising trend in the number of students who received scholarships to further their study in the countries of the third language they have acquired. Exhibit 2-16 shows the foreign languages offered in residential schools as well as the number of teachers and students involved in the programme in 2016.

Exhibit 2-16: The Foreign Language Programmes Implemented in Residential Schools, 2016



Note: *Korean Volunteer Teachers

Source: Fully Residential and Excellence Schools Management Division (BPSBPSK)

Beside attending foreign language classes in school, students improve their acquisition of the foreign languages by participating in the support programmes organised by various agencies. Foreign language teachers also enhance their pedagogical skills in the third language acquisition through trainings provided by the relevant agencies. Exhibit 2-17 lists the foreign language programmes participated by students and teachers from residential schools in 2016.

Exhibit 2-17: Residential School Participations in Foreign Language Programmes, 2016

JAPANESE

ONE STEP TO JAPAN Focus: Study in Japan STUDENTS

HOTARU CAMP

Focus: Japanese Language Level 2 STUDENTS

JAPANESE SPEECH CONTEST

Focus: Japanese Language STUDENTS

HK FOREIGN LANGUAGE

Focus: Language & Culture STUDENTS

SHORT TERMS COURSES

Focus: Japanese Language Communication TEACHERS

PROFESSIONAL TRAINING

Focus: Pedagogical skills TEACHERS

RESIDENTIAL SCHOOL PARTICIPATIONS

GERMAN

ESSAY COMPETITION

Focus: German language STUDENTS

HK FOREIGN LANGUAGE

Focus: Language & Culture STUDENTS

SHORT TERM COURSES

Focus: German language TEACHERS

PROFESSIONAL TRAINING

Focus: Pedagogical skills
TEACHERS

FRENCH

HK FOREIGN LANGUAGE

Focus: Language & Culture STUDENTS

MASTER'S DEGREE SCHOLARSHIP

Focus: French TEACHERS

PROFESSIONAL TRAINING

Focus: Pedagogical skills TEACHERS

FRENCH SEMINAR

Focus: French & Pedagogical skills TEACHERS





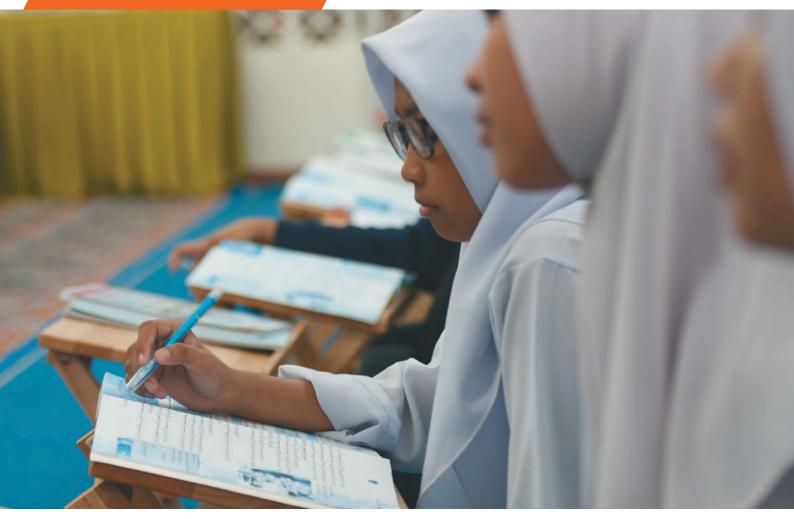








Source: Fully Residential and Excellence Schools Management Division (BPSBPSK)



Foreign Language Programmes in Religious Schools

Foreign languages were introduced in religious school beginning 2014, in line with the introduction of the *Tahfiz Model Ulul Abab* (TMUA). In 2016, eight religious schools offered three foreign languages, namely French, German and Chinese besides Arabic (Exhibit 2-18).

Exhibit 2-18: Foreign Languages Offered in Religious Schools, 2016

NO.	LANGUAGE	SCHOOL	NO. OF	YEAR S OFFERED
1	French & Chinese	SMKA Kuala Lumpur, Bandar Menjalara, KL	573	2014
2	French & Chinese	SMKA Kedah, Alor Star, Kedah	576	2014
3	French & Chinese	SMKA Maahad Muar, Muar, Johor	519	2015
4	French & German	SMKA Kerian, Taiping, Perak	412	2015
5	French & Chinese	SMKA Tok Bachok, Kota Bharu, Kelantan	502	2015
6	French & Chinese	SMKA Kota Kinabalu, Kota Kinabalu, Sabah	237	2016
7	French & Chinese	SMKA Nibung Tebal, Pulau Pinang	310	2016
8	German	SMKA Hj. Abu Hasan Sail, Pedas, N. Sembilan	279	2016

Source: Islamic Education Division (BPI)



STRENGTHENING TEACHER QUALITY

The foundation to raise the quality of Malaysian teachers to be at par with developed nations was set in Wave 1 of the Blueprint implementation. The Ministry has succeeded, to a certain extent, in shifting the perception on the teaching profession in the country from the least preferred profession to one of the professions of choice. This is clearly demonstrated by the increasing number of applications seeking to be accepted into the Ministry's Institute of Teacher Education (*Institut Pendidikan Guru*, IPG) of which there are currently 27 nationwide.

Stringent Admission Requirement into the Institutes of Teacher Education

Since 2013, the Ministry has been receiving an overwhelming number of applications to enrol in the Bachelor of Education programmes offered at the IPG compared to the number of available places. The tremendous response continues annually despite the stringent entrance requirements into the programme, as per Exhibit 2-19.

Exhibit 2-19: Achievement of IPG Teacher Trainees in SPM, 2013-2016

COHORT ACHIEVEMENT IN SPM	2013	2014	2015	2016
At least 5A's	90.0%	98.0%	99.0%	100%
At least 7A's	48.0%	50.7%	58.3%	62.4%
At least 9A's	42.0%	21.7%	20.7%	29.0%

Source: Institute of Teacher Education Malaysia (IPGM)

Continuous Professional Development (CPD) Master Plan

The development of the CPD Master Plan (*Pelan Induk Pembangunan Profesionalisme Keguruan*, PIPPK) started in 2015 and was finalised in 2016. The PIPPK was developed to assist all education officers (*Pegawai Perkhidmatan Pendidikan*, PPP) under the purview of the Ministry to plan their career and professional development. The PIPPK is the main document of reference towards raising the quality of the teaching profession in Malaysia. The document also provides guidance for career pathways for PPP to develop their competencies based on aptitude and ability, ultimately ensuring high performance in tandem with current and future trends throughout their tenureship.

The concept of continuous professional development employed under the Ministry is divided into three phases, namely the pre-service phase, in-service phase, and career enhancement throughout the service years. The PIPPK serves as a point of reference for the PPP to design and implement activities for the development and stabilisation of their career to ensure quality of service and performance is maintained throughout their service. This will contribute towards the improvement of student outcomes. With the development of the PIPPK, the Ministry aspires that the teaching profession be elevated as the profession of choice by many Malaysians.

EFFECTIVENESS Selection Criteria **Educational** Resources Appraisal Expertise Support Teacher Evaluation Teacher Teaching & Trainina Implementation Learning of Exit Policy Professional Evaluation Implementation CPD - Continuous of Exit Policy Professional Development Not qualified to be selected/appointed **Early Service** Career Enhancement **Preservice** stration Record

Exhibit 2-20: Framework for Professional Development of Teachers

Framework for the Development of Teaching Professionalism adapted from Model of Educator Talent Management Framework (Sherratt et. al. 2013)

LENGTH OF SERVICE

Source: Teacher Education Division (BPG)

Exhibit 2-21: Content of the PIPPK



http://www.moe.gov.my/index.php/my/pegawai-perkhidmatan-pendidikan/dalam-perkhidmatan

Source: Teacher Education Division (BPG)

IPG Transformation

To ensure IPG maintains the trajectory of producing highly qualified teachers who will contribute towards achieving the system and student aspirations set out in the Blueprint by 2025, the IPG Transformation Roadmap (2016-2025) was developed. The IPG Roadmap is a comprehensive strategic plan which comprises both short term and long term plans to improve the quality of teacher education in the country.

The Ministry commenced efforts to transform the IPG into a teacher education training provider of international standard and centre of excellence for preservice and in-service professional development beginning from 2016. The IPG Transformation initiative was listed as one of the priority initiatives in Wave 2. In 2016, the Ministry started the initial processes towards the transformation through the following activities:

Developing the Talent Review Instrument

The Talent Review Instrument was developed starting from January to October 2016 to identify talented and high potential lecturers for the Lecturer Talent Development Programme. The online instrument will be used to assess IPG lecturers' competencies and soft skills in order to enhance their capabilities in training and developing future aspiring teachers. A comprehensive database on high potential lecturers will be developed to assist the Ministry in identifying faculty members for further professional development and future promotions.



Enhancing the Capacity of IPG Lecturers

To ensure that IPG campuses produce quality teachers, the number of IPG lecturers with doctoral degrees is vital. In April 2016, the Institute of Teacher Education Malaysia (IPGM), a governing body of all IPG campuses in Malaysia, started developing a strategic canvas to review the quota for lecturers in each field of study for doctoral degrees under the sponsorship of the Ministry. The final proposal was approved by the Ministry on 15 December 2016 through the Steering Committee for Staff Development (JIPS) Meeting No. 3/2016. The move saw 64 lecturers obtaining scholarships to continue their post-graduate studies in various fields of education.

Developing IPG and IPGM New Structure

The process of establishing the new structure for IPG and IPGM started in 2016 and aims to empower IPG to become a higher institution of learning for teacher education. This move will ensure that IPG is constantly responding to change and remains relevant in current Malaysian context. In tandem with the transformation, it is imperative that the leadership and governance of IPGM and IPG campuses to take into account skills knowledge and values required in academic leadership.

The new structure of IPGM and IPG will involve the configuration of 16 campuses with each campus as *niche* for corresponding disciplines. The restructuring of IPG will involve:

- merging the roles and functions of 27 IPG campuses into 11 main campuses to run preservice training and research functions.
- establishing Teacher Continuous Professional Development Centres, Technical and Vocational Education and Training Institutes, and Indigenous Learning Centres.

Establishing the Quality Assurance and Policy Compliance Centre (QAPCC)

The aim for the establishment of the QAPCC is for quality assurance of in-service training in IPG campuses. QAPCC will also act as an accreditation body for the academic programmes offered. The establishment process was still an on-going process which reached near completion (90%) in December 2016.

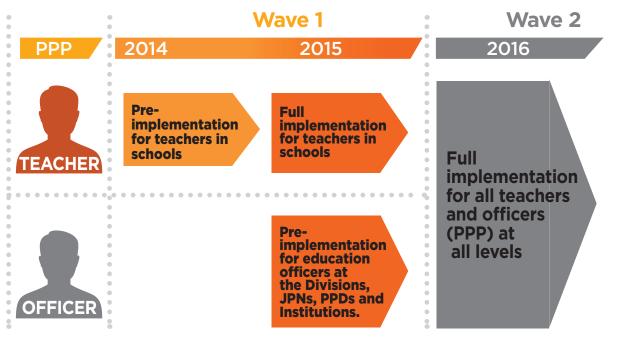
Establishing the IPG Transformation Management Office (TMO)

In order to execute the IPG transformation, the TMO was established in 2016 spearheaded by six officers. The main roles of TMO is to manage the IPG transformation planning and development, monitor the execution of the IPG transformation activities, and to manage the change and engage relevant stakeholders through communications and capability management.

Unified Instrument

The Unified Instrument (*Penilaian Bersepadu Pegawai Perkhidmatan Pendidikan*, PBPPP) was approved by the central agency, the Public Service Department (*Jabatan Perkhidmatan Awam*, JPA) to replace the Annual Performance Evaluation Report (*Laporan Nilaian Prestasi Tahunan*, LNPT) in 2015. In 2016, PBPPP became the sole instrument to assess the competencies and potentials of all teachers and education officers in the Ministry.

Exhibit 2-22: Stages of Implementation of the *Penilaian Bersepadu Pegawai Perkhidmatan Pendidikan*, 2014-2016



Source: Teacher Education Division (BPG)

In 2014, Competency Development and Assessment Division (*Bahagian Pembangunan dan Penilaian Kompetensi*, BPPK) produced the instrument and Guidelines for PBPPP, Guidelines for Evaluators including videos, checklists, Standard Operational Procedures, brochures and manuals. BPPK also conducted trainings to all schools, divisions and educational institutions. These efforts were important to ensure all teachers and education officers had the same understanding on the processes of evaluation using the instrument.

In 2016, PBPPP was successfully used to assess the performance of 438,228 PPP under the Ministry. Evaluations using PBPPP will determine the level of competency of officers to further develop their capabilities through Continuous Professional Development (CPD). The evaluation scores will also be used to determine annual increments, to seek approval to further studies, to identify officers for exit policy, promotion and career pathways.

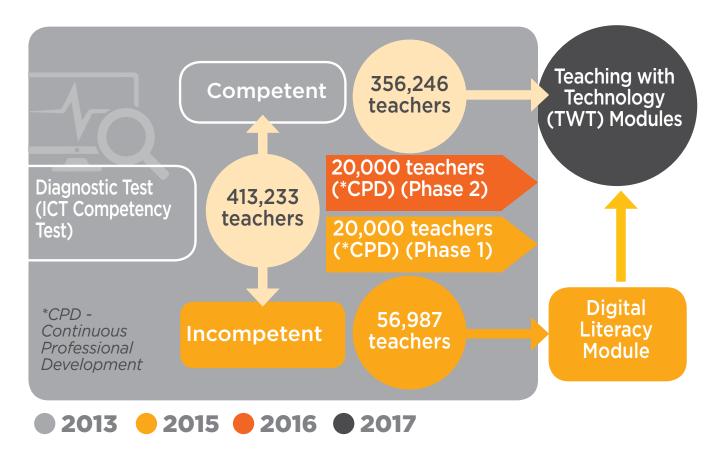
Enhancing ICT Literacy For Teachers

In 2013, Teacher Education Division (Bahagian Pendidikan Guru, BPG) administered an online Diagnostic Test to 413,233 in-service teachers throughout the country to measure teachers' ICT competency level. The instrument was recognised by the International Society for Technology in Education (ISTE) and was administered using the Microsoft Digital Literacy Course platform.

A total of 356,246 teachers who scored above the minimum level of ICT literacy went through the Teaching with Technology course, while the remaining 56,987 teachers who did not meet the minimum level of ICT literacy were required to complete a series of online training modules through the Online Digital Literacy Course (Exhibit 2-23). The online course used the IT Academy curriculum developed by Microsoft through the Enhanced Teachers Learning Network (ETLN). Teachers had to complete five modules of self-training before they could sit for the Digital Literacy Self-Assessment to identify their new level of ICT literacy.



Exhibit: 2-23: The Process of Assessing Teachers' ICT Literacy Level



Source: Teacher Education Division (BPG)

The implementation of ICT Literacy Training is in line with the aspirations within the Blueprint to ensure teachers achieved at least at a minimum level of ICT literacy by 2016. By having competency in ICT, teachers will be able to use innovations in pedagogy to improve student learning outcomes in the future. The Online Digital Literacy Course (accessible at https://www.etln.edu.my) was implemented in two phases. The first phase was implemented in 2015, while the second phase was implemented in 2016 with 20,000 teachers each.



Exhibit 2-24: Overall Achievement for the Online Digital Literacy Course, 2015-2016

Target for teacher participation: 40,000

Registered Participants
42,886

Exempted Participants

256
(0.6%)

Non-Completion
313
(0.7%)

Participants Completion *42,317

Note: Number of participants completion exceeded the target set.

Source: Teacher Education Division (BPG)

ICT Literacy Online Training Motivates Teachers To Learn More

Pn. Siti Rahayu binti Ramli, a religious teacher who participated in the ICT Literacy Online training.

"I support this online training because it's user friendly and could be accessed at any time. Teachers could repeat the training until they had successfully passed the assessment. The Guidelines provided were very comprehensive and helpful for better understanding of the online training."

"I believe that the ICT online training fulfilled the demands of the 21st century learning. Because of the flexibility of the training, teachers could complete their task at any time and at any place."

En. Mohd Zaki bin Mahmood,

JPN officer from Perak

"I find the modules provided were easy to understand. The digitalised literacy curriculum helps teachers understand every aspect of ICT in the teaching and learning process."

Cik Chuah Swee Hong

SK Jalan Panglima Bukit Gantang



ENHANCING SCHOOL LEADERSHIP QUALITY

Strong leadership is essential in ensuring positive outcomes in student learning. The most effective school leaders are not only managers but also instructional leaders who can transform their school environment. The Ministry strives to ensure every school, regardless of location and performance level, will have high-quality school leaders and a competent and supportive leadership team to drive their school performance.

In Wave 1 of the Blueprint implementation, a new selection process (Syarat Baharu) based on a set of new criteria was introduced to enhance the way principals are selected, developed and rewarded. The new criteria included enforcing the National Professional Qualification for Educational Leadership (NPQEL) course as a mandatory requirement for school leadership appointment. To further enhance the capability of school leaders, continuous preparatory and professional development was led and organised by Institute of Aminuddin Baki (Institut Aminuddin Baki, IAB). Consequently, with the availability of a

pool of qualified candidates and improved succession planning by states, the Ministry could fill vacant positions at a faster rate.

In 2016, the Ministry continued to provide support programmes for school leaders to enable them to become high-performing instructional leaders and move towards distributed leadership as envisioned in the Blueprint. The NPQEL training continued to be provided to prepare potential school leaders towards excellence. To further support the schools' leadership team, the Leadership Course for Middle Leaders (LCML) was introduced and piloted to help middle leaders develop leadership skills they need to ensure they are equipped with the skills as educational leaders. Other supporting programmes implemented in 2016 include PRIme (*Program Residensi dan Imersif*) - a mentorship programme aimed to help newly appointed school leaders ease of transition into new school, and CPD - courses and coaching programmes to help raise competency level.



Some of the accomplishments from school leadership programmes implemented in 2016 were as followed:

- NPQEL: A total of 1,685 participants were trained, which led to 56% of school leaders in all schools having the NPQEL/NPQH qualification.
- PRIme (Immersion): A total of 1,162 newly appointed school leaders coached by district SIPartners+.
- PRIme (Residency): Five prospective school leaders participated in the Residency pilot programme.
- CPD: A total of 17 (94.4%) school leaders who participated in the CPD training met the set minimum competency level.
- LCML: A new training module was developed and piloted. A total of 60 middle leaders participated in the pilot programme.

The Ministry also drafted a new guideline for the placement of high performing school leaders in low performing schools to introduce a performance and competency based management. The success of this year's programmes enabled the Ministry to fill 96.7% of vacant leadership positions at a faster rate. New school leaders were appointed at a rate of 9.7 days in 2016, in comparison to 88.1 days in 2014.



Young Headmaster Broke the Stereotype Barrier on Seniority Based Promotion

Previously, the selection criteria for new school leaders were linked to tenure instead of competencies. This resulted



in an aging cohort where the majority of school leaders were due to retire when they

assumed duty as school leaders. With the implementation of a new selection process in Wave 1 of the Blueprint, the Ministry managed to refine a new selection criteria based on performance and competencies to allow more headmasters/principals to serve longer prior to retirement, having been appointed at a younger age.

One young headmaster who shines through the system with his leadership style is Mr Ahmad Firdauz bin Abdullah Tahrin. At the young age of 32, Ahmad Firdauz was appointed as the new headmaster of SK Jaya Mulia, Pontian, **Johor** in 2015. Newly graduated from the NPQEL programme, he initially struggled to overcome the challenges of being a new and young leader at an SKM (Sekolah Kurang Murid) school. Then, most of his subordinates, who were senior officers with higher grades of service, were greatly surprised to see a much younger officer breaking the age stereotype in the appointment of headmasters.

Ahmad Firdauz knew he had to overcome the skepticism of his staff and started by gaining their trust through effective communication, actively listening and responding to concerns and suggestions from all teachers, staff, parents and the community. He also used the observeanalyse-act approach in all situations. Through this approach, he managed to implement several new initiatives which contributed to a more holistic teaching and learning environment. He incorporated the knowledge that he received through the NPQEL training, mentoring sessions from former headmasters, district mentors and LeapEd advisors.

Currently, Mr. Ahmad Firdauz is a headmaster at **SK Pekan Nanas, Pontian**. He continues to use the same

approach, emphasizing on the human factor and connecting with students and teachers at the ground level. He has been receiving positive feedback on his style of leadership from his peers. Mr Ahmad Firdauz managed to break the age stereotype wall with effective communication, trust, and always being positive.

PRIme (Residency) Programme Prepares Headteacher to Face Challenges

Sekolah Kebangsaan Sungai Las is located at a low lying land near Sungai Tong, Setiu in Terengganu. Due to the proximity to the river and low land, the school is usually flooded up to about seven feet of water every monsoon season. While most of the surrounding villages have been relocated to the nearby higher ground, the location of the school remains. Some parents and teachers are frustrated with the yearly flooding but Mr Fauzi bin Ibrahim faces it as a challenge he needs to overcome as the newly elected headmaster of the school.



As part of the provision to place high performing principals in every school as envisioned in the Blueprint, Fauzi

completed NPQEL training in 2016 prior to his appointment as a headmaster at SK Sungai Las. Besides that, he also received training through the PRIme (Residensi) programme to ease the transition into his new position. Fauzi managed to discuss with the outgoing headmaster on the strategic plan of the school for 2017 during the PRIme programme. The discussion helped him tremendously in facing the challenges in the school.

Upon his appointment as headmaster, Mr Fauzi rallied everyone to clean the school from the flood. He single-handedly sought for extra funding and even used his own money to pay for some of the cost for classroom decorations. Even though his efforts might be small, students' and teachers' motivation

increased, and he gained more trust from his staff and students.

Through the leadership training he received from IAB prior to



his new role and the continuous support from PPD and JPN, Mr Fauzi was fully prepared to face any challenges. As for his next course of action, he hoped to increase parents' motivation and boost the academic achievement of the school. Mr Fauzi strongly believes that without trust, one is not able to be a good leader. He hopes that his leadership during trying times will help to bring more community support to the school.



ENGAGING PARENTS, COMMUNITY AND PRIVATE SECTORS TO CREATE A LEARNING SYSTEM



The year 2016 was a year of exponential progress made by schools across the nation in actively engaging parents and the local community to be involved in the learning ecosystem at school. Parents involvement in school activities is measured

through their attendance in six main school activities, namely Registration Day, Report Card Day, Performance Target Setting Day, Prize Giving Day, Sports Day and the Annual Parents Teachers Association (*Persatuan Ibu Bapa dan Guru*, PIBG) Meeting.

In 2016, there was a significant increase in the number of schools recording strong parental involvement in the six key activities in school. The percentage of schools nationwide recorded strong parental involvement at 92.56% across these activities in contrast to 83.31% in 2015. There was also a sharp increase in the percentage of parents volunteering at school at 40.92% compared to the recorded percentage of 15.3% in 2015. These achievements were made possible by the hard work of the Parental and Community Involvement Trainers. There were in total of 96 National Trainers being placed in each district. The trainers were responsible in providing coaching to schools to increase the volume of parental involvement. The Trainers also provided schools with instruments and checklists in ensuring healthy parental engagement.

To increase the involvement of parents and community in the school ecosystem in Wave 2 of the Blueprint, a myriad of innovative strategies was created including expanding the role of PIBG in supporting schools, driving school-level engagement with broader community, providing a support network such as the Parents Support Group to learn and share best practices in working with and supporting their children learning and growth, and reaching out to their broader communities to collaborate on improving student learning.

The strategies above were proven successful in schools such as SMK Balung, Tawau, Sabah where the collaboration between the school administrators and the parents had drastically reduced the number of disciplinary cases among students. Another success story could be seen from the case of SK Paon, Lundu, Sarawak whereby parental engagement to improve the literacy rate among students resulted in lesser disciplinary cases in the school.

Disciplinary Court in SMK Balung Builds Students' Character

Disciplinary matters are often contentious with various stakeholders having polarising views on how a student ought to be corrected. In SMK Balung, disciplinary cases such as truancy, display of aggressive behaviour, bullying, petty theft, vandalism on school property and extortion were rampant. Instead of blaming parents over their children's disciplinary problems, SMK Balung decided to use this opportunity to bridge the differing opinions of the parents and the academic staff at school

SMK Balung decided to establish a disciplinary court, headed by the Senior Assistant of Student Affairs to address disciplinary matters between the students and parents involved, and the school administration. A systematic procedure is put in place where a proceeding involving the student and his parents would be convened and the charges read. The student will be given the opportunity to defend himself and justify his actions. The parents and the school will then deliberate on the charges and arrive at an amicable resolution to resolve the matter at hand.

SMK Balung noted that the Disciplinary Court impacted students more positively than the conventional method of disciplining student individually in absence of their parents. The school also felt a notable growth in character strength among students.

This strategy worked well for SMK Balung as parents were made aware that addressing disciplinary issues at school is a joint effort. As a result, SMK Balung saw more parents being actively involved in shaping the character of their children, contributing to a more conducive environment for their children's learning.



An illustration of the Disciplinary Court proceeding in SMK Balung



A tri-partite agreement being affirmed between the school, student and parents

Story Telling Activities Benefit Children and Parents

Madam Cheng Yu Ting is a career woman working in business marketing in Kuala Lumpur. This mother of two is a volunteer at her child's school, SJKC Lai Meng. She decided to become a volunteer after listening to her friends' exciting stories on their rewarding experience volunteering at school. The school provides opportunities for parents to participate actively in their



children's learning. Parents can even sit and read stories to students in the classrooms for the story telling sessions.

Yu Ting's children love storytelling sessions at home and that sparked an idea in her. "Volunteering in school will enable me to share the joy of listening to stories with other children. I take this as a very meaningful thing to do. I truly enjoy what I am doing through this group, and I say this honestly from my heart."

Students like the story telling sessions as the parent-volunteers presented their stories in various creative ways. "We use picture books to present the stories. Sometimes, we also tell stories by playing games with the children. We also do short plays from the picture book to present the stories". The parents believe that storytelling is important to enrich their children's learning as it teaches them moral values and character growth.

Yu Ting believes in today's world, parents and teachers are a community. "We can no

longer work separately on our own. Without closer collaboration between parents, teachers and schools, we are depriving our children from the best education they can get." She also believes when parents provide help in classrooms, they can help detect things which might go unnoticed as there are too many students for one teacher to care for. Their observations will assist teachers and the school to give better support to students in need. "For example, we might discover that some students have emotional issues or may struggle with some form of learning disability."

Though Ms Yu Ting works full time and struggles often with time management, she always tries to arrange her schedule as best as possible to volunteer at school. "Before becoming a volunteer in school, I always think being in school only benefits the children and teachers. However, when we, the parents, are in schools, surprisingly we too feel at ease. The time spent helping the school is a good break for us".

"To all parents, please go to school to help schools make learning experience happy and memorable for our children. If everybody can spare a little bit of time, like half an hour, to volunteer in school for even a simple activity like story telling it will be wonderful."

Ms. Cheng Yu Ting Mother.

SJKC Lai Meng





A Father's Commitment Changed the School Landscape

To see this particular figure of a man walking around **SMK Putrajaya Presint 8(1)** is not something strange for the students. **En. Mohd Zaini bin Mohd Said**, a father of two students in the school made the school his second home starting from March 2016 when he was appointed as the committee member of the PIBG, headed by Tuan Hj Roslan Abu Hanif. The PIBG committee often collectively discusses in meetings or via Whatsapp group on ways to help the school improve students' knowledge and build their character.

The school and the PIBG decided that school and discipline were the two pressing issues which needed immediate attention. Convinced that these two issues were inter-related, En. Zaini and a few fathers took proactive measures to patrol the area around the school after school started each morning to identify students who often skipped school or were involved in discipline problems. After two months of continuous monitoring, truant students were identified and a discussion with the parents was held. Collective efforts were carried out to ensure the students reformed academically, while the school counsellor with consent from their parents, counselled the students to turn over a new leaf. Positive punishments were meted out and these were to assist En Zaini and a few fathers to repair the school toilets, to beautify the school landscape and to do minor maintenance work.

According to En Zaini, "We found that students who were involved in disciplinary problems such as smoking or truancy were those who craved attention. When we involved them in physical activities such as maintenance and landscaping, they were able to apply what they have learnt, and we give our undivided attention. When we provided guidance and spent time with them or prayed together, they were encouraged to make positive contributions to the school. I am

thankful that now they voluntarily work with me to carry out some maintenance work in school. Thus, we were able to overcome both problems – maintenance issues and discipline."

"My experience and work as a contractor allow me to help the school in doing minor maintenance work. I am thankful that I have the time with the PIBG to implement various activities, whether academically or character building, for the sake of our children," he added.

Pn Nor Hayati Ishak, Senior Assistant (Student Affairs) expressed her gratitude for the unwavering commitment of the PIBG, especially to En Zaini who was willing to help the school at all times.

"Out of 80 teachers in the school, 72 are ladies. So, we appreciate the help of the fathers to instil discipline especially in our boys. En Zaini's commitment and willingness to come to school at night, sometimes at 2.00 am when required is invaluable to us. He could encourage the surrounding community to monitor the students' activities outside the school. As a result, we were able to instil the love for the school among students who were previously involved in discipline problems, to the extent that some of these students were willing to help the school while waiting for their SPM results. En Zaini also helped to organise academic improvement programmes with the help of volunteers from institutes of higher learning to support the students who have the potential to pass the exam. This effort is a testimony of how the cooperation among the school, parents and the community can help ensure a conducive learning atmosphere and make the school as a place for character building."

"In my 33 years of experience as an educator, I have never met a father who has such a high commitment for a school like En. Zaini. He is the runner, he is the maintenance officer, he is the disciplinarian, he is the gardener... he is the 'McGyver' of the school."

Datin Norbaya Mansor,

Principal, SMK Putrajaya Presint 8(1), Putrajaya

> Please scan to watch the video





ENCOURAGING PUBLIC PRIVATE PARTNERSHIP IN EDUCATION

The private sector plays an important role to support the national education system. The Public Private Partnership (PPP) launched by the Ministry of Education empowers communities across Malaysia to assist schools in raising their performance, and subsequently motivate schools to dream big. The current spectrum of PPP which ranges from Light PPP to Full PPP involvement by private sectors is shown in Exhibit 2-25.

Exhibit 2-25: Existing PPP Ecosystem in Education

LIGHT Public Private Partnership

FULL Public Private Partnership















One-off Programmes

School Adoption

Trust **Schools**

Fully Managed by Private Sector

One-off Programme

One-off programme is a form of sponsorship for educational programmes and activities from individuals or companies within a period of one year or less. Sponsorship can be in the form of financial contributions, materials and/or expertise based on the sponsor's interest and areas of expertise.

In 2016, the Ministry conducted a baseline study to identify the trend and percentage of contribution for one-off programmes. The study discovered that the type of contributions for the one-off programmes covered expertise and social services provision, financial contribution, and other contributions.

Exhibit 2-26: Findings from the Baseline Study: Percentage of Contributions by Type for One-off Programme

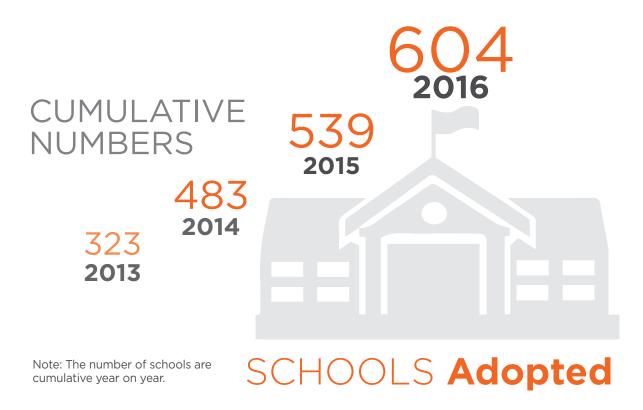


Services 16%
Monetary 20%
Others 64%

School Adoption Programme

The School Adoption Programme enables the private sector to assist government schools through intervention programmes for a short term (1 to 3 years). The programme varies from academic to non-academic excellence, particularly for the students in underserved communities. Among the organisations which contributed to the programme include the PINTAR Foundation, SP Setia Foundation, Sime Darby Foundation. PINTAR Foundation was one of the biggest contributors to the programme through its contributions to 483 schools in 2016. The number of schools adopted under this programme increased to a total of 604 in 2016 from 539 in 2015 as shown in Exhibit 2-27.

Exhibit 2-27: Number of Schools under the School Adoption Programme, 2013 - 2016



PINTAR Programmes: Private Sector Supports Towards Education Transformation

PINTAR Mobile Learning Unit (PMLU)

"I love PMLU because it has given me an opportunity to learn and discover new things in a fun environment. I am happy that I was able to apply what I have learned during class and used them at the interactive stations inside the PMLU. I do not have any preferred activity or interactive station as I love them all! Thank you PMLU and PINTAR for giving me this opportunity. I hope PMLU will visit my school again in the future."



Khairi Azahari Azizan

Student, SK Kuala Perlis, Perlis

Leadership Programme for PINTAR School Leaders (LPPSL)

"I found the LPPSL programme by PINTAR Foundation is truly beneficial among the teachers because there is so much input and ideas we can get from the trainers. This programme serves as a good platform for teachers to share their thoughts and concerns about their students and ways to



overcome the challenges. I also learned so many things from other schools in terms of management and teaching methods that are suitable for students nowadays. Thank you PINTAR Foundation for the opportunity."

Mohammad Azhan Shahrom

Discipline Teacher, SMK Seri Kota Paloh, Johor

Leadership Programme for PINTAR School Leaders (LPPSL)

"First of all, I would like to express my gratitude and thank you especially to PINTAR Foundation & UEM Group for the great opportunity. As one of the members of the administration board, I could clearly see our aims and goals. Starting with our driven vision & mission, the programme provides new insights for us to focus and move to the next level and make a paradigm



shift. SK Kampung Batu is now becoming more efficient in teaching & learning towards the 21st century. I believe in future, SK Kampung Batu will be able to compete side by side with other great schools. Inshaa Allah..."

Puan Sharidah binti Mustafa

Senior Assistant of Administration & Curricular, SK Kampung Batu, Kuala Lumpur





Danajamin100 Leadership Programme

"This programme has greatly benefitted me. It has helped me to overcome my shyness and improve my confidence level. I am now more comfortable interacting with people and happy to share my opinions with others. The programme has taught me how to be organised, to work in a team and to prioritise, enabling me to get the most out of revision time, and this has made

school work much easier to manage and even enjoyable."

Ghajehndran a/l Arnajalam Student, SMK Chederiang, Perak



PINTAR Action Song Programme (PASP)

"PINTAR Action Song Programme (PASP) is a tremendously good program for me because it gives the essential exposure of the importance of English language for my students and at the same time, I can gain new knowledge and experience in conducting a stage performance. I hope this programme will

continue in future because it surely helps to motivate the primary school students to learn English language and improve their skills in communicating using the English language."

Amirul Sufie B. Mohd Saleh Teacher, SK Senawang, N. Sembilan



PINTAR-HELP Programme (PHP)

"One of the most beneficial programmes I ever participated with lots of interesting activities and with experienced trainers. This programme is packed with essential knowledge that helps the teachers to overcome the challenges in teaching special education needs (SEN) students and to develop their own

teaching plan that is suitable for their students. It's a good programme for SEN teachers as it gave the insights and better preparation for teachers to develop consistent outcomes and to cope with the modern teaching."

Izhar Raihan Bin Muhamad Yaziq Teacher, SK Parit Penghulu, Melaka



Aflateen Financial Programme

"I have seen so many positive outcomes and feedbacks from my students after we joined the Aflateen programme. It was great to be part of this programme as we gained so much benefit and learnt so many things on how to manage our budget. My students are happy to apply what they had learnt throughout

the programme and frequently asked me when PINTAR will ever invite us again to join any other PINTAR programme."

Rohana Bt. Yunus @ Unus Teacher, SMK Tengku Temenggong Ahmad, Johor

Source: Pintar Foundation, 2016



Trust School Programme

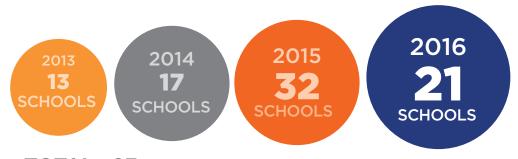
Leading the way in PPP is the Trust School Programme which is a public-private partnership initiative spearheaded by the Ministry to transform government schools. The Trust School Programme aims to transform the educational ecosystem through four strategic goals: Teachers, Students, School Leaders and the Community. The concept of Trust School is the holistic transformation of schools towards excellence. The private sector contributions will benefit schools in terms of school leadership capability building, providing expertise in raising the quality of teaching and learning, providing additional resource support and relevant value-added services to accelerate academic achievement and school performance. The Ministry continues to provide funds and resources for the day-to-day operations of schools.

The Trust School Programme is a strong collaborative partnership which uses the gradual release model. It is a long term-based programme of at least 5 years. The programme focuses on sustainable transformation of the schools involved. It also aims to create values for private sectors as 'partners' to the Ministry in education transformation. In 2016, the private sector supported 21 new schools for the programme. Since its inception in 2011, the Trust School Programme has positively impacted 83 schools across Malaysia.

Currently, the PPP initiative is more inclined towards "private sector support' rather than 'private sector led'. The private sector is still cautious on exploring the model of private sector fully managed public school. The Ministry will be conducting a feasibility study on the newly conceptualised model of fully privately run public schools.

Exhibit 2-28: Number of Trust Schools, 2013-2016

NUMBER OF TRUST SCHOOLS



TOTAL: 83

Private Sector Engagement Sessions

The Ministry remained committed in engaging with the private sector to create awareness, understanding and commitment via various media channels such as editorials, advertisements, edumercials, face to face engagement sessions, internet, newspapers and magazines.



(The Ministry vist to Weststar Group HQ, in May 2016)



(The Edge's Responsible Business Magazine highlights on PPP, 2016 Issue)



One of the sessions in the Sabah Education Roundtable in Kota Kinabalu, Sabah on April 25, 2016





ation technologies, conducting after of activities as well as running linesrojects and motivational talks for the mits with a minimum commitment of has learned new skills. "I war

Since its Isaach in 2014, 66, 940 students and 2,748 school leaders and teachers have to be beefined from it. One of them is a student from Selangor who says the programms has helped him improve the way he learns his subjects in school.

"Before this, I have always left over this, I have always left over

so manage to a point it has even become enjoyable."

Another student from Penang says he has learned new killis. "I was able to hearn about what it's like to be a news reader in the however the property of the property has been been been about the beautiful the whole and bass, which were totally new to me," he adds.

Meanwhile, a teacher from Malacca shares that since the implementation of the programme, his students have become mere aware of the importance of conservment and the programme. confined to just the Science medule."
Foundation supported
Pinnar Foundation has been one of the key
supporters of the MOE in the school adoption programme and through its support,
several institutives have backed off. Among
them are the Pintar Mobble Learning unit,
a leadership programme for Pintar school
holder, Pintar ac Govern School, Pintar
John School, Pintar ac Govern School, Pintar

The School Pintar School Pintar School

The School Pintar School

stil the right competencies in students of all the same time, the foundation is tracking at providing educational support both students and leachers, and leachers. Both students and leachers from the school adoption of the school

(Highlights on School Adoption Programme in Focus Malaysia Oct 29 - Nov 4, 2016 Issue)

Public Private Partnership Lab

To establish the next phase of PPP initiative in Wave 2, a lab focusing on identifying issues and developing solutions based on the approved PPP framework was held in September 2016. A total of 52 participants from the private sector and the Ministry were involved on a full-time basis in the lab. The main objective of the lab is to realign all activities in ensuring the Ministry's aspiration to become the preferred strategic partner in public private partnership in education is

realised. The scope for input prioritisation was divided into four main pillars: product innovation, strategic alliance and outreach, and standard governance operating procedures, and human capital. A total of 17 issues and 14 strategic action plans were proposed and designed by the participants. The ideas were syndicated with the Deputy Education Minister. YB Senator Datuk Chong Sin Woon and the top officials of the Ministry. Findings from the lab would be translated into plan of actions in 2017.





SUMMARY

The focus on improving quality in education centred on enhancing HOTS by intensifying efforts to integrate HOTS in the teaching and learning process, and securing IBMYP for schools to act as catalyst towards the acceleration of HOTS across schools in the country. The groundwork towards hands-on approach in the teaching of STEM subjects has been completed – teachers and lab assistants were trained and science labs were identified for maintenance. To enhance students' proficiency in basic literacy and numeracy, BM and English language, the Ministry is relentless in providing the necessary support to students and teachers. The quality of Malaysian teachers and school leaders continued to be the focal point of the education transformation through the development of CPD Master plan, various trainings and the IPG transformation.

Education transformation towards quality education and motivation to raise achievements, embedding universal values, and developing positive character among students is a collaborative effort between the Ministry of Education, parents, communities and the private sector. Nurturing future ready children and potential nation builders requires the active involvement of all parties which at the same time is the catalyst to the progress and prosperity of our nation.





"The best school systems deliver the best possible education for every student, regardless of ethnicity, geographical location, or socioeconomic background. The education envisioned for Malaysia is one where all students – regardless of who their parents are, or where they study – will be equipped with the tools and skills they need to unlock their own future"

Malaysia Education Blueprint 2013-2025, p 2-3

ENSURING EQUITY IN EDUCATION

Since independence, the ideal of equity has remained one of the fundamental goals of the Malaysian education system. Moving into 2016, the first year of Wave 2 in the education transformation, the Ministry remains unwavering in its quest to achieve equity in education at all levels of education by narrowing the achievement gap across schools, regardless of location and specific needs. The Ministry has continued to enhance the following key initiatives under the Malaysian Education Blueprint 2013-2025 (Blueprint):

- District Transformation Programme
- Orang Asli and Indigenous Education
- Inclusive Education

"Equity in education is the means to achieving equality. It intends to provide the best opportunities for all students to achieve their full potential and act to address instances of disadvantages which restrict educational achievements. It involves special treatment/action taken to reverse the historical and social disadvantages that prevent learners from accessing and benefitting from education on equal grounds. Equity measures are not fair per se but are implemented to ensure fairness and equality of outcome"

UNESCO
World Education Forum 2015





DISTRICT TRANSFORMATION PROGRAMME

The District Transformation Programme (DTP) enables all school districts in every state to accelerate school improvement. focusing on school quality and students' outcomes, including those for students with specific needs. The State Education Departments (Jabatan Pendidikan Negeri, JPN) and the District Education Offices (Pejabat Pendidikan Daerah, PPD) now have greater empowerment and accountability to support and monitor schools. PPD will analyse school data. diagnose underlying problems, provide differentiated support for schools. Performance dialogues will be held at all levels to provide a structured process in monitoring, problem solving and remedial actions. To improve efficiency and reduce bureaucratic inefficiency and gridlock, PPD will be the primary communication channel to schools, integrating all directives from the federal or state departments.

The year 2016 marked the fourth year of the DTP implementation. The programme was established to achieve the following goals:

- Reducing the percentage of low performing schools (Band 6 and 7) to 0.8%.
- Increasing the percentage of high performing schools (Band 1 and 2) to 37%.
- Narrowing the achievement gap between urban and rural schools by 30%.
- Increasing the percentage of PPD achieving excellence rating of 4 and 5 Stars to 2%.

Various intervention programmes were planned and executed at the Ministry,

state and district levels to accelerate school improvement. At the Ministry level, the following main interventions were implemented in 2016:

- Cascading Key Performance Indicators (KPIs) to states and districts.
- Conducting monitoring and support visits to all PPD.
- Conducting national and zonal focused performance dialogues.
- Conducting upskilling programmes for School Improvement Specialist Coaches+ (SISC+) and School Improvement Partner+ (SIPartner+).
- · Reviewing the PPD excellence rating assessment and collecting baseline data.

Cascading KPIs to States and Districts

The Ministry has developed a set of KPIs anchored on improving school performance. The KPIs include reducing the number of low performing schools, increasing the number of high performing schools, narrowing of the performance gap between urban and rural schools in Primary School Assessment Test (Ujian Penilaian Sekolah Rendah, UPSR) and Malaysia Certificate of Education (Sijil Pelajaran Malaysia, SPM), and lastly increasing the number of PPD rated as four or five stars. The KPIs are cascaded from the Ministry to states and districts and to schools, ensuring consistency and coherency of targets throughout the system. In 2016, the KPIs for DTP were cascaded through multiple sessions of target setting from the federal levels to the states and districts.

Conducting monitoring and support visits to all PPDs

Monitoring and support visits were conducted to all 142 districts in 2016, spearheaded by the School Management Division. Areas of improvements district management were identified and potential interventions were deliberated in each district. For example, through the monitoring visits, it was discovered that even though performance dialogues were duly conducted, their outcomes and further actions were not tracked by some PPD, leading to weak follow up actions. PPD which vet to achieve the desired performance standards were then coached to enhance their competencies in areas identified for improvements. A few PPD did not conduct intervention activities as planned. Thus, they were coached on good governance to ensure effective implementation of district intervention plans. The PPD were also trained on financial planning and procedures to maximise students' outcomes.

Conducting National and Zonal Focused **Performance Dialogues**

Regular performance dialogues conducted to ensure schools, districts, and states were on track to achieve their targets. The performance dialogues used granular performance data to identify both strengths and weaknesses, followed by immediate revisions to the implementation plan to ensure issues were solved. Pertinent issues which hindered student achievements and school progress at the district levels were

discussed and resolved. The dialogue also served as a platform for states to seek specific support and assistance from the Ministry. In 2016, the National Performance Dialogues were held twice, once in May and another in December. The dialogue was chaired by either the Director-General of Education Malaysia or the Deputy Director-General with all the Directors of JPN in attendance.

In 2016, six performance dialogues were conducted at zone level - central, northern, southern and eastern zones including Sabah and Sarawak. The dialogues focused on academic performance as well as student attendance and discipline. The School Management Division, which is responsible to oversee the implementation of DTP facilitated the dialogues. The dialogues also served as a model illustrating effective ways of conducting dialogues for the district leaders. The dialogues were well received by all heads of PPD as it focused on improving work processes rather than fault finding session.

Moving forward, the scope of performance dialogues will be expanded from academic achievement to include co-curricular and sports achievements, psychometric assessment outcomes and school-based assessment to shift the focus towards holistic students' outcomes.

Conducting Upskilling Programme for SISC+ and SIPartner+

In line with the PPD expanded roles to support schools, the manpower at the district level was increased to provide focused interventions to schools based on their needs. The SISC+ and SIPartner+ were placed in all PPD to empower local leadership at improving schools by providing coaching to selected teachers and principals. As of 2016, only 1,133 out of the 1,287 SISC+ positions (88.7%) and 266 out of the 342 SIPartners+ positions (77.8%) were filled. Some PPD, particularly in rural districts in Sarawak, faced issues in attracting talents to fill these critical positions. Moving forward, the Ministry will explore creative alternatives to recruit and retain SISC+ and SIPartner+, especially in remote districts with severe vacancies.

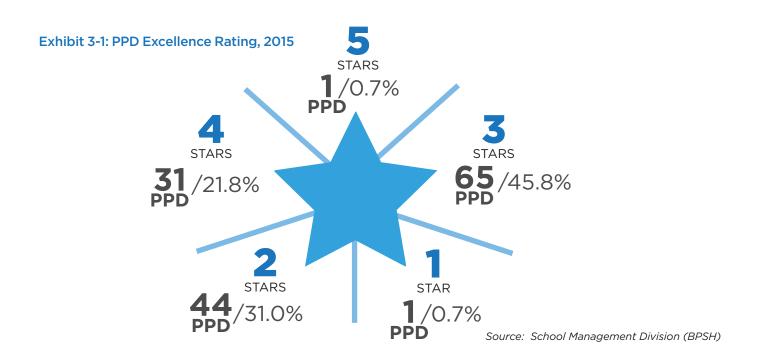
The Ministry will also review the role of SISC+ as subject-based pedagogical coach and explore the suitability of transforming the role of SISC+ as pedagogical experts across all subjects. SISC+ will also serve as the communication channel and internal spokesperson for the Ministry regarding education policies. To date, all SISC+ were upskilled in generic coaching and subject content of Bahasa Melayu, English Language and Mathematics. The upskilling course included higher order thinking skills (HOTS), the usage of the Curriculum and Assessment Standard Document, Schoolbased Assessment, and action research.

The SIPartners+ were placed in the PPD to assist school leadership in educational management and enhance instructional skills. To date, all SIPartners+ were upskilled to better support school leaderships in managing schools. The Ministry would also be assessing the impact of the SISC+ and SIPartners'+ trainings to improve the training delivery.

Reviewing the instrument Used to Rate PPD Performance

In 2015, the Ministry decided to rate the performance of PPD based on their KPI achievements. An instrument was introduced to assess and identify best practices and areas of improvement in district management. The indicators used to rate the performance of PPD comprised

the quality of management and students' outcomes, and access to education. Based on the results of the baseline data, it was found that the instrument did not truly reflect the quality of management of the districts as each PPD had different profiles, needs and challenges. In 2016, the Ministry reviewed and revamped the instrument and the assessment exercise to rate the performance of the PPD. The revamped instrument now consists of indicators on district leadership, district organisational excellence as well measurement of district and schools' outcomes. The revamped baseline ratings were then independently reviewed by external researchers. The 2015 PPD excellence baseline data showed that a total of 32 PPDs (22.5%) were rated at or above 4 stars



Achievement Gaps

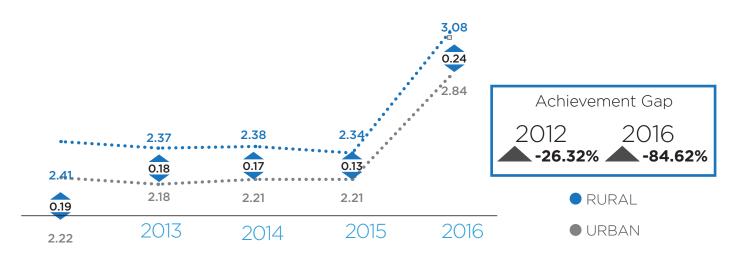
In 2016, the percentage of low performing schools (Band 6 and 7) increased to 1.9% and the percentage of high performing schools (Band 1 and 2) continued to show an upward trend from 36.8% in 2015 to 39.9%.

Achievement Gaps in UPSR 2016

The national achievement gap between urban and rural schools drastically widened by 26.3% in UPSR 2016 as compared to 2012, as per illustrated in Exhibit 3-2.

All states regressed in the 2016 UPSR. States with large cities suffered smaller regress while the east coast states had the largest drop in UPSR achievement, as per Exhibit 3-3.

Exhibit 3-2: UPSR Urban-Rural Achievement Gap, 2012-2016



2012

Exhibit 3-3: States Average Grade Point Regression in UPSR 2016

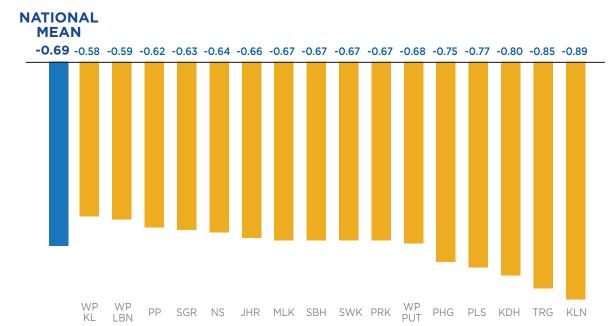
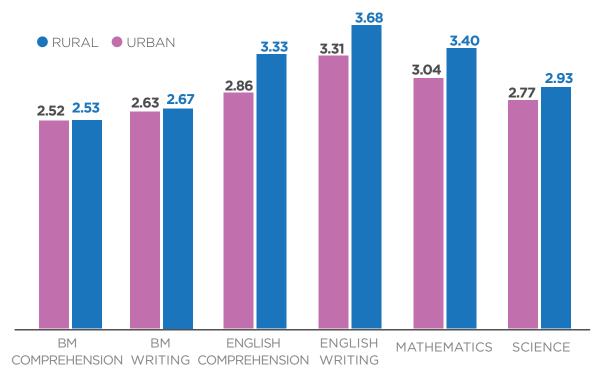




Exhibit 3-4 showed the 2016 UPSR urban-rural achievement in Bahasa Melayu, English Language, Science and Mathematics. Overall, urban schools performed better than rural schools across all subjects. The biggest achievement gap between urban and rural schools was in the subjects of English language and Mathematics. One of the main factors contributing to the widening of the urbanrural achievement gap was the urban-rural achievement gap in the English Language mastery. The weak mastery in English language among students in the rural areas was further compounded when the UPSR 2016 English Language paper was divided into two papers. Comprehension and Writing, and graded separately.

In 2016, the Ministry introduced a new format for UPSR based on the new Primary School Standard Curriculum (Kurikulum Standard Sekolah Rendah, KSSR), which focused on creativity and innovation, entrepreneurship, Information Communication and Technology and the expanded scope of 3R (reading, writing, arithmetic) to 4R to include reasoning (Exhibit 3-5). The KSSR curriculum was introduced in stages starting in 2011. Teachers were, thus, trained in inculcating and applying the HOTS in the teaching and learning process, and assessment. The performance gap between urban and rural schools indicated that there were disparities in the implementation readiness. Initial findings suggested that students in

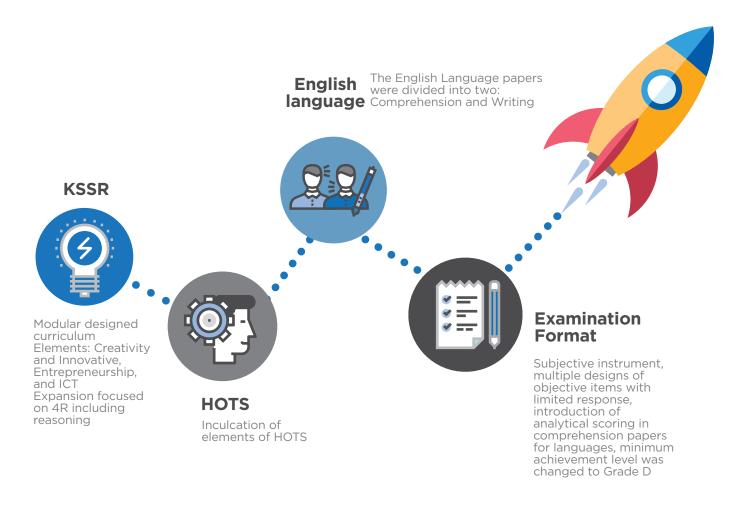
Exhibit 3-4: UPSR Urban-Rural Achievement in Bahasa Melayu, English Language, Science and Mathematics, 2016



most rural areas lacked exposure to the usage of English language. Some teachers and students relied heavily on rote learning rather than application of HOTS in teaching and learning process which negatively impacted their examination results, while some teachers had yet to fully grasp and internalise the standards set in KSSR.

The challenge for the Ministry is to provide differentiated support to rural schools to ensure students can master the skills required to succeed in the 21st century. More researches need to be done to identify factors within and outside the classrooms to provide innovative pedagogical skills and approaches, and content knowledge which is relevant to students' surroundings and caters to the learning needs of students in the rural areas.

Exhibit 3-5: Differences between UPSR 2016 Format and Past Years UPSR Format



Source: Examination Syndicate (LP) 2016

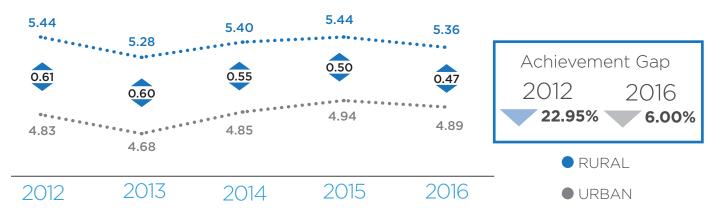
Achievement Gaps in SPM 2016

The achievement gap between urban and rural schools at the SPM level was further narrowed by 22.9% compared to 2012 (Exhibit 3-6). The achievement gap was narrowed due to improved performance by students in rural areas compared to students in urban areas.

Most states continue to show encouraging improvements with Federal Territories of Labuan and Putrajaya showing the largest gains, as per Exhibit 3-7.

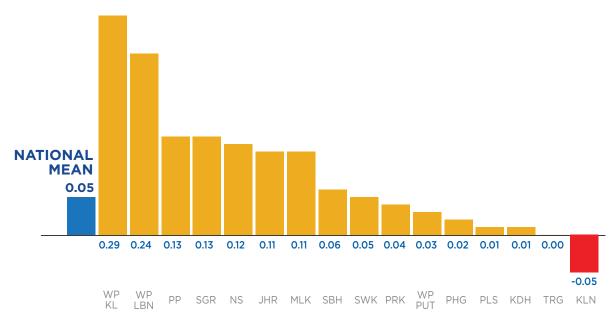
The Ministry will continue to prepare schools to effectively translate the new KSSM curriculum into learning instructions in the classroom.

Exhibit 3-6: National Urban-Rural Achievement Gap Trend in SPM, 2012-2016

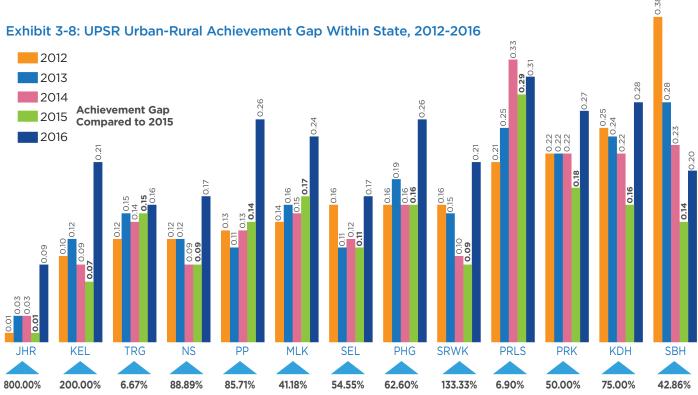


Source: Data from Examination Syndicate (LP); Analysis from Education Performance and Delivery Unit (PADU)

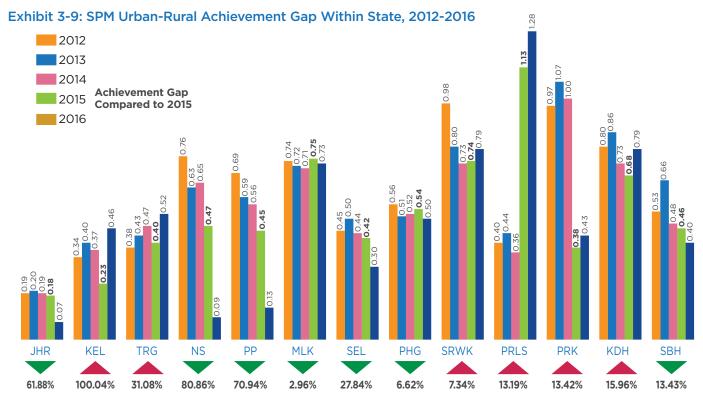
Exhibit 3-7: States Average Grade Point Improvement in SPM 2016 compared to SPM 2015



Mirroring the trend at national level, the urban-rural divide within states widened at the UPSR level (Exhibit 3-8) and narrowed at the SPM level (Exhibit 3-9).



Source: Data from Examination Syndicate (LP); Analysis from Education Performance and Delivery Unit (PADU)





ORANG ASLI AND INDIGENOUS EDUCATION

The Ministry is persistent in its aim to ensure all students including the Orang Asli and the indigenous community receive quality education that is relevant to their needs. The Orang Asli and the indigenous community in Malaysia comprise diverse ethnic groups with unique culture. backgrounds and languages. The ethnic groups are spread throughout different regions of the country with more than one third of the Orang Asli settlements located in remote areas. Education delivery which caters to diverse needs of the Orang Asli and the indigenous children pose different challenges compared to those in the mainstream urban settings. These minority groups are at higher risk of dropping out of school unless specific interventions are provided.

Enrolment, Attendance and Transition Rate of Orang Asli and Indigenous Students

Ensuring access to education can improve social mobility for the Orang Asli community and increase entry into mainstream job market. In 2016, a total of 40,257 Orang Asli students were enrolled in schools, as shown in Exhibit 3-10.

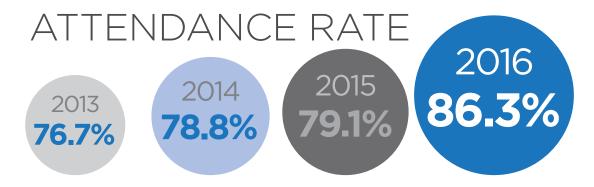
Regular school attendance is crucial for Orang Asli students to master subject content mastery and skills acquisition. The collective effort in supporting at risk schools of poor attendance had improved the Orang Asli school attendance from 79.1% in 2015 to 86.3% in 2016, significantly exceeding the 82% target set in 2016. A total of 71 out of 98 Orang Asli schools, which were monitored by the respective

Exhibit 3-10: Enrolment of Orang Asli Students, 2012-2016

	2012	2013	2014	2015	2016
Primary Education (Preschool to Year 6)	28,567	28,619	27,978	28,985	27,697
Secondary Education (Remove Class to Form 6)	10,304	10,530	13,229	11,691	12,561
TOTAL	38,871	39,149	41,207	40,676	40,257

PPD managed to maintain an average students' attendance above 82%, as per illustrated in Exhibit 3-11.

Exhibit 3-11: Attendance Rate in Orang Asli Schools, 2013 - 2016

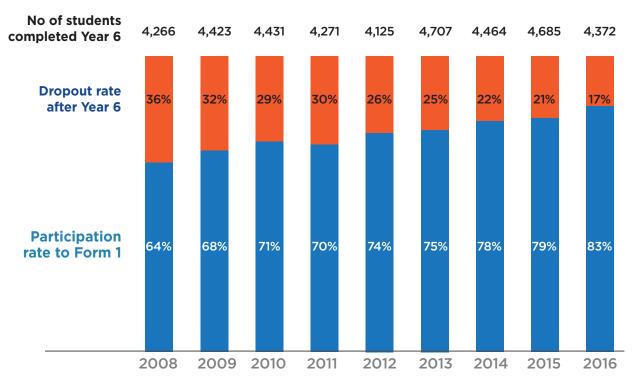


Source: School Management Division (BPSH)

students from primary to secondary level also showed a significant improvement

The transition rate among Orang Asli from 79% in 2015 to 83% in 2016, as per Exhibit 3-12.

Exhibit 3-12: Transition Rate among Orang Asli Students from Year 6 to Form 1, 2008 - 2016



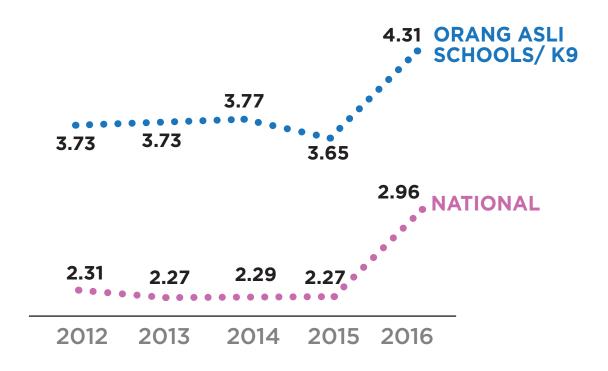
Source: School Management Division (BPSH)

Academic Achievement in Orang Asli and Comprehensive Special Model School (K9)

The performance of Orang Asli and K9 Schools regressed from a cumulative grade point of 3.65 in 2015 to 4.31 in 2016 (Exhibit 3-13), in tandem with the regression in the mastery rate for UPSR papers from 45.6% in 2015 to 43.8% in 2016 (Exhibit 3-14). Comprehensive Special Model School (K9) was established to provide nine years of schooling until lower secondary level with the aim to arrest the dropout rate among Orang Asli students after primary education.

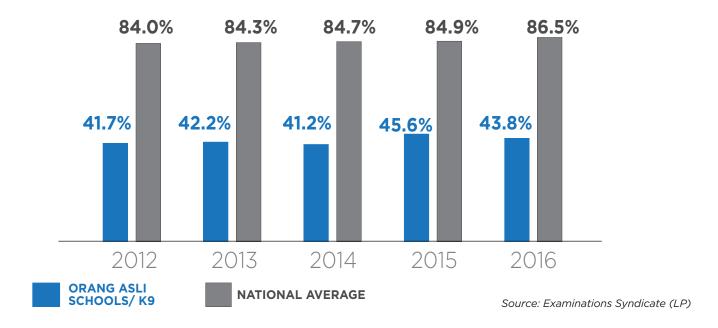
However, the overall achievement in UPSR from 2012 to 2016 showed these group of students performed far behind their peers, with a passing rate of 43.8% compared to the national passing rate of 86.5%. The wide gap signified a low mastery rate among the Orang Asli students in the 3R - reading, writing and arithmetic. Low literacy and numeracy skills will hinder the Orang Asli students' progress and achievement at the secondary level and posed high risk of dropping out of school.

Exhibit 3-13: National and Orang Asli Schools / K9 Cumulative Grade Point in UPSR, 2012-2016



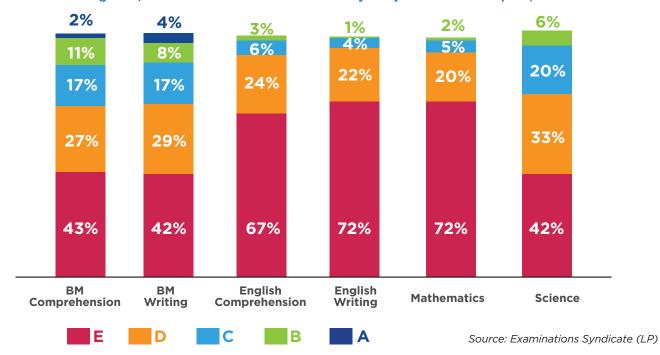
Source: Data from Examination Syndicate (LP); Analysis from Education Performance and Delivery Unit (PADU)

Exhibit 3-14: National and Orang Asli / K9 Schools Passing Rate in UPSR Papers, 2012-2016



The Orang Asli students still struggled to master the Bahasa Melayu subject. English language which is the third language for the students, posed a huge challenge for them to acquire. Thus, the subject became the weakest subject with a mere mastery rate of 33.3% for the English Language comprehension component and 27.7% for the writing component, as per Exhibit 3-15.

Exhibit 3-15: Orang Asli / K9 Schools Grade Distribution by Subjects in UPSR Papers, 2016





Providing Access and Reducing Student Attrition Rate

Currently, there are 98 primary schools catering to Orang Asli students. In 2016, a total of 40,257 Orang Asli students were enrolled in schools. The attrition rate among Orang Asli students had gradually reduced but remained significantly higher than the national average. As of 2016, seven K9 schools were in operation, staffed by 269 teachers, catering to 3,295 Orang Asli and indigenous students.

Basic Vocational Education (Pendidikan Asas Vokasional, PAV) is offered through four K9 schools. PAV provides an opportunity for Orang Asli and indigenous students aged 13 to 15 to be involved in vocational education. The Ministry is currently working to ensure these K9 schools meet the Department of Skills Development (Jabatan Pembangunan Kemahiran, JPK) accreditation criteria including teaching personnel, training facilities and premises to ensure that the students who have completed PAV at the lower secondary level are awarded the Malaysian Skills Certificate (Sijil Kemahiran Malaysia, SKM) Level 1 and 2. The accreditation will allow the Orang Asli and indigenous students to pursue higher level skill certification in vocational colleges.

Supporting Teachers in Classrooms

The Ministry recognises the importance of effective teaching and learning to improve student outcomes and strives to continuously support teachers in Orang Asli schools through pedagogical and capability enhancement training. Novice teachers are supported by the Teacher Education Division (*Bahagian Pendidikan Guru*, BPG) and the PPD have their teaching and learning strategies to meet students' learning needs.

Qualified Orang Asli students are accepted into the Bachelor in Education programme (Program Ijazah Sarjana Muda Perguruan, PISMP) to ensure a healthy pipeline of teachers who understands the local context and can serve the Orang Asli and indigenous communities' best interest. Special considerations are given to the Orang Asli and indigenous students who aspire to enter the teaching profession. The minimum academic entry requirement into PISMP for Orang Asli and indigenous applicants is six credits in SPM, compared to five distinctions for other applicants. In 2016, 30 Orang Asli and indigenous students were enrolled as teacher trainees. The pioneer cohort of the Orang Asli and indigenous teacher trainees completed the programme and are already serving in various Orang Asli schools throughout the nation (Exhibit 3-16).

Exhibit 3-16: Number of Orang Asli and Indigenous Students Enrolled in PISMP by Cohort, 2010-2016

ENROLMENT	Year of Intake	Size of Intake
IN PISMP	2010	10
	2011	-
	2012	25
	2013	14
	2014	30
	2015	30
	2016	30
	Total	139

Source: Institute of Teacher Education Malaysia (IPGM)

Improving Literacy Rate

The Curriculum for the Orang and Penan (Kurikulum Orang Asli dan Penan, KAP) is a modified and adapted syllabus and curriculum which has been contextualised to the Orang Asli and Penan perspectives. The curriculum is currently being implemented in 30 Orang Asli schools in Perak, Pahang, Terengganu, Kelantan, and six Penan schools in Sarawak. Moving forward, the Ministry will update and revise KAP to ensure alignment with the design framework and principles of KSSR.

In its fervent effort to improve literacy rate within the Orang Asli and indigenous communities, the Ministry has introduced adult Classes for the Orang Asli and Pribumi communities (Kelas Dewasa Orang Asli dan Pribumi, KEDAP) to ensure sufficient literacy and numeracy mastery among them to support their children's learning. In 2016, a total of 89 classes were implemented, a decrease from 119 classes conducted in 2015. The opening of KEDAP classes depends on allocation received by the Ministry.

Collaboration with the Private Sector

The Ministry aims to strengthen partnership with other agencies as well as international bodies to support the Orang Asli education transformation agenda. State and local education leadership are urged to create a comprehensive ecosystem to



Deputy Minister of Education II, YB Senator Dato' Chong Sin Woon chairing the Orang Asli Education Roundtable

achieve these goals. In 2016, the Ministry managed to engage 32 schools with other governmental agencies, corporate partners, NGOs and universities to contribute towards the betterment of Orang Asli education. A few examples of the successful collaboration between schools and the various agencies include the EMPOWER ECER, Marlborough College, Kentucky Fried Chicken Company, *Universiti Sains Islam* Malaysia and T7-Global which helped to build four classes in SK Sg Berua, Terengganu and SK Ladang Pendas, Gelang Patah, Johor.

Orang Asli Education Roundtable and Problem Solving Lab

To provide access to quality education for all, the Ministry must consider key issues which are hampering students' access to schools and impeding students' academic performance. A roundtable discussion was held on 29 September 2016 to understand the issues and challenges faced pertaining to Orang Asli education. The roundtable was chaired by the Deputy Minister of Education, YB Senator Dato' Chong Sin Woon and attended by academicians, non-governmental organizations, Department of Orang Asli Development, the National Indigenous Pedagogy Excellence Centre, community representatives and school principals. It is of utmost importance for the Ministry to identify and resolve key issues concerning Orang Asli students' performance and develop a holistic approach to improve access and quality of education.

The issues discussed during the roundtable formed the scope of discussion in the Orang Asli Education Lab to develop the action plans for 2017. The lab was facilitated by PADU and PEMANDU. The lab members comprised of representatives from various divisions in the Ministry, JPN, PPD, school leaders and teachers, Institutes of Teacher Education, community leaders, the Department of Orang Asli Development, the Ministry of Higher Education, the Ministry of Human Resource, academicians, non-governmental organisations and non-profit organisations. The Orang Asli community leaders asserted that they too had high expectations and desired the best education for their children, dispelling assumptions that formal education was irrelevant to the livelihood of the indigenous people.

Recommendations from the Orang Asli Education Lab

The Ministry will strengthen the governance of Orang Asli school management and administration to ensure all issues and problems faced by Orang Asli children are resolved promptly, taking into consideration the existing socio-cultural practices.

Beginning 2017, the Ministry will focus its efforts to implement the 11 initiatives proposed in the problem-solving lab to address the issues of obtaining quality education for the Orang Asli community. The 11 initiatives proposed to raise the performance of Orang Asli students are:

- 1. Strengthening Orang Asli Pedagogical Programme to ensure Orang Asli students benefit equally from the mainstream curriculum.
- 2. Sharing of best practices of Orang Asli education management and delivery with all 98 Orang Asli schools.
- 3. Ensuring adequate infrastructure for primary schools, especially those which have been identified to be upgraded as K9 Schools.
- 4. Expanding Comprehensive K9 Schools in Kelantan, Perak and Pahang.
- 5. Allowing flexibility in schooling days and time for Orang Asli schools based on local needs.
- 6. Creating Tengku Ampuan Afzan Community Schools (SKTAA) for Orang Asli students.
- 7. Ensuring that the K9 schools which offer PAV meet the *Jabatan Pembangunan Kemahiran* accreditation criteria for training facilities and premises, teachers, curriculum training, and quality assurance system.
- 8. Expanding PAV and PVMA in ten secondary schools with high Orang Asli enrolment in Kelantan, Perak and Pahang.
- 9. Establishing Community Education Centres for children from preschool to Year 2 involving parents and members of the community as teaching manpower guided by nearby primary school teachers.
- 10. Enforcing conditional scholarships for Orang Asli to ensure they return to serve their community.
- 11. Building student hostels and parent transit homes through public-private partnership.

Orang Asli students in SK RPS Banun Excelled through Concerted Efforts

SK RPS Banun is a remote school located in Grik, Perak, 150km off the North-South Expressway. In 2015, SK RPS Banun was the weakest performing Orang Asli school with an overall 10% mastery rate in literacy and numeracy. English language was the most critical subject – no student attained the minimum proficiency in the language.

In 2016, the Ministry conducted a series of fact finding sessions in SK RPS Banun to analyse root causes of weak performance and strategise interventions along with the school and district leadership. In July 2016, the Ministry strategically deployed Orang Asli teacher trainees from IPG Tengku Ampuan Afzan to be placed in the school for their 3-month practicum programme. The move allowed the teacher trainees to gain real experience of teaching in a challenging Orang Asli school and provide support to the teachers in the school to deliver lessons effectively.

The teacher trainees, supported by experienced lecturers from IPG Tengku Ampuan Afzan, planned and conducted programmes engaging the local community - the OPS 3M programme. Focus was given on improving basic literacy. In the OPS 3M programme, students received daily guidance and coaching from a teacher to improve their literacy. The activity was conducted for 30 minutes daily in small groups.

Games and sport activities were introduced along with academic lessons to encourage attendance and ignite the



Support visit by Dato' Hj Tajuddin bin Jab, Deputy Director of Education (Operations) at SK RPS Banun.

fun in learning. The teacher trainees also fostered close rapport with the local community by conducting monthly visits during weekends to the villages.

The concerted effort produced encouraging improvement as reflected in 2016 UPSR. The mastery rate for English Language Comprehension showed the highest improvement, from 0% mastery rate in 2015 to 21% in 2016. Similarly, mastery rate for Science jumped from 7% in 2015 to 35% in 2016. Mastery rates for the Bahasa Melayu Writing component and Mathematics also showed improvement.



INCLUSIVE EDUCATION

Providing opportunities for students with special education needs (SEN) to receive quality education comparable to those in the mainstream is clearly emphasised in the Blueprint. The Ministry intensified efforts to provide special education to more SEN students through the implementation of inclusive education in Waye 2.

Inclusive Education Programme (IEP) aims to provide educational opportunities for SEN students to be in a regular classroom with students in the mainstream. The students will follow the same curriculum, receive guidance from the mainstream teachers with the help of a special education teacher. Appropriate assistance is provided to enable SEN students to participate in social interactions and learning alongside their peers in the mainstream classroom.

In 2015, the Ministry had set an ambitious target of achieving 30% of SEN students enrolled in IFP at the end of Wave 1 (2013-

"Inclusive education programme" means an education programme for students with special education needs, attended by students with special education needs alongside other students in the same class in government schools or government-aided schools"

Source: Regulations of Education (Special Education, 2013)

Exhibit 3-17: Percentage of SEN Students in Inclusive Education Programme (PPI), 2013-2016

INCLUSIVE EDUCATION PROGRAMME

YEAR 2013 2014 2015 2016

STUDENTS (%) 9.5% 18.4% 23.2% 30.3%

Source: Special Education Division (BPKhas)



2015). The target set was not achieved as the enrolment of these students in IEP at the end of 2015 was 23.2%. Thus, the target was maintained for the first year of Wave 2 (2016).

The Ministry is proud to note that with numerous efforts done to expand inclusive education programme, the percentage of SEN students has significantly increased in the government and government-aided schools since the start of the Blueprint implementation in 2013. In 2016, the percentage of SEN students in inclusive education rose to 30.3% (Exhibit 3-17). There was also a tremendous increase in the number of schools implementing IEP, parallel to the increase in enrolment. The number of schools implementing IEP significantly increased to 5,811 schools in 2016 from to 4,869 in 2015, an additional of 942 schools.

It is important to note that before the focused and intensified efforts to implement IEP, most SEN students were enrolled in Special Education Schools (SES) or schools with Special Education Integration Programme (SEIP). Parents were sceptical of enrolling their children in IEP due to lack of knowledge and understanding on the beneficial outcome of IEP on their children's potentials.

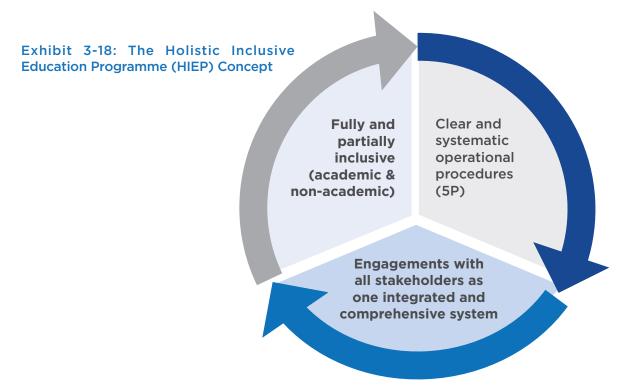
Thus, several awareness campaigns were conducted nationwide to educate parents and the community on the importance and provision of special education. These campaigns resulted in more students being accepted to learn together with mainstream students.

To support and encourage more SEN students to enrol in IEP, schools were equipped with relevant resources such as physical infrastructure, trained special education teachers and support services. Since 2013, continuous trainings were also provided to mainstream teachers and special education teachers to help them deal with SEN students in the IEP. Beginning 2016, the IEP was scaled up with more strategies to encourage enrolment among SEN students. The target set was 30% SEN students enrolled in IEP by end of 2016.

Holistic Inclusive Education Programme (HIEP)

The Holistic Inclusive Education Programme (HIEP) was a programme piloted by University of Science Malaysia (USM) in five primary schools in Larut, Matang and Selama districts from March 2015 until October 2016. A holistic

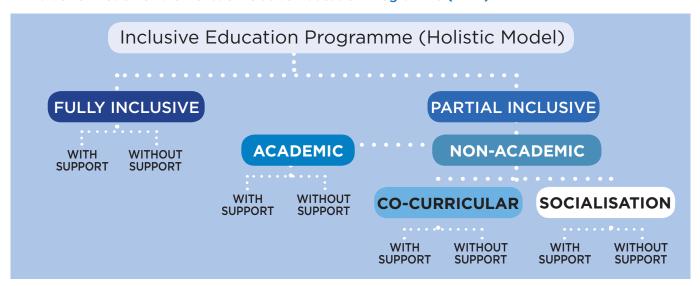
concept of IEP was developed comprising three main aspects as shown in the diagram below (Exhibit 3-18). The holistic concept will help schools to implement more effective IEP to enhance student potentials.



From the IEP concept, an existing HIEP model was redesigned based on feedback and suggestions received from the school teachers and stakeholders involved in the pilot programme. The adapted HIEP model

will be used as a guide to implement a more effective IEP towards the holistic development of SEN students. The model comprises two main components as displayed in Exhibit 3-19.

Exhibit 3-19: Model for the Holistic Inclusive Education Programme (HIEP)





Inclusive Education: Raising Confidence Among Students with Special Needs

Inclusive education aims to provide equitable education opportunities for students with special education needs (SEN) in the same classroom as their mainstream peers. Interactions between SEN students and mainstream students are beneficial to all as the mainstream students will increase knowledge about the needs of SEN students besides inculcating positives values such as cooperation and helpfulness. SEN students will also be able to build self-confidence and have opportunities to carry out numerous school activities alongside their peers.

SK Changkat Larut, Taiping, Perak and SK Long Jaafar, Kamunting, Perak are in the District of Larut, Matang and Selama in Perak. The two schools were among the five schools chosen to be the pioneer schools for the Holistic Inclusive Education Programme (HIEP), which is a new model for inclusive education. The programme was a collaboration between the Ministry of Education and the University of Science, Malaysia.

SK Changkat Larut has five special education classes with six teachers and four teacher assistants. Most SEN students in the schools are in the learning disability category who had yet to master the 3R (reading, writing

and arithmetic). Students from the special education classes were screened to ensure their mastery in basic literacy and numeracy and achieve the appropriate skills level to enable them to join the inclusive education programme and study together with their mainstream friends.

Senior Assistant for Special Education, En. Mohd. Azaini Sham bin Mohd Ali, informed that SK Changkat Larut implemented a comprehensive special education programme. Students' learning was based on students' ability. For those who were not academically inclined, they were enrolled in inclusive programmes in sports and co-curricular activities, and uniformed bodies.

Puan Jasmiah binti Abu Bakar, a mainstream teacher informed, "As a mainstream teacher, I help the SEN students individually. We will teach the SEN students together with the mainstream students to ensure they do not feel left out. We treat them the same as their normal friends. Their learning becomes better and they will have more confidence in themselves."

Senior Assistant for Special Education at SK Long Jaafar, Puan Faridah binti Ghazali informed that SEN students were sensitive children. She firmly stated, "Teachers must be patient and encourage their interest to learn. SEN students are more attracted towards learning methods which use visuals

and games.... The Inclusive Education Programme greatly helped the SEN students conduct themselves and adapt to their friends, and the classrooms."

A father, **Ustaz Affendy**, had a son who was enrolled in the inclusive education programme in SK Long Jaafar. His son had dyslexia and following the advice of a specialist, he sent his son to SK Long Jaafar. He informed, "Alhamdulillah, to date, I have met with his English Language teacher and was told that my son has showed improvement."

Headmaster of SK Long Jaafar, Tn. Hj. Mohd Nasir bin Abu Bakar notified that inclusive education in his school was well received by parents with SEN children. He suggested that parents with SEN children identify their children's ability as early as possible. Parents need to contact special education schools or schools with inclusive education and see a doctor for confirmation or get support from relevant parties so that the children could be registered at special education schools or schools with a special education programme.

Affini was happy to be in the inclusive education programme as she could interact with many friends and had a teacher who was caring and understand her ability. "My teacher and friends are good to me. My friends help me in my studies and my needs."

The school has provided a toilet specifically for me which makes things easier. My teachers are helpful and always encourage me to study." Affini's advice to other SEN students, "Keep up with the good efforts, do not give up and always say your prayers.

Nur Affini binti Muhammad Nasrun

SEN student with physical disability, SK Changkat Larut

Irfan voiced his feelings of being in the inclusive education programme, "I like the school as it is a fun place to be in. I have many friends, the teachers are kind, and the food in the canteen is good. My teacher teaches us to write and read, and it is fun. My friends also teach me to write." Irfan is also one of the football players for his school.

Muhammad Irfan Hakimi

SEN student with learning disability, SK Long Jaffar

Early identification of SEN children and providing them with the right education programme are essential towards developing their potentials and raising their confidence to become productive citizens. This action can contribute towards the development of a caring and inclusive nation.

Please scan the code to watch video



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Development of Inclusive Pedagogy Implementation Guide

The teaching and learning process in inclusive classrooms plays a crucial role in ensuring effective learning for SEN students. In 2016, the Inclusive Pedagogy Implementation Guide was developed to assist mainstream teachers and special education teachers in carrying out their teaching and learning for SEN students in inclusive classrooms. The guide includes information on the characteristics of different categories of disability, specific teaching and learning method for SEN students, as well as other support services such as therapies. learning accommodations and special learning tools which can be applied in the classroom.

The Placement Instrument for SEN Students

The Placement Instrument for SEN students (Instrumen Menentu Penempatan Murid Berkeperluan Khas, IMPaK) for 4-6 year old children was developed in 2014 as a trial edition. The instrument was used to assess students in areas such as cognitive, speech and language, motor skills as well as behaviour. Results from this assessment were used to place preschool SEN students in suitable special education programmes based on their individual abilities and potential. It can also be used to assist teachers in planning



Inclusive Pedagogy Implementation Guide



Guide Book for Placement Instrument for SEN students

and developing support needed by each student. In 2016, the instrument was revised based on feedback and suggestions from teachers and relevant professionals to be administered to all preschool SEN students in 2017.

Support and Interventions for SEN Students

In 2016, the Special Education Services Centre (Pusat Perkhidmatan Pendidikan Khas. PPPK) officers consisting of an audiologist, psychologist, speech therapist, occupational therapist and peripatetic went out to provide support to 1,186 students who were undergoing full or partial inclusive programmes in schools across the nation. The services provided included assessment of students' level of performance and abilities, intervention plan to help increase learning potential and well-being of students as well as consultation to students and teachers on managing related issues. Consequently, students who needed more intensive intervention were referred to the nearest PPPK for further individually-catered sessions.

Evaluation on the Effectiveness of Special Education Training

From 2013 to 2015, a total of 8,722 mainstream and special education teachers attended the professional development trainings for inclusive education. In 2016, a study was conducted to measure the effectiveness of the trainings through the involvement of 351 mainstream teachers. Based on the findings, majority of the respondents provided positive feedbacks, particularly in terms of the impact on their teaching strategies and approaches on subjects taught and positive responses from their students.

Exhibit 3-20: Support Services by Special Education Services Centre



Source: Special Education Division (BPKhas)

Increase Awareness on IEP and SEN Students

In 2016, efforts in promoting IEP to increase public awareness on the provision of education for SEN students were intensified through major newspapers in Malaysia. Coverage on the implementation of IEP highlighted the Ministry's commitment to increase enrolment of SEN students.

Newspaper Cuttings: Coverage on IEP



gram Pendidikan Inklusif tu pelajar SMK Bukit Baru

Menengah Kebangsaan it Baru di Ayer Keroh, errupakan salah sebuah enengah harian yang maksimum," katanya ketika ditemui di sekolah tersebut, baru ni.
Menurut Rosli, kaedah tersebut berbih kepada teknik memudah

merupakan anak kepada psangan polis dan kakitangan Suruhanjaya Pilihan Raya (SPR) di negeri ini. Bagi pelajar tingkatan enam, Muhammad Aris Abu Bakar, 20, pula, dia tidak berasa tersisih wa-

Peluang murid keperluan khas bersaing secara sihat

MASIH ramai dalam kalangan ma-syarakat hari ini berpendapat kanak-kanak yang mengalami masalah disleksia sebagai bodoh dan digo-longkan di bawah Orang Kurang Upaya (OKU).

Hakikatnya, golongan ini ha-nya mengalami masalah gangguan dalam proses pembelajaran dan ia-bukan sejenis penyakit. Maka po-tensi untuk mereka bertukar men-jadi seperti individu lain adalah besar.
Bukitang masalah pangguan

jadi seperti individu lain adalah besar,
Buktinya, Penyelaras Program Disleksia Sekolah Kebangsaan (SK)
Taman Maluri, Shairah Ali memberitahu, hampir semua murid yang pernah belajar di sekolah itu berjaya dipulihkan dan hidup secara sihat dengan masyarakat luar apabila menginjak ke sekolah menengah.
"Rahsianya, kita menjalankan ujian saringan terhadap murid yang berada di Program Pendidikan Khas Integrasi, dengan menithiberatkan aspek tingkah laku dan mampu menguruskan di sendiri.
"Selepas mendapati tahap mereka itu berkeupayaan tinggi untuk bersaing, kita letakkan mereka di bawah



SHAIRAHALI

iaitu mereka akan berada di dalam kelas arus perdana kecuali bagi mata pelajaran Matematik dan Bahasa Melayu, katanya.

Jelas Shairah yang telah sembilan tahun berpengalanan mengendalikan kanak-kanak yang mengalami gangguan tersebut, dua mata pelajaran itu perlu dasingkan kerana musid-murid diseksia mengalami kecelaruan dalam mengela, kanak dalam da

ENSURING EDUCATION IS INCLUSIVE









SUMMARY

The Ministry will strengthen efforts to provide equitable support to more than 10,000 schools under its jurisdiction. School districts and school leaders are encouraged to partner and form networks with other agencies towards developing interventions to raise school achievement and close gaps between the urban and rural areas. All stakeholders within and outside the Ministry must collaboratively work and support the

development of creative programmes to turn around low achievement among students, regardless of locality and ability. Innovative pedagogical approaches and best practices must be shared to raise performance of schools including Orang Asli and Indigenous schools, special education schools, and schools with special education programmes to accelerate system improvement in Wave 2.



FOSTERING UNITY THROUGH EDUCATION

An unshakeable sense of national identity, tied to the principles of the Rukun Negara, is necessary for Malaysia's future and to foster unity. Every student will identify themselves proudly as Malaysians, irrespective of ethnicity, beliefs, socio-economic status or geographical location.

Malaysia Education Blueprint 2013-2025, p. E-10

The progress of a nation depends on the solidarity of its citizen to work together to achieve common goals despite differences in backgrounds and beliefs. The Ministry plays a major role in ensuring the values of unity are inculcated from an early age by ensuring all the education fraternities and students from different socioeconomic groups, religious backgrounds, ethnicities and locations can come together to understand, accept and appreciate diversity to create a national identity in line with the National Constitution, Rukun Negara and National Philosophy of Education.

In Wave 2 of the Malaysia Education Blueprint (Blueprint) 2013-2025, the Ministry continues to emphasise the importance of unity and patriotism in school as the foundation to national integrity. In 2016, the Ministry focused on key activities to foster unity in schools:

- Instilling unity through curricular and co-curricular activities.
- Measuring level of unity among students and teachers in schools.
- Developing Unity in Education Roadmap.
- Developing a training module to enhance the capability of school leaders in instilling unity in school.
- Inculcating unity values among undergraduates of the Bachelor of Education programme (PISMP) in Institutes of Teacher Education (IPG).

INSTILLING UNITY THROUGH CURRICULAR AND CO-CURRICULAR ACTIVITIES

Co-curricular activities play an essential part in providing a holistic education towards the development of balanced individuals as it provides an avenue for students to polish their leadership qualities, enhance soft skills, and foster interactions and understanding among peers of different ethnicities, backgrounds and cultures. The universal values and concepts learnt in the classrooms can be put into practice and inculcated through participation in the diverse co-curricular activities.

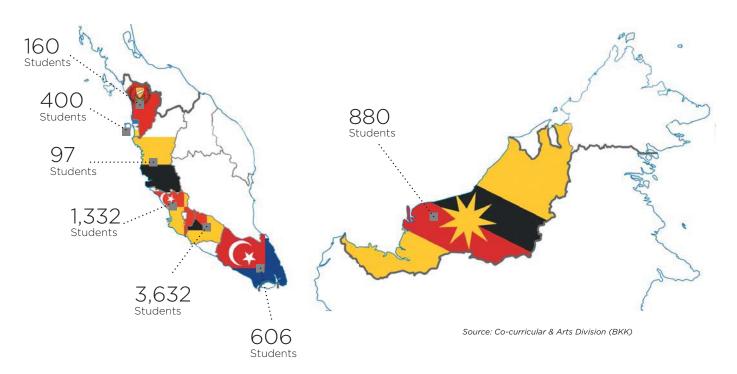
The Student Integration Plan for Unity (Rancangan Integrasi Murid Untuk Perpaduan, RIMUP) is one of the programmes implemented to foster unity among students and teachers within schools, and among schools. The RIMUP activities focus on co-curricular activities in five main categories: academic, arts and culture, community service, patriotism, and sports and games.

In 2016, the implementation of RIMUP activities focused on seven priority states (Johor, Kedah, Negeri Sembilan, Perak, Pulau Pinang, Sabah and Sarawak) with the highest number of homogenous schools. A total of 7,107 students from 630 schools of various school types participated in the programme as per Exhibit 4-1.

Four main objectives of RIMUP:



Exhibit 4-1: Student Participation in RIMUP Activities in Seven Priority States, 2016





Instilling Unity Through Co-Curricular Activities



Sekolah Menengah Kebangsaan (SMK) Bukit Jelutong

SMK Bukit Jelutong is in the Guthrie housing area in Bukit Jelutong, Shah Alam. The school started operations on January 6, 2003. The school is a co-ed school with students from various background and races. With more than 1,000 enrolment, the school encourages unity among the students in all activities organised by the school. All students are given the opportunity to participate in the numerous co-curricular activities within the school.

One of the co-curricular activities which made the school proud in 2016 was the participation and victory achieved by the school team in the STEP Sunburst Brain Camp International Competition which was organised by the National University of Singapore (NUS) in Singapore. The school team comprised four Form 4 students namely, Muhammad Adam Jefri bin Johan, Yew Wan Hu, Mohamad Mukhzuhayr bin Mohd Rashid and Barghavi a/p Visualingam. The teacher/chaperone was Pn. Seow Sek Ling. The team won first place in the Research Paper category and second place in the Research Presentation category.



The preparation for the school team participation in the Sunburst Brain Camp had successfully instilled the unity values and helpfulness among the students of different races. **Cikgu Seow Sek Ling**, the team coach, stressed on the cooperation among the team members and their friends, "the co-curricular activities can really develop students to be dedicated, trustworthy, and enhanced their self-esteem......From this, it clearly shows that through co-curricular we can really inculcate the spirit of unity and the spirit of togetherness among students."

"The Sunburst Brain Camp was an eye opener. Everyone was open minded, shared information from different countries. Everyone was friendly and it was not a problem when we made friends."

Barghavi a/p Visualingam

Student, SMK Bukit Jelutong

"It took us one month to prepare. First, we started with our research paper. We did a lot of research online and after the four of us combined our work."

Yew Wan Hui

Student. SMK Bukit Jelutong



"We posted a huge questionnaire session. Everything went well, regardless of our races. For this particular science event, I would say that passion, hardwork and cooperation helps a lot. If you know your team mates you can be close to them and spend a lot of time. If you don't have connection with each other, it will be hard to communicate and deliver the information."

Muhammad Adam Jefri bin Johan

Student. SMK Bukit Jelutona

St. John's Institution

St. John's Institution is a public all-boys' school and one of the oldest schools in Kuala Lumpur. Various co-curricular activities are run with student participations from the lower secondary to the post-secondary levels. One of the co-curricular activities which becomes the school's pride is the school band, the Naval Cadet Band, which consists of members from Form 1 to Form 5. In 2016, the St John's Institution marching band continued to make the school proud at the international arena when it became among the top five band in the 2016 World Championship of Marching Showbands. The involvement of students from different races and levels of education had established a high level of unity and teamwork among them.



"The secret of success for the band is discipline....The closeness shown by the students in the band reflected the harmonious surrounding of our school of various races. I am really proud to watch the tolerance and united attitude displayed by the students even



though they came from different races and cultures."



Music Teacher,

St. John's Institution

"Initially, my elder brothers taught and help me, teach me discipline and the way to play the instrument. They were firm with me and sometimes I have fun and I enjoy."

Max Khoo Yan Jie

Band Member,

St. John's Institution

"Usually, the senior Form 5 students will teach and fasilitate ways to play and read note to the juniors who just entered the band. In the band, teamwork is most important as the band need to sound harmonious and not individual. Teamwork is the most important for the band."

Amin Haidir bin Abdul Malek

Band Member,

St. John's Institution



"What is most important to succeed in competition is cooperation between the seniors and the juniors and communication among them."

Callitus Jeriah Chew

Band Member,

St. John's Institution

SMK Cheras, Kuala Lumpur

SMK Cheras is a school located in Bandar Tun Razak, Kuala Lumpur, which is five kilometres from Kuala Lumpur city centre. The school is



within a 14.6 acres of land which enables it to cater to the boys and girls of various ethnicity around Cheras. The student composition of the school varies - 55% are Malay, 35% are Chinese while the rest comprise Indians and other ethnicities. About 50% of students is in the urban poor category. The school has 42 units of cocurricular bodies, which include sports and games, societies and clubs, and uniformed bodies.

Cikgu Jamail Kaur stressed on the importance to enhance unity among students, "We really encourage unity. For example, the seating arrangements in the classroom are mixed among the races and not arrange according to a particular race. Group activities, doing experiments, which is the teaching and learning process advocated unity among the different ethnicities.....When students are comfortable



with each other, the Malay, Chinese and Indian students, it is common for them to interact, it will be a normal practice in their daily life."

Gamelan, one of the co-curricular activities, managed to unite students of different ethnicities in SMK Cheras through the training sessions and musical presentations.

"I was interested in Gamelan when I saw my seniors playing it. Even though the Gamelan is the Malay traditional musical instrument, I still want to try and play it."

Devisha a/p Punithakumar

Gamelan Player, SMK Cheras

"We work together everyday, stay back and go



for practice and we always help each other if we really do not understand."

Wong Li Wen

Gamelan Player, SMK Cheras

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MEASURING LEVEL OF UNITY AMONG STUDENTS AND TEACHERS IN SCHOOLS









In 2016, the Education Policy and Research Division conducted a study to determine the level of unity among students and teachers in Malaysia. The study was a second study to determine the level of unity in schools after the inaugural study conducted in 2014.

Three instruments used in the 2014 were administered in 2016 to collect quantitative data-Questionnaire for Primary School Students, Questionnaire for Secondary School Students, and Questionnaire for Primary and Secondary School Teachers. These instruments comprised three main constructs and ten sub-constructs of unity. The main constructs were accepting differences, respecting differences, and managing differences, while the ten sub-constructs (value of unity) are openness, tolerance, cooperation, trust, politeness, appreciation, care for others, fairness, trustworthiness, and rationality. The respondents for the study were 2,949 teachers and 2,981 students from 253 primary schools and 3,542 teachers and 3,584 students from 303 secondary schools.

Exhibit 4-2: Comparison of Unity Index for Teachers and Students in 2014 and 2016

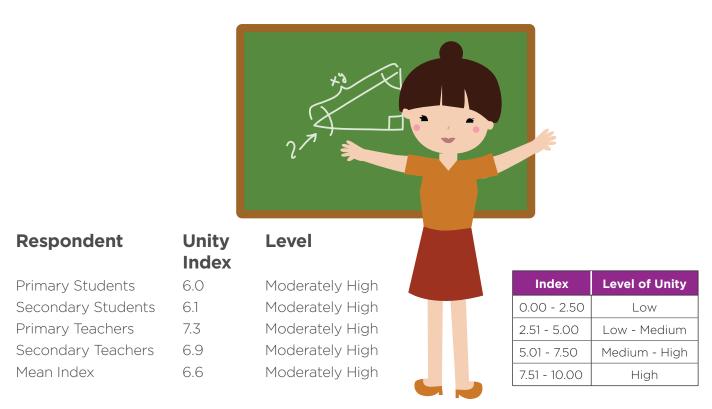
Unity Main Constructs	Unity Sub-Constucts	Teachers		Students	
		2016	2014	2016	2014
Accepting Difference	Openness	6.3	5.9	5.2	5.8
	Tolerance	6.2	7.1	5.6	6.3
	Cooperation	6.7	6.1	5.7	6.5
	Trust	5.7	7.0	5.2	6.5
Respecting Differences	Politeness	7.8	7.5	7.1	7.2
	Appreciation	7.8	7.5	6.5	6.8
	Care for Others	7.6	7.6	6.3	6.9
Managing Differences	Fairness	7.6	7.7	6.1	6.5
	Trustworthiness	7.9	7.9	6.5	6.6
	Rationality	7.3	7.6	6.1	6.5

Note: Different groups of respondents for teachers and students in 2014 and 2016

Source: Education Planning and Research Division (BPPDP)

Findings from the study were presented in the form of a Unity Index. The findings showed that the overall average unity index among teachers and students was at 6.6 over an index of 10. This revealed that unity was at moderately high. The findings also showed that the ability to respect and manage differences was at medium to high levels among teachers and students. However, the result for the main construct of accepting differences was not encouraging. The result showed that the ability to accept differences in terms of race, culture, language and religious practice were still low among students and teachers.

Exhibit 4-3: National Unity Index for Teachers and Students in Schools



Source: Education Planning & Research Division (BPPDP)

As Malaysia is a country which is rich in diversity – race, culture, language and religious practices - it is important for the *Rakyat* to understand and accept these differences to live in peace and harmony. The challenge for the Ministry, especially in schools, is to inculcate the sense of togetherness among students from young in all activities and to instil a positive mindset to view these diversities as strengths.

DEVELOPING A ROADMAP FOR UNITY IN EDUCATION

The inception of the Roadmap for Unity in Education started with Phase 1 of the Unity Lab in October 2015. The lab identified a few contributing factors to the lack of unity in schools, namely:

- Insufficient knowledge among teachers and school leaders on best practices to instil unity.
- Limited opportunity for interaction among students of different races.
- Less usage of Bahasa Melayu in SJKC and SJKT.
- Lack of support by parents, community and private sectors in enhancing unity.

Phase 2 of the Unity Lab took place in March 2016. The Lab focused on establishing strategic plans to strengthen unity amongst students in schools. A total of 11 strategic plans were developed and categorised into three aspects; policy, school and community. The lab involved wide-ranging problem solving exercises and engagement with 34 representatives ranging from the Ministry, government agencies such as the Department of Unity and Integration (Jabatan Perpaduan Negara dan Integrasi Nasional, JPNIN), Universiti Kebangsaan Malaysia, Institut Kajian Etnik (KITA) and non-governmental organisations including Teach for Malaysia (TFM), Malaysian Buddhist Association, Bahaí Community, Malaysian Hindu Sangam, Global Peace Foundation, Generation Gemilang Foundation and Yayasan 1Malaysia. The Roadmap is expected to be published in 2017.

Datuk Dr Denison Jayasooria from the Institute of Ethnic Studies, UKM during his sharing session on the Malaysian National Unity Landscape



Wan Saiful Wan Jan
CEO from Institute for
Democracy and Economic
Affairs (IDEAS) during
his sharing session on the
Malaysian National Unity
Landscape





Dato' Sri Khairil bin Awang, Deputy
Director General (Policy and Education
Development) and Dr. Amin bin Senin, Deputy
Director General (Teaching Professionalism
Development) during the Unity Lab 2.0
syndication sessions.



Understanding Malaysia and Its Diversity

Malaysia's unique ethnic, religious and cultural diversity has always been its greatest strength, and its greatest challenge. The plural society in Malaysia is due to the historical colonisation of the country. The challenge for Malaysia to achieve "unity in diversity" is demonstrated in the following traits:

- **Positive Trait** diversity that is articulated, celebrated and commercialised for example through the Visit Malaysia programme.
- **Negative Trait** diversity of ethnic, religious, language and customs of potential conflict because of rumours, prejudices and stereotypes.
- **Ideal Trait** the phenomenon of diversity which is emotional, longing for the most ideal form of unity in uniformity "unity in union".

Although Malaysia publicly acknowledges that it is a country which has "unity in diversity", it still has not achieved unity. Malaysia enjoys "social cohesion", which is peaceful, secure, stable and prosperous because of the strong social consensus built over the years. Unity is difficult to achieve and takes a long time; efforts done can only lead to cohesion, which is a prerequisite or step before "perpaduan". However, if there is diversity, efforts towards reconciliation must continue.

Source: Unity, cohesion, reconciliation: one country, three cherished concepts, 1951 Prof. Unggul Datuk Shamsul Amri Baharuddin, Institute of Ethnic Studies (KITA)

Unity and national integration have been the main agenda of the Ministry. Unity has also been the utmost priority especially among the leaders of the country since independence. The Ministry acknowledges this importance and will work alongside all key stakeholders in achieving the ideal trait of unity.

DEVELOPING A TRAINING MODULE TO ENHANCE THE CAPABILITY OF SCHOOL LEADERS IN INSTILLING UNITY

A school leader who is knowledgeable, competent and thoughtful is central in propelling students and teachers towards academic success and good character building. To ensure school leaders are equipped with the necessary knowledge and skills to instil unity amongst teachers, school communities. students and Aminuddin Baki Institute (IAB) initiated the development of a module on unity for school leaders - Modul Penerapan Nilai Perpaduan untuk Pengetua dan Guru Besar - in 2016.

A series of discussions were held to ensure comprehensive ideas and suggestions on unity in education were obtained from various parties. Panel of experts for the development of the module included experts from KITA, JPNIN and the IAB lecturers. IAB conducted a series of training need analysis with principals, head teachers and senior assistants from Johor, Melaka, Negeri Sembilan, Wilayah Persekutuan Kuala Lumpur, Selangor and Perak.

Training need analysis on school leaders was conducted to gauge their understanding

on unity and the implementation of activities to foster unity. The analysis showed that school leaders' knowledge and understanding of unity was at medium and high levels. Their skills in implementing tasks related to enhancing unity related programmes in schools was moderate. Based on these findings, the development of the module centred on enhancing skills and knowledge to strengthen unity in schools which encompassed topics of Mind Setting, Concept of Unity, Roles of School Leaders to Enhance Unity in Schools. Issues and Challenges Related to Unity, Implementation of RIMUP, Self-evaluation, Formulation of Action Plan, Conducting Workshop, Creating Unity Forum, and Understanding the Constitution and Policy.

The finalised module was approved by the top management of the Ministry in July 2016. Through practical sessions provided in the module during their training at IAB, it is hoped the school leaders will have the capability to create a harmonious and conducive teaching and learning environment to strengthen unity within and outside schools.

INCULCATING UNITY VALUES AMONG PISMP STUDENTS IN IPG



Teachers play an important role in inculcating good moral values to students. As such, teachers must be the role models of positive thinking and exemplary behaviours. It is of utmost importance for the Ministry to ensure all future teachers are able to impart knowldege and skills to Malaysian children, without fear or favour, regardless of their background, race, religion and locality. This is further emphasised in the national education system through the Razak Report 1956 where all children are to be provided with a learning environment that celebrates unity through an appreciation of the nation's diversity.

In 2016, the Institute of Teacher Education (*Institut Pendidikan Guru*, IPG) conducted a study to ascertain elements of unity were imparted through the training curriculum to ensure aspiring teachers have the skills to inculcate unity in the classroom. The study was conducted in 27 IPG campuses across Malaysia. The respondents were final year trainee teachers from the July 2013 intake of the Bachelor of Education programme (*Program ljazah Sarjana Muda Pendidikan*, PISMP). The objectives of the study were to identify the following:

- the level of unity among trainee teachers.
- the trainee teachers' readiness to implement activities related to unity in schools.
- the extent of elements of unity incorporated in three main courses in IPG.
- the strengths and weaknesses in implementing elements of unity through three main courses in IPG.
- the teaching and learning strategies to implement values of unity in three main courses in IPG.

The respondents of the study comprised 2,374 trainee teachers for the quantitative component while 140 trainee teachers for the qualitative component. The quantitative data was obtained through an online questionnaire between the month of July and August 2016 during the School Internship Programme, while the qualitative data was collected through interviews, observations, and document analysis during the academic session.

Findings from the study showed that the overall level of unity among the trainee teachers was high (Exhibit 4-4). The trainee teachers' level of unity was also high across all elements of Unity - Respecting Differences, Managing Differences, and Accepting Differences and among all the major ethnic groups. Findings from the sub-elements also showed the level of unity were high - the highest level was Appreciation and the lowest is Trust. The level of unity of respondents by gender, location, the type of schools the respondents were placed in, race, religion, locality or state of origin and neighbourhood were also found to be high.

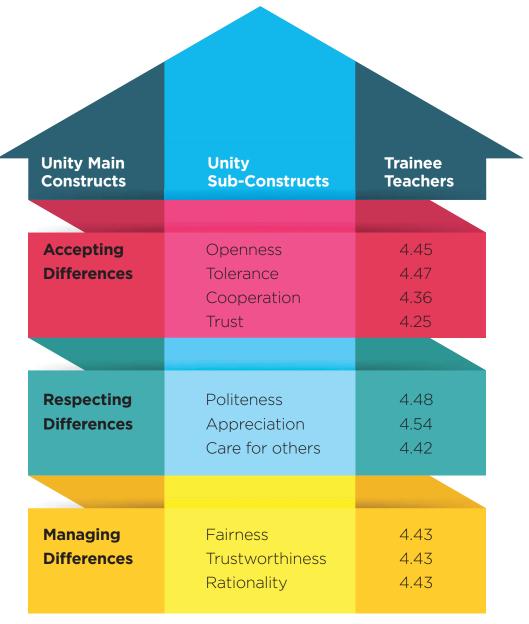
Exhibit 4-4: Level of Unity among Trainee Teachers by Elements of Unity



Source: Education Planning and Research Division (BPPDP), 2016

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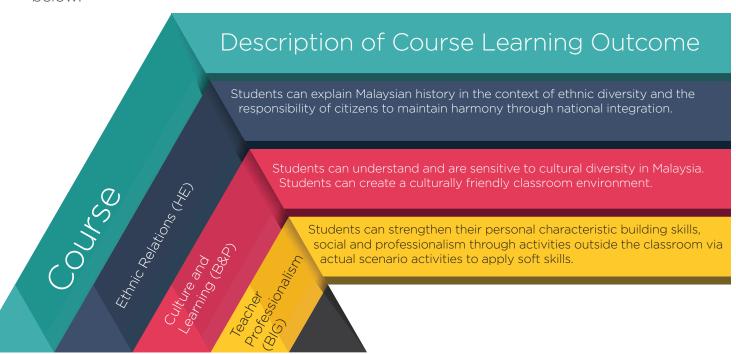
Exhibit 4-5: Score on Unity Sub-constructs by Trainee Teachers, 2016



Source: Education Planning and Research Division (BPPDP), 2016

The findings indicated almost all (99%) trainee teachers interviewed expressed their willingness to implement the elements of unity in schools (Exhibit 4-5). The trainee teachers' readiness was categorised into four areas: understanding of the multicultural background/ethnicity in Malaysia; implementing unity in teaching and learning within and out of the classroom; integrating unity in school through practicum and internship components; and understanding the essence of the content of the three main courses related to unity taught in IPG.

To evaluate the effectiveness of implementing elements of unity through courses taught in IPG, three main courses were evaluated mainly, Ethnic Relations (*Hubungan Etnik*, HE), Culture and Learning (*Budaya dan Pembelajaran*, B&P), and Teacher Professionalism (*Bina Insan Guru*, BIG). The Course Learning Outcomes (CLO) of these courses are described below:



The study also showed that BIG provided well-defined elements of unity and was the most preferred course. The activities in BIG emphasised on personality enhancement skills and group skills which are important in creating awareness on unity. The strengths of BIG in enhancing the trainees' confidence in embedding values of unity in their lessons should be emulated in HE, B&P, and other courses offered at all IPG.

Recommendations of the study were as follows:

- The placement of PISMP students in IPG should be made heterogeneously.
- HE course should be introduced in semester 1 of PPISMP.
- BIG course should be placed in semester 2 of PPISMP and semester 1 until semester 4 of PISMP.
- Chinese, Tamil and Indigenous languages should be offered as elective subjects and added value for basic communication.
- Extra topics on cultural diversity of Malaysian society should be added in the Course Outline Summary of HE.
- Emphasis on the soft skills aspects should be made explicitly in all the subjects.

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- Teaching strategy of the lecturers must include both activities, inside and outside classroom.
- HE instructors should undergo a special course related to HE.
- Panels of developers for the Course Outline Summary of HE, B&P and BIG should possess at least five years teaching experience in the related fields.
- All activities carried out in IPG particularly among the homogenous campuses should consider the involvement of all races/ethnicity to reach the continuity of unity.

SUMMARY

Efforts by the Ministry to foster unity include embedding elements of unity through co-curricular activities, conducting research to measure unity among students and aspiring teachers, and engaging with strategic partners. The inculcation of good universal values, especially unity and trust, must start from the homes of every family in Malaysia. Fostering unity should be the responsibility of all Malaysians, regardless of race, religion, culture and locality.





The Ministry will ensure that it has the capacity and capabilities to provide the right type and levels of support to schools and students. This will require a fundamental transformation in the Ministry's organisation to develop its JPNs and PPDs, which are closer to schools, and more attuned to their specific needs.

Malaysia Education Blueprint 2013-2025, p.6-1

ENHANCING EFFICIENCY

Establishing an efficient delivery system through continuous improvement is one of the focus of the Ministry to bridge the gap between policy formulation and implementation. In Wave 1, the Ministry adopted the OBB principle in managing finances more effectively, ensuring optimal return on investment. Key leadership positions have been strengthened through specialised professional development programmes in the effort to develop more capable leaders in spearheading the education transformation

The delivery system has been further enhanced with the successful launch of the Single Sign-on (SSO) facility which allows the Ministry to access its data management system with a single user ID and password. A total of 28 stand-alone systems have been successfully integrated, thus promoting data accuracy within a single education data source. Internet access through the 1BestariNet network

and the utilisation of the Virtual Learning Environment (VLE) have improved over the past three years, enabling teachers to optimise the vast source of knowledge to bring the world into the classroom.

In 2016, the Ministry intensified its efforts to improve efficiency by focusing on the following areas:

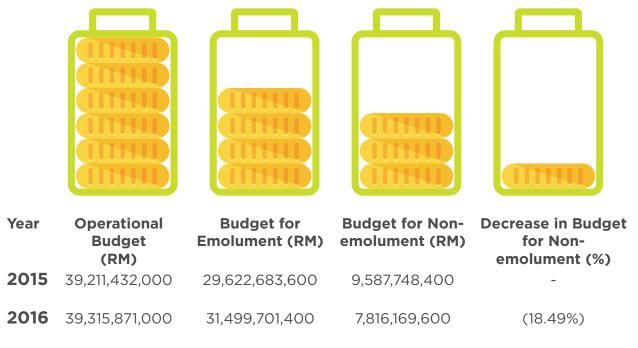
- · Realigning and optimising budget to maximise student outcomes.
- Enhancing skills and capabilities within the Ministry.
- Improving school infrastructure and maintenance.
- Enhancing the education database to support decision making.
- Promoting VLE usage to enhance learning capabilities.
- Increasing operational efficiency of under-enrolled schools.

REALIGNING AND OPTIMISING BUDGET TO MAXIMISE STUDENTS' OUTCOMES

The commitment of the government towards transforming the education system remains as the key success factor for the progress of the nation. The substantial annual budget which has been continuously provided to the Ministry is yet another testament of the government's pledge to raise the quality of education. This pledge for educational transformation agenda requires careful planning and prudent spending by the Ministry to ensure the desired students' outcomes are achieved.

However, over the past few years the budget allocated for the Ministry had significantly reduced due to global economic downturn brought on by the decline in petroleum prices as well as the restrained global trade in 2015 and 2016. This has affected Malaysia's robust productivity and economy, thus causing lower budget allocation to all government ministries and agencies. In 2016, the Ministry received an allocation of RM7.8 billion for its operational budget (non-emolument), which was a reduction of 18% from the same budget received in 2015 as shown in Exhibit 5-1.

Exhibit 5-1: Budget Allocated to Ministry of Education (2015-2016)



Source: Finance Division (BKew)

targeted percentages for the realignment of budget from non-emolument activities, and the allocation to be distributed to programmes and activities which supported students' outcomes were revised and readjusted to 1% and 30%, respectively.

Careful planning and reprioritisation of activities towards high impact programmes

Due to the reduced budget allocation, the enabled the Ministry to successfully exceed the targets set for the initiative as shown in Exhibit 5-2. The activities which benefitted from the budget realignment were:

- Provision of Allowance for Matriculation Students
- Dual Language Programme and Highly Immersive Programmes
- Provision of Co-curriculum Allowance

Exhibit 5-2: Target and Performance for the Realignment of Budget, 2016

KPI	Target	Actual Performance
Percentage of Realignment of Budget from Non-Emolument Budget 2015	1% (RM78,161,696)	1.08% (RM84,140,000)
Percentage of Realignment Budget to be distributed to programmes and activities which support student outcomes	30% (RM23,448,509)	77% (RM60,035,250)
		Source: Finance Division (BKew)

IMPROVING THE BIDDING PROCESS FOR THE ESTIMATED BUDGET EXPENDITURE

The Ministry acknowledged the need to recalibrate all education programmes and activities in line with the Government Budget Recalibration as announced by the Prime Minister in January 2016. Finance Division (Bahagian Kewangan, BKew), Education Planning and Research Division (Bahagian Perancangan dan Penyelidikan Dasar Pendidikan, BPPDP) and Education Performance and Delivery Unit (Unit Pelaksanaan dan Prestasi Pendidikan. PADU) collaborated closely and reviewed all programmes planned under the Ministry before the revised ABM 2017 was presented to the Ministry of Finance (MOF). Due to this exercise, a substantial amount (RM280 million) was successfully reallocated to programmes and activities in 2017 which have greater impact on student outcomes. Approaches to improve the efficiency of the bidding process for ABM 2017 include the following:

1. Removal of Budget Redundancy

Budget requests from all divisions within the Ministry were screened and duplications were removed. The budget allocation for all initiatives under the Blueprint for 2017 was proposed and centralised at PADU.

2. Prioritisation of Programmes

Existing low impact programmes on students' outcomes or less impact on enhancing delivery system were removed or scaled down.

3. Outcome Driven Programmes

Consideration for budget requests and allocations was prioritised to programmes and activities which support the Key Performance Indicators (KPI) of the Minister and the top management of the Ministry.

PADU and Finance Division worked closely with all Divisions to review and align MOE ABM 2017

Analysis & Outcome Mapping by PADU

20-29 April 2016

- 8 days session
- Daily 4-6pm meeting to analyse
- Attended by 49 participants from 16 Divisions

Workshop with Divisions & PADU

4-6 May 2016

- 3 days workshop
- Attended by 181 participants from 33 Divisions
- 21 Directors/Under Secretaries attended on Day 3 to review updated budget and deliberate on pending items



ABM review session with 16 Divisions from 20 to 29 April 2017



3-day ABM workshop in IPGM, Cyberjaya



ENHANCING SKILLS AND CAPABILITIES WITHIN THE MINISTRY

The Ministry has been resolute in its effort to lay the foundation for a comprehensive restructuring plan which will strengthen delivery system towards better implementation of education policies. Despite the challenges faced during Wave 1 of the Blueprint, due to merging and de-merging of the Ministry of Education and the Ministry of Higher Education, the new structure of the Ministry was finally approved on 14 December 2016. The Human Resource Management Division (Bahagian Pengurusan Sumber Manusia, BPSM) will continue to work with the Public Service Department to expedite the process for the ministry restructuring. The next phase of the organisational restructuring is to specify the roles and functions of all divisions and agencies based on the approved new structure.

It is imperative for the Ministry to establish a pipeline of qualified talents with the potentials to fill the key leadership positions and to ensure a sustainable supply of quality leaders to spearhead the education transformation. To achieve these objectives, in Wave 1, the Ministry has embarked on a large-scale profiling exercise among its officers at all levels – Divisions, (Jabatan Pendidikan Negeri, JPN) and District Education Offices (Pejabat

Pendidikan Daerah, PPD) and schools - to identify potential leaders in the Ministry. In 2016, the High Potential Talent Pool, a professional development programme for future education leaders was conducted from April to December. The programme was helmed by the Aminuddin Baki Institute (Institut Aminuddin Baki, IAB). It was aimed at enhancing participants' functional competencies in the following areas:

- education management and leadership in the areas of instructional leadership.
- people management and development.
- resource management and allocation.
- strategic planning and direction.

A total of 62 participants from JPNs, PPDs identified in Wave 1 through the profiling exercise successfully completed the development programme. Participants provided positive feedbacks on the training modules which encompassed transforming of mindset, learning enhancement, and coaching and mentoring. This programme was proven to be an effective training module as it allowed potential leaders to improve their competencies through the journey of self-discovery which impacted their careers and self-developments.

Developing Leaders through the Talent Pool Programme



"This Talent Pool Programme has successfully developed the concept of leadership in me. It encouraged mindset transformation and refined coaching and mentoring skills which would strengthen my leadership style in the future."

"I also realised that as a leader, the right thing to do is to Lead and not just Manage. This programme also revealed that good leaders should have both elements of Scientific Management (Hard Skill) and Humanistic Management (Soft Skill) to be effective transformational leaders."

"The most treasured knowledge in this programme for me was the exposure provided on exemplary leaders and the knowledge sharing during the discussions on the book 'The Five Practices of Exemplary Leaders' (Kouzes and Posner, 1995)"

Mr. Vaea bin Sarima

Head of Technical and Vocational Education Unit, PPD Tawau, Sabah



Speech by Datuk Dr. Amin bin Senin at the Graduation ceremony in December 2016



Presentation by the programme participants during the Graduation ceremony in December 2016

IMPROVING SCHOOL INFRASTRUCTURE AND MAINTENANCE

The focus on improving basic infrastructure in schools in Wave 2 (2016-2020) addresses the need to further improve the efficiency of asset management by the Ministry while continuing the efforts to address the basic infrastructure needs of schools. Basic infrastructure includes access to treated water, a minimum of 12 hours of electricity per day, sufficient number of toilets, and classrooms, as well as enough tables and chairs. A total of 10,464 repairing and upgrading projects were completed in Wave 1 under this initiative. The Ministry continues to improve basic infrastructure of schools to fulfil the minimum standards set and provide a safe, hygienic and conducive environment for learning.

Budget Allocation and Spending Performance for Infrastructure Projects in 2016

- RM1.394billion under Development Expenditure (DE) to carry out repairing and upgrading basic facilities and infrastructure of schools including repairing and upgrading 20 dilapidated schools in Sarawak. The Ministry successfully spent 99.97% budget allocated for DE.
- RM500million under Operational Expenditure (OE) to ensure the development and maintenance of education facilities. The Ministry successfully spent 99.03% budget allocated for OE.

In June 2016, the Ministry, in collaboration with Department of Works (Jabatan Kerja Raya, JKR), successfully developed the Standard Infrastructure Guideline. This guideline is designed to assist JPN, PPD and schools to have a common and consistent methodology for evaluating the condition of school infrastructure. It also allows schools to effectively perform self-assessment on the condition of their infrastructure, and subsequently report for repairs, if required. The reports will assist the Ministry in obtaining conclusive data for making informed decisions.



With the guideline and budget allocated for maintenance and upgrading projects, the Ministry had successfully completed and improved the quality of infrastructure in 43 schools (Exhibit 5-3). The upgrading projects at the schools involved the construction of multi-purpose hall projects, upgrading school fields, and several new facilities which included dormitory blocks, multi-purpose courts, toilet facilities, teachers' room, and additional academic blocks. Infrastructure and maintenance issues in the remaining schools would be resolved in subsequent years based on the allocation provided to the Ministry.

on the allocation provided to the Ministry.

Exhibit 5-3: Number of Schools with Upgrading Projects by State, 2016



Total 43

Source: Education Development Division (BPP), 2016

My New School Project

My New School is a project under the National Blue Ocean Strategy (NBOS) which aims to transform rural schools into community hubs. The programme will not only benefit the school but also the surrounding community at large, especially in areas where public amenities are limited. The compounds of the schools are open to the public as a shared venue for the community to gather and conduct various community programmes.

In 2016, the Ministry led the project and closely collaborated with various agencies and other ministries. The project encouraged wider community participation through volunteering of time and energy to restore dilapidated school buildings. Projects were chosen based on three principles namely, high impact, low cost and rapid execution. A total of four dilapidated rural schools were upgraded and modernised under the My New School project.

Four dilapidated rural schools upgraded and modernised under the NBOS's My New School programme





SK Pinang, Kota Samarahan, Sarawak



SK Tanjung Bako, Kuching, Sarawak



SK Penimbawan, Tuaran, Sabah



SK Gadong, Beaufort, Sabah

ENHANCING EDUCATION DATABASE TO SUPPORT DECISION MAKING

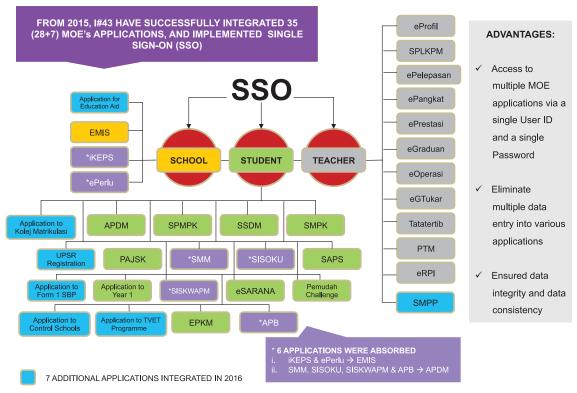
The Development of Education Data Repository and Expansion of Dashboard Usage initiative is intended for the Ministry to establish a single education management system which will improve the efficiency of school management and administration. The integrated systems and dashboard will significantly provide more comprehensive and reliable data for better and more informed decisions and problem solving of educational issues at all levels of education management.

The Ministry is constantly finding ways to improve the delivery system and ease the administrative burden using technology. Although major progress has been made in Wave 1 through the introduction of SSO facility in integrating multiple applications, further efforts are needed to accelerate system improvement in terms of educational management and administration. However, technological incongruence still exists among the many applications as most have yet to be fully integrated with the overall technological ecosystem.

Leveraging on the achievement of integrating applications under the SSO in Wave 1, seven additional system applications were successfully integrated in 2016, increasing the number of integrated applications to 35 in comparison to 28 integrated applications in 2015.

Exhibit 5-4: Applications Integrated under SSO

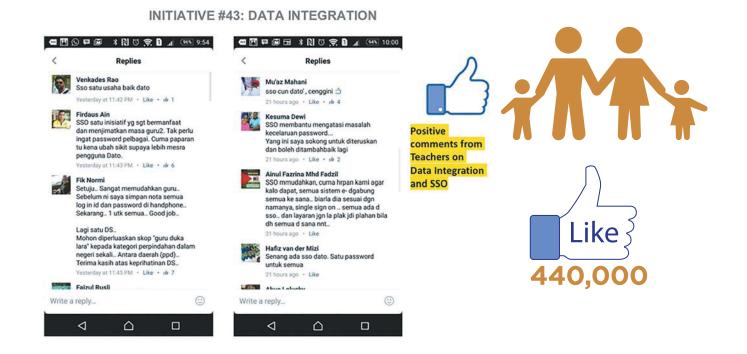
COMPLETED DATA INTEGRATION AND SSO



Source: Education Planning & Research Division (BPPDP), 2006

The SSO facility was well received by teachers as it allowed them access to multiple applications by only using a single user ID. More than 440,000 users signed up for the SSO in 2016 and responses had been overwhelmingly positive.

Exhibit 5-5: Comments on SSO in the Minister's Facebook



To ensure that education data is reliable, accurate and consistent for effective and informed decision making, Data Verification Workshops were held nationwide in all the six zones to improve data accuracy and eliminate errors. PPD officers were taught to identify data errors and make rectification accordingly.

Activity in Data Verification Workshops



PPD Officers from Sarawak in discussion during the workshop



Briefing session on School Management Module in the Northern region, Penang

In July 2016, a research proposal to determine the scope for the development of a comprehensive ICT Ecosystem for Education was approved by the Ministry. The study would provide recommendations for a long-term solution to address the issue of silo databases for other system applications which existed in the education data centre at Enstek Data Centre (Pusat Data Enstek, PDE). Based on recommendations from the study, a new initiative to review the overall Ministry ICT Ecosystem will be introduced in 2017.



Practical exercise on School Management Module (Infra) in Sabah



INCREASING USAGE OF VLE TO ENHANCE LEARNING CAPABILITIES

The 1BestariNet is developed to transform the Malaysian educational platform and to bridge the digital divide between students in urban and rural areas by providing quality internet-based education to all students. In Wave 1, a total of 8,934 schools nationwide had been successfully connected to 1BestariNet. In July 2016, the Ministry of Finance approved the agreement for implementation of Phase 2 of 1BestariNet. As part of the agreement, internet connectivity for schools was upgraded to the new 4G high speed broadband profile.

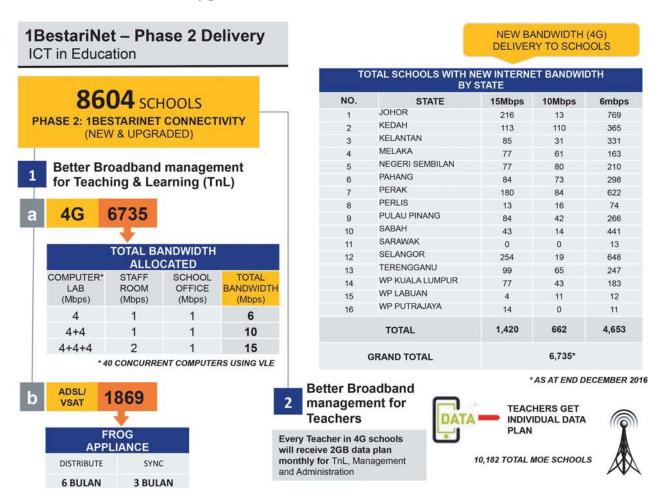
Phase 2 of 1BestariNet

Phase 2 of 1BestariNet will ensure a better and improved internet bandwidth in schools to further accelerate efficient and effective teaching and learning, as well as management and administration processes. The key focus will be to enhance the bandwidth management for all 4G schools. Meanwhile, other non-4G schools will continue to be profiled for potential upgrades to 4G in the future. As of December 2016, 8,604 schools

were connected to 1BestariNet; 8,185 with 4G high speed broadband and 1,547 with Asymmetric Digital Subscriber Line (ADSL) or Very Small Aperture Terminal connectivity(VSAT) (Exhibit 5-6). A total

of 3,940 schools nation-wide received the new bandwidth upgrades from 6Mbps to 15Mbps based on the availability of school computer labs.

Exhibit 5-6: New Bandwidth Upgrades under Phase 2 of 1Bestarinet



Source: Education Technology Division (BTP)

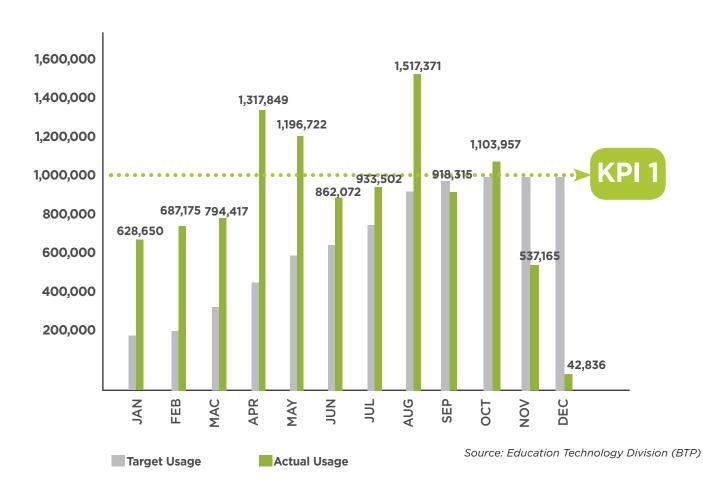
Teachers in all 4G connected schools were provided with a monthly 2Gb individual data plan to support their teaching and learning responsibilities as well as and management and administrative duties without interruptions in connectivity.

Usage of Virtual Learning Environment (VLE)

The adoption of the VLE by students, teachers and parents has been encouraging. The Education Technology Division (*Bahagian Teknologi Pendidikan*, BTP) together with Teacher Activity Centres (*Pusat Kegiatan Guru*, PKG) is continuously providing support and training for teachers to enhance their capabilities in developing and embedding more exciting VLE materials. In 2016, the use of VLE was further intensified and strengthened to improve the teaching and learning experience. Best practices from areas of excellence and innovative ideas identified in Wave 1 were adopted.

By the end of December 2016, the achievement for VLE usage had surpassed the year's KPI target on four occasions; April (1.3 million), May (1.2 million), August (1.5 million) and October (1.1 million), with the highest monthly VLE being in August; as illustrated in Exhibit 5-7 below. These achievements showed the effectiveness of the programmes and activities carried out in 2016.

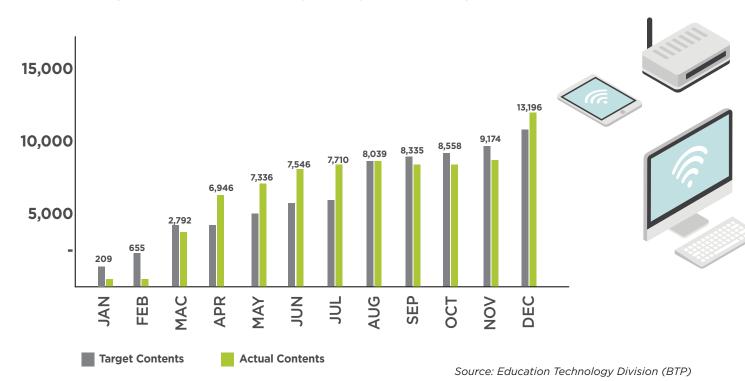
Exhibit 5-7: Monthly VLE Usage by Students in 2016



The lower monthly usage in June (0.8 million), July (0.9 million) and November (0.2 million) was due to examination periods, national examination weeks (i.e. UPSR, PT3 and SPM); as well as school and festive holidays.

Despite the budget cuts and unavailability to conduct nation-wide VLE content development workshops, BTP managed to garner its resources from teachers and internal officers to develop and upload more than the targeted KPI. Exhibit 5-8 showed the monthly VLE learning sites developed and uploaded into the VLE repository. By the end of December 2016, a total of 13,196 new VLE learning sites were successfully uploaded into the VLE repository to be used by the teachers.

Exhibit 5-8: Progression of the VLE Learning Sites Uploaded Monthly in 2016



Other notable efforts to complement the above activity included:

- i. monitoring the usage of VLE at the state and district level via PKG and PPD.
- ii. training workshops for VLE Frog at school levels.
- iii. conducting on-going seminars to promote VLE usage at the state level.
- iv. validating content of VLE Learning Modules produced by teachers for quality assurance.

Virtual Learning Environment (VLE): Fun Learning at the Fingertips, No Matter Where You Are

Virtual Learning Environment (VLE) is a web-based online learning system which is easy,



fun and interesting. Schools in Malaysia are provided with Frog VLE free of charge. Frog VLE is an easy to use learning platform and a gateway for numerous education resources and interesting applications from innumerable websites. VLE is also a platform which enables teachers, students and parents to access information on learning and current education news.

SK Meru 2 is one of the examples of a school which successfully leverages on VLE for students' learning. SK Meru 2 is in Meru, a small town in the District of Klang, Selangor. This town in now booming due to the development of new townships around it. The school, with 2.3 hectares of land and surrounded by palm oil estates and Malay villages continues to flourish in terms of quality education offered to the local children through using internet for learning.

VLE-based learning in SK Meru 2 is championed by **Cikgu Mohammad Azmi bin Hj. Muda**. Cikgu Azmi is motivated to make teaching and learning using VLE fun and easy for students and teachers in the school. Azmi firmly stressed, "VLE is a platform which is safe and not limited to certain groups. In fact, it is a shared platform which can be generated by all education fraternities in Malaysia free of charge. VLE makes learning more fun for the students." Students became excited with the use of technology as learning was fun and interactive. Teachers too found it beneficial as assessments and the scoring process was automated and efficient. The use of VLE in SK Meru2 managed to strengthen communication and the discussions between teachers and students. Teachers discovered that it was helpful in the sharing of learning materials and providing group assignments. To sustain the integration of technology in learning, Cikgu Azmi implemented various learning activities including online competitions and online quizzes among classes. Due to his dedication and determination in supporting the use of virtual learning, Cikgu Mohammad Azmi was awarded the 1BestariNet Teacher Awards (1BNTA) in Communication in 2016.

"Learning using the computer is something new for me and the best thing is I like to use it as it is one of the new ways which is the 21st century learning using technology."

Mohamad Akbal bin Hazim

Student, SK Meru 2



"I like VLE as it enables me to be totally involved. Through VLE, I can monitor my children's development. For example, I can monitor my children's assignment, exercises and the fun thing is as a parent, I am provided with an ID by the school and I can log in to the VLE and see for myself my children's learning progress."

Puan Zuriati binti Zakaria

Student's Mother, SK Meru 2



SMK St Mary, Kuala Lumpur is an all girls' school with more than 1,000 students. SMK St Mary, situated in a dense area with many public amenities, started to use VLE since 2013. All teachers use VLE in teaching and learning in the classrooms. The **principal, Puan Chee Poh Kiew** informed, "All teachers in SMK St Mary are encouraged to build learning sites on the Frog VLE platform, and preferably each learning site or VLE sites are interactive."

"My experience in using is fun as my students are interested in it. Before this, students only see their teacher in front of the classroom but now they can watch videos. I teach Mathematics, and there are videos to make Mathematics easy and make my teaching more interesting.....Students too can play games which stimulate their minds to learn."

Cikgu Puan Siti Zarina

Mathematics Teacher, SMK St Mary

"When VLE was first introduced, I wasn't too sure about Frog as I thought it sounded a bit weird. Our teachers give us notes and fun videos to watch but we also get quizzes and exercises and also sometimes games.....With conventional learning, we need books

and more reference books to help us but with Frog VLE all you need is a working internet connection."

Levin Low

Student, SMK St Mary

SJKT Ladang Sungai Sebaling, Bahau, Negeri Sembilan is an under-enrolled school located in Sungai Sebaling Estate. Even though located quite far in the rural area with a handful of students, the school is not deprived from internet connection and virtual learning is highly encouraged.

"I like using VLE as it is interesting and easy. It helps to increase my learning. Frog VLE makes it easy for me to communicate with other students and teachers."

N. Nitya Sri a/p Murulee

Student, SJKT Ladang Sg. Sebaling

"All my subjects use Frog VLE. I do my homework and find information in the Frog VLE. For example, sending assignments and asking questions to teachers."

M. Pavithra a/p Muganeswaran

Student, SJKT Ladang Sg. Sebaling

En. Manisekaran a/I Kuppusamy, a teacher in di **SJKT Ladang Sg. Sebaling** stated that there were many benefits from the use of VLE. "Before we mostly use chalk and talk, but now it is more advanced. Learning using the VLE enables us to show something more realistic.....it catches students' interest and students can learn anywhere they want. Teachers

can prepare exercises and notes and upload in the VLE.....it makes teaching and learning easy for teachers."



En. Manisekaran a/I Kuppusamy Teacher, SJKT Ladang Sg. Sebaling

Please scan the code to watch video



QR CODE

INCREASING OPERATIONAL EFFICIENCY OF UNDER-ENROLLED SCHOOLS

Enhancing the efficiency and effectiveness of education delivery is essential in achieving positive students' outcomes. Since 2015, the Ministry has been conducting rigorous and comprehensive review on issues linked to the operation of Under-Enrolled Schools

(Sekolah Kurang Murid, SKM) in the country. SKM are schools with an enrolment of 150 students or less across Year 1 to Year 6 for primary schools. High operating cost per student is one of the key issues of the SKMs.

Exhibit 5-9: Number of SKM Primary Schools 2016



Primary Schools

1 National schools (SK)

2,058

2 National-type Chinese School (SJKC)

578

3 National-type Tamil School (SJKT)

360

*Data as of 31 March 2016

Total 2,996

Source: Education Planning and Research Division (BPPDP)







SJKT Ladang Kampung Baru, Kuala Selangor SK Dato' Abu Bakar, Kuala Lumpur

SK Sg Betul, Perak

To resolve operational issues in SKM, the current policy was reviewed. A proposal to develop the Roadmap for Under-Enrolled Schools was approved at the Post-Cabinet Meeting in August 2016. There were 2,996 schools classified as SKM throughout the country. The Ministry has formulated shortterm (12 months) and long-term (more than 12 months) strategic implementation plans to improve the operational efficiency of SKM. The Ministry is committed in reviewing the operations of SKM with two main objectives: to improve the quality of education and reduce the operating cost of schools.

Exhibit 5-10: Strategic Plans to Improve Efficiency under the Roadmap for SKMs

SHORT TERM PLANS LONG TERM PLANS

Multi-grade Classroom	Merging of SKMs
Under this programme, Year 2 and Year 3 students as well as Year 4 and Year 5 students are combined into 1 class, respectively	Explore the possibility of merging two or more SKM of the same type which are located within 10km radius
Appointment of Security Services (Perkhidmatan Kawalan Keselamatan - PKK) at SKM based on the current norm Appointment of PKK at SKM are based on the current norm with an upgrading of security control within the schools. In the current practice, four security officers in some SKMs are appointed due to special request by the schools with insufficient security control	Relocation of SKMs SKM to be relocated or moved to a new school to support the increasing number of population
Appointment of Cleaning Services (Perkhidmatan Kebersihan Bangunan dan Kawasan - KBK) based on the new norm Review the current norm for KBK to provide optimum number of cleaners in SKM	Remain in Operation SKM with accessibility issues (e.g.: on islands or in remote areas) to continue operations status quo
	Cease Operation
	SKM which are combined or relocated to cease operations with proper procedures

Source: Education Planning & Research Division (BPPDP), 2016

SUMMARY

In 2016, the Ministry intensified efforts to enhance its delivery system by realigning and optimising allocation of budget to high impact programmes despite budget constraints, and prioritise programmes to maximise student outcomes. Identified future leaders continue to be trained to enhance their leadership competencies. More applications were integrated to increase system efficiency; school connectivity continued to be increased, while thousands of learning sites were created and uploaded to enrich the teaching and learning experience. Basic infrastructure in schools were maintained and better learning environment was provided through upgrading projects.

EDUCATION PERFORMANCE AND DELIVERY UNIT (PADU)

The Education Performance and Delivery Unit (PADU) was established on March 20, 2013 as an independent unit under the Ministry of Education, Malaysia. PADU's establishment is documented in the Malaysian Education Blueprint (Blueprint) 2013-2025 (Chapter 8, pages 10-11) where its mandate and role has been clearly defined as part of the strategy to ensure successful implementation of the Blueprint. The primary role of PADU is to be a partner and work closely with the Ministry to help facilitate, support, and deliver the vision of the Ministry in transforming the national education system. This is done by focusing on the timely execution and successful implementation of the Blueprint. To ensure the success of the Blueprint implementation, it is critical that PADU works in total alignment with the Ministry to jointly develop action plans, which ensures continuous quality improvements to the education system covering the whole spectrum of initiatives under the Eleven Shifts as outlined in the Blueprint. In delivering these promises, PADU has a strong and passionate team consisting of the best of talents and highly skilled officers from both the civil service and private sector.

The combination of expertise between the public and private workforce enables PADU to leverage on diverse and valuable knowledge, experiences and competencies to bring about the positive change needed for transformation. One of PADU's key focus areas is finding effective solutions in overcoming challenges during the education transformation journey. This process helps to inculcate solution oriented culture efforts to explore alternatives towards a successful shift in driving an education system that is of international standards. For any organisation to thrive and remain relevant, every member of the organisation must believe in the same goals and vision. PADU's workforce is united and committed in providing full support to each other within the Unit, and value added services to our stakeholders, towards realising the Five System Aspirations and Six Student Aspirations across the Eleven Shifts. PADU sets to effectively deliver strategies, oversee implementations, manage interdependencies, and introduce new approaches to propel the Ministry to drive quality education in preparing a strong foundation for our students as the future workforce and industry leaders who will take the nation to greater heights and to be globally competitive.



Chief Executive Officer PADU, Puan Khadijah Abdullah.

PADU: DRIVING THE EDUCATION TRANSFORMATION AGENDA

Since the beginning of Wave 1 in 2013, PADU has supported the initiation and preparation of the Blueprint initiatives alongside the lead divisions in the Ministry. These initiatives are categorised into priority and secondary initiatives. Priority initiatives are very complex initiatives which usually have systemic impact. These initiatives are monitored rigorously on a weekly basis via a dashboard report. They are analysed and problem-solved intensively. The secondary initiatives have medium complexity which are monitored less regularly via monthly reporting. The Lead Divisions in the Ministry are fully in control of the initiatives implementation with PADU's full support.

No. of No.of **Background** Year **Priority** Secondary **Initiatives Initiatives 75** Wave 1 (2013-2015) 2013 25 2014 14 25 Turn around system by supporting teachers and focusing on core skills 2015 20 26 Wave 2 (2016-2020) 2016 24 8 Accelerate System Improvement

Exhibit 1: Number of Priority and Secondary Initiatives under the Blueprint, 2013-2016

Source: Education Performance and Delivery Unit (PADU)

PADU core values; Proactive, Accountable, Driven, and United, are reflected in the way PADU conducts its partnership with the Ministry in driving, facilitating and monitoring the transformation of the Malaysian education system. PADU will assist the Ministry's divisions in meeting the targets of each initiative set under the Blueprint and is jointly accountable to the success and failure of said initiatives and the transformation agenda with the Ministry. Each initiative is assigned an officer from PADU known as the Officerin-Charge (OIC) whose role is to be proactively involved in its implementation. Most importantly, the OICs work closely and support the Programme Managers (PM) from the Ministry who are the officers leading the implementation of initiatives.



CHAPTER 6 | PADU 2016 ANNUAL REPORT

In ensuring the delivery of the Blueprint aspirations, each year PADU assesses the list of initiatives, and identifies the priority and secondary initiatives, and the lead divisions responsible for the initiatives. Once the initiatives are determined, an initiative planning workshop will be held where the appointed Programme Managers (PM) and Work Stream Leaders (WSL) from each division who support the PMs are invited to discuss and plan for each initiative. At the end of the workshop, the Lead Divisions will complete the initiative charter, KPI dictionary and detailed plans. Consequently, an onboarding session is conducted to inform the PM and WSL on the Dashboard reporting process as a platform to monitor the progress of the initiatives. The initiative plan will then be monitored on a weekly basis for progress updates as well as highlighting issues which need to be resolved with PADU's support. If the issues cannot be resolved at the divisional level, and need to be escalated to the top officials of the Ministry for intervention or decisions, the issues will then be presented in the Problem-Solving Meeting (PSM), a meeting co-chaired by the Secretary-General of Education and the Director-General of Education Malaysia which is usually held once a month. The above activities are some of the activities initiated by PADU in the guest to accelerate the achievement of the Blueprint implementation, in addition to other programmes and activities organised to support the initiatives.

In executing the roles mandated by the Ministry, PADU incorporates the best and leading transformation practices to ensure the realisation of the Blueprint and the Key Performance Indicators (KPI) set annually. PADU also subscribes the Managing Successful Programmes (MSP) practices, one of the world's leading programme management standard with its defined processes and roles designed to help programme teams deliver projects and realise benefits which directly contribute to strategic objectives. As of today, 35 of PADU personnel are MSP certified and PADU will continue to certify new personnel.

PADU: CHANGING WORK CULTURE

Numerical data has always been the key indicator of success for any plan, programme and project. Besides quantitative measures, PADU places high emphasis on the quality of delivery through inculcating and promoting change in work culture. Strategies for cultural change and transformation encompass coaching and mentoring, inculcating data driven culture, problem solving and consulting, knowledge exchange and collaboration, and inculcating best practices. When all these elements are embraced, and becomes part of the work culture within the Ministry, greater efficiency and outcomes can be achieved. With that, the overall quality of the education system will be greatly improved as envisaged in the Blueprint.

Coaching and mentoring

Since 2013, PADU has supported the Ministry in various coaching and mentoring programmes. Issues were identified and data were analysed to provide valuable input towards designing targeted interventions to resolve the issues.

Among the coaching and mentoring activities executed in 2016 were:

- coaching and mentoring of officers from the Institute of Teacher Education Malaysia (Institut Pendidikan Guru Malaysia, IPGM) in planning, organising and driving the transformation of the Institute of Teacher Education (Institut Pendidikan Guru, IPG) campuses.
- coaching of officers in the Lead Divisions in budget planning to ensure proper budget allocation was planned and spent accordingly.
- · coaching and mentoring of officers from the District Education Offices (Pejabat Pendidikan Daerah, PPD) and FasiLINUS by OIC of LINUS programme on ways to improve the quality of the screening process in the LINUS programme.

CHAPTER 6 | PADU 2016 ANNUAL REPORT

Inculcating data driven culture

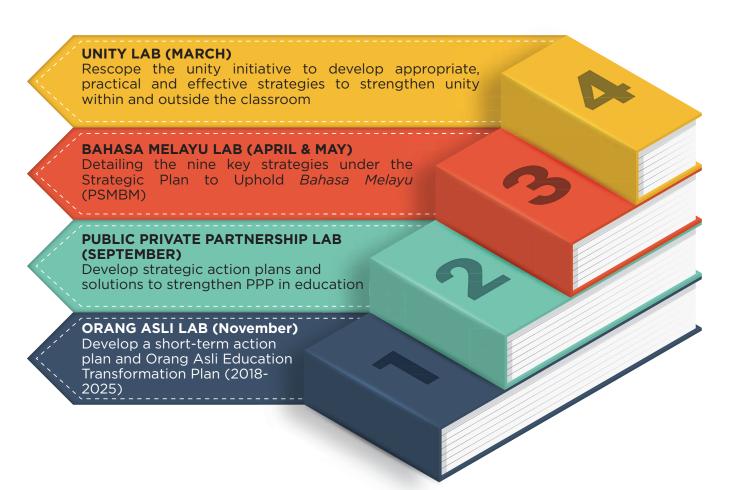
Efficient use of reliable data is important to help make the right decisions. Before any programme and activity is planned or implemented, the divisions need to fully understand available data and the analysis of the data to make informed decisions. There has been a positive move towards relying on data and moving away from mere assumptions which can be risky. Performance dialogues are also conducted at districts, states, and federal levels to better understand what is happening on the ground and to help address any roadblocks towards the successful implementation of initiatives. The dialogues elevated the focus on delivery and accountability. These sessions enable PADU to monitor performance, escalate issues and solve problems that arise. PADU developed comprehensive analysis to facilitate the dialogue sessions so that the engagements are more meaningful, looking at real issues on the ground.

Problem Solving and Consulting

One of the methodologies practised by PADU in resolving issues and getting to the root cause of a problem is through conducting a lab. The lab is a workshop which involves intense problem-solving, rigorous analysis and stakeholder engagement, mediated and supported by a team of able facilitators. The lab is a strategy used to achieve quick wins whilst getting in-depth analysis on the issues discussed. Through the lab, syndications are done with experts in various fields to gain insights, new ideas and perspectives. Engagements with the top officials of the Ministry are conducted to determine the feasibility and viability of proposed recommendations. Relevant interested parties on the subject from outside the Ministry are also included so that there is synergy and collaboration in working together for a common goal.

In 2016, PADU had conducted four initiative labs to assist various divisions under the Ministry to develop strategic solutions and proposals in accelerating the outcomes of their initiatives. Below are the labs organised by PADU in 2016:

Exhibit 2: Education Labs conducted in 2016



CHAPTER 6 | PADU 2016 ANNUAL REPORT

Apart from the labs, PADU also worked closely with Lead Divisions to clear the pathways for them to facilitate complex bureaucratic processes and expedite operations within the Ministry. ProELT training which is the English language enhancement training for teachers was one of the Blueprint initiatives where PADU assisted in expediting the procurement process which helped to warrant the training of 500 teachers in 2016.

Under the initiative of IPG Transformation: Roadmap and Implementation, PADU supported IPG in driving and monitoring the implementation of the activities identified in the IPG Roadmap. The successful partnership brought about the establishment of the IPG Transformation Management Office and the completion of the Talent Review exercise.

PADU also acts as a consulting entity to the Ministry. A key recognition of PADU's contribution to the Ministry in 2016 was the appointment of PADU by the Ministry of Finance to help review the proposal for the Ministry of Education Budget 2017 or Anggaran Belanja Mengurus 2017 (ABM 2017). The main objectives for the review were to prioritise the programmes and streamline the budget for activities under the Ministry. Prior to holding a 3-day workshop to conclude the amount of ABM 2017, PADU analysed the expenditure trends of each division. Then, a syndication with the related divisions was held to ensure there were no redundancy and duplication in their financial bids, and financial procedure guidelines were complied with. The rigorous workshop resulted in a RM280million saving for the Ministry.





Knowledge exchange and collaboration

Over the years, PADU has participated in various international symposiums and events to share the best practices in the execution of the Blueprint. To date, PADU has also been approached by various international agencies and countries in recognition of the Blueprint and the successes of the implementation of the initiatives. The journey of our Blueprint has attracted a lot of interest from other countries and PADU has often been requested to share and showcase the Malaysian education transformation story. Some of the delegations that had visited PADU included the Civil Service Delegation from Andhra Pradesh, India; Ministry of Education, Saudi Arabia; and delegations from Holland, Iran, Brunei, Vietnam, Thailand, Myanmar, Nigeria, and Bhutan. International agencies such as UNESCO, the World Bank and a few other individuals representing some international bodies also visited PADU to learn more about our nation's education transformation journey.

In addition to the international acknowledgement and the numerous knowledge exchange received from various countries, PADU also engages with the stakeholders via various mediums and platforms at national and international levels.

CHAPTER 6 | PADU 2016 ANNUAL REPORT

Increase transparency for direct public accountability

From 2013, PADU publishes an Annual Report on the actual progress against the Blueprint targets and initiatives. This Annual Report can be downloaded via PADU's website for the public to read. The Annual Report launch event is held annually to share with the public the successes of the Blueprint initiatives as well as the areas that need more effort. The Annual Report for 2015 was launched by the Minister of Education on 9 August 2016. The event was attended by more than 500 guests both from the fraternity of education as well as external guests. Since the Annual Report for 2015 coincided with the end of Wave 1, it also included the overall achievements for Wave 1. A gallery walk showcasing the Blueprint initiatives achievements in Wave 1 was shared with the public including the success stories and best practices in PPDs and JPNs. Student outcomes in Technical and Vocational Education and Training, 21st Century Learning in a classroom, and Special Education were also exhibited as showcases for all to see.



Dissemination of information on the Blueprint

PADU participated in various programmes and exhibitions to promote and increase awareness on the Blueprint. Dissemination of information on the progress of initiatives was done on an ongoing basis via roadshows, TV, radio, print and social media.

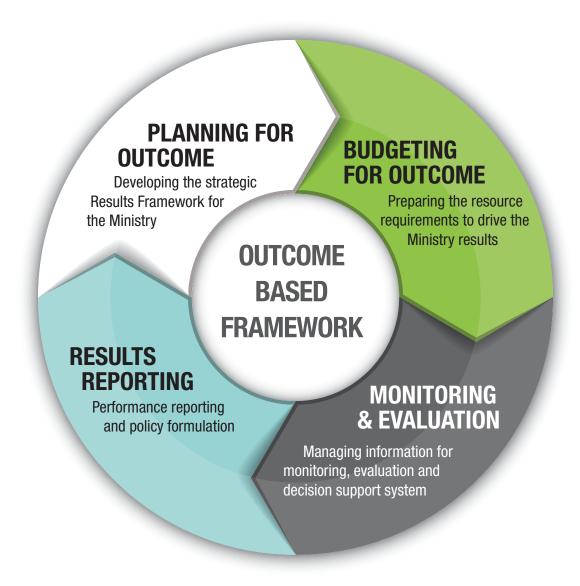
Change Management and Communications Sector of PADU together with the relevant divisions within the Ministry were also actively involved in the roadshows organised by the Corporate Communications Unit under the Ministry (Unit Komunikasi Korporat, UKK) to disseminate information on education policies and programmes throughout the country. PADU also assisted various divisions in designing communications plans and crafting communication messages, especially regarding the Blueprint initiatives.



Inculcating best practices

PADU subscribes best practices to ensure the success of programme management which is the hallmark of PADU's key role. Aside from adopting MSP as mentioned earlier, PADU is also guided by the Key Performance Indicators (KPI) of initiatives and Outcome Based Budgeting principles introduced by the Ministry of Finance when planning any programmes. Hence, based on all these guidelines, PADU implements the outcome based framework when initiating and planning new initiatives. This knowledge is then imparted to the Lead Divisions when executing the initiatives under their responsibility. The outcome based framework encompasses four main components: Planning for Outcome, Budgeting for Outcome, Monitoring and Evaluation, and Results Reporting.

Exhibit 3: Outcome Based Framework





Planning for outcome

The first step in planning is to develop a charter to include the scope, concept and KPI for the initiatives, followed by action plans which entail the KPI and key activities. The KPI Dictionary is also developed to detail out the KPI definition and measurement methodology. The final document is the 3-feet plan which is basically a detailed action plan to help guide the execution of planned activities.

Budgeting for outcome

Based on the directives of the Ministry of Finance, all financial planning must be based on the outcomes. Therefore, the 3-feet plan provides the details of the activities or programmes which include the financial implication within each activity or the initiative total budget.

Monitoring and evaluation

PADU tracks and monitors the progress of Blueprint initiatives through the initiative dashboard. The PMs and OICs update the progress of priority initiatives on a weekly basis, whilst secondary initiatives are monitored monthly. When issues or roadblocks on administrative processes or policy decisions occur but could not be resolved at the divisional level, PADU assists in drawing attention and escalating these issues in the Problem-Solving Meeting (PSM). The PSM is a platform for the top management of the Ministry to resolve issues and provide the decisions necessary to move forward.

Results reporting

Progress of each initiative under the Blueprint is reported in two main annual events organised by PADU and chaired by the Minister of Education, which are the Mid-Year Review (MYR) and the Year End Review (YER). The MYR is conducted to evaluate the progress of initiatives for the first half of the year and provide the necessary support to achieve targets, while the YER is conducted to evaluate the performance of initiatives at the end of year and provide advice on future planning. In August 2016, 24 Lead Divisions presented their initiatives progress through the report card methodology in the MYR. The Ministry top officials, the Directors of JPN and the Heads of PPD were also present to provide input. Input and decisions made in the session were noted and PADU supported divisions in ensuring the necessary actions were executed to expedite processes in achieving the intended outcomes at year end.

Note: The YER was carried out in January 2017 due to scheduling issues.



WAY FORWARD

Entering Wave 2, PADU is determined to further strengthen the partnerships with all parties within the Ministry to ensure progress is on track, efficient delivery and success of the Blueprint initiatives. Apart from the Ministry, PADU will continue to also reach out to external stakeholders for stronger collaboration. Learning from 2016, PADU has lined up improvement plans for various activities and programmes. PADU will continue to extend support to all stakeholders via various platforms and using multiple methodologies to ensure targets set are met and better planning for the coming year. Analysis of actual vs targeted KPI and lessons learnt from these activities would provide input for further enhancement of plans in Wave 2 to accelerate system improvement. As much as the Blueprint will remain as the basic basic stronghold and foundation in transforming the education system, PADU is will also be agile enough to embrace and adapt new and emerging needs as the education transformation journey is dynamic which requires adjustments to be made where necessary.



MALAYSIA EDUCATION BLUEPRINT 2013-2025 2016 ACHIEVEMENT

In 2016, there were 23 initiatives planned, executed, monitored and reported weekly. These initiatives marked the new start of Wave 2 of the Blueprint. The 2016 initiatives were also crucial in determining the success of the Blueprint Implementation.



ACCESS

The percentage of the national enrolment for preschool children aged 4+ and 5+ for public and private school increased from 84.6% to 85.4%. The percentage of upper secondary school enrolment, however, fell short from the 90% target with only 85.8% students registered in the system. This however, is an increase from 84.9% enrolment achieved in 2015. Meanwhile, enrolment in technical and vocational education continues to increase and exceeded the target of 6% by achieving 6.2%. Efforts must be intensified to ensure the Wave 2 target of 20% is achieved by 2020.

Access: Targets and Achievement 2016

KPI	2015 Achievement	Target 2016	2016 Achievement	Wave 2 Target
Percentage of national enrolment of preschool for children aged 4+ and 5+ (public and private).	84.6%	90%	85.4%	Universal Target
Percentage of private preschool enrolment for children aged 4+ and 5+.	50.7%	55.0%	51.9%	58.0%
Percentage of upper secondary enrolment.	84.9%	90%	85.8%	Universal Target
Percentage of enrolment aged 16+enrolment in Technical and Vocational Education and Training (TVET).	5.2%	6.0%	6.2%	20.0%

SUMMARY | ACHIEVEMENT 2016 ANNUAL REPORT

QUALITY

The Ministry aspires to be among the top third countries globally in international assessment such as Trends in International Mathematics and Science Study (TIMSS) and Programme for international Student Assessment (PISA).

English literacy achievement has increased tremendously since it was first introduced through the LINUS programme in 2013, recording the highest achievement of 98.6% since its inception. Numeracy on the other hand, recorded a slight decrease from 99.1% to 94.7%

IPGM continued to maintain a stringent entrance requirement for intake into the first-degree programme by ensuring top 30% achievers in SPM were accepted as trainee teachers. In 2016, 99.9% of the trainees achieved good scores in SPM. Consequently, the Ministry targets to produce high-quality graduates to further enhance the quality of education in the country.

The collaboration between the public sector and the private sector in education through the Trust School concept has proven to be an effective model towards improving school performance and increasing student outcomes. In 2016, an additional 21 schools under the purview of the Ministry participated in the programme making the total number of Trust Schools in Malaysia to 83.

Quality: Targets and Achievement, 2016

КРІ	2015	2016 Target	2016 Achievement	Wave 2 Target
Percentage of English language literacy (Year 3).	94.1%	100%	98.6%	100%
Percentage of Bahasa Melayu Literacy (Year 3).	98.6%	100%	99.0%	100%
Percentage of Numeracy (Year 3).	99.1%	95.0%	94.7%	100%
Percentage of HOTS-based components in UPSR.	20.0%	20.0%	20.0%	40.0%
Percentage of HOTS-based components in SPM.	20%	20%	20%	50%
Percentage of option-English teachers trained in ProELT improving by at least 1 CEFR band from a)B1: b)B2:	a) 87.4% b) 42.0%	a) 85.0% b) 50.0%	•	a) 85.0% b) 50.0%
Percentage of intake of candidates into the Bachelor of Education Programme.	99.1%	100%	99.9%	Top 30% in SPM
Percentage of positions for head teacher filled.	99.1%	100%	96.6%	100%
Percentage of teachers obtained CGPA of 3.75 and above in NPQEL.	43.7%	N/A	30.0%	65.0%
Number of Trust School.	62	82	83	140
Percentage of Schools in Band 1 and 2.	38.8%	37%	39.9%	50.0%
Percentage of Schools in Band 6 and 7.	1.9%	0.8%	1.9%	0%

SUMMARY | ACHIEVEMENT 2016 ANNUAL REPORT

EQUITY

The Ministry diligently works to bridge the gaps identified which have been identified in the education system. Thus, a few initiatives were implemented with the aims to reduce the achievement gaps between urban and rural students by increasing students' performance in both national level public examinations (UPSR and SPM).

Students with special education needs (SEN) are constantly given the chance to excel along with mainstream students. Their participation in inclusive education has gradually increased over the years and in 2016, 30.3% of them had enrolled into this programme.

Focus were also given towards increasing Orang Asli attendance rate in schools. Initiatives carried out by Ministry, thus far, showed positive effects when the attendance rate increased tremendously to 86.2% as compared to 79.1% in 2015. Efforts to ensure Orang Asli students remained in the system after primary education were monitored by several divisions in the Ministry.

Equity: Targets and Achievement 2016

KPI

Percentage reduction in urban-rural gap in UPSR.

2015 achievement

0.13 (-32%)

Target 2016

0.12 (-35%)

2016 Achievement

6.00 (+26%)

Wave 2 Target

50%

KPI

Percentage enrolment of SEN students in inclusive education programme.

2015 achievement

23.2%

Target 2016

30.0%

2016 Achievement

30.3%

Wave 2 Target

55.0%

KPI

Percentage reduction in urban-rural gap in SPM.

2015 achievement

0.50 (-18%)

Target 2016

0.46 (-25%)

2016 Achievement

0.47 (-23%)

Wave 2 Target

50%

KPI

Average attendance rate in Orang Asli Schools.

2015 achievement

79.1%

Target 2016

82.0%

2016 Achievement

86.2%

Wave 2 Target

Universal Target

SUMMARY | ACHIEVEMENT 2016 ANNUAL REPORT

UNITY

The Roadmap for Unity in Education was crafted in 2016 and is currently being aligned to the National Unity Blueprint. Only three states (Labuan, Sabah and Sarawak) met the minimum score of 6.9 for the unity index. Results from a study showed that students experience difficulties in embracing differences.

Unity: Targets and Achievement, 2016



Wave 2 Target5 out of 11 strategic plans completed



100%

EFFICIENCY

In ensuring that the education system runs at an optimum level, the Ministry pledges to redistribute the allocated budget, whenever possible, towards achieving student outcome. This is done through prudent spending and meticulous planning by realigning the budget for educational programmes which have greater impact on students. In 2016, the Ministry successfully redistributed an astounding 77% of the budget to high impact programmes.

The Ministry also had taken steps to enhance the education database through the integration of multiple application systems. The use of single user ID and password had increased the efficiency in education operation and reduced administrative burden for teachers and administrators. Seven additional systems were integrated in 2016 making a total of 35 system being integrated.

The Ministry continued to incorporate technology in education by infusing the Virtual Learning Environment (VLE) in daily lesson. VLE usage had been tracked and 1.5 million students had accessed VLE untill November 2016. This development had encouraged the Ministry to further increase the number of learning resources in VLE.

Efficiency: Targets and Achievement, 2016



MOVING FORWARD

As we enter the second year in Wave 2 of the Blueprint implementation, the Ministry strives to intensify the momentum set in 2016. In 2017, we hope to further increase access to education, improve education quality, ensure equity across schools regardless of location, promote

and strengthen values on unity among students, and enhance system efficiency through 28 initiatives. Concerted efforts among all stakeholders, within and outside the Ministry is central towards sustaining and accelerating the upward trajectory achieved in Wave 1.



Every Malaysian child deserves equal access to education which will enable the child to achieve his or her potential. The Ministry, thus, aspires to ensure universal access and full enrolment of all children from preschool through to upper secondary level by 2020. To increase access to education, activities to be implemented in 2017, include the following:

Increasing Access to Quality Inclusive Education

To encourage the participation of more students with Special Education Needs (SEN) in mainstream schools, the target for participation of SEN students in inclusive class is increased to 35%. We hope more families with SEN children will be more open and willing to send their children to learn alongside their friends in mainstream schools. Concurrently, more schools will be encouraged to be involved in the Inclusive Education Programme through the provision of appropriate facilities and learning tools. Mainstream teachers and special education teachers will be upskilled to enhance their competency in managing inclusive class methodology.

Raising the Quality of Preschools

Early childhood development is important in shaping the future of our children. The emotional, social and physical development of young children have a direct effect on their overall development and their adult life. To maximise their future well-being, we will continue to invest in the provision of education for young children. Hence, the Ministry will continue to ensure the minimum standard set for facilities and teacher qualifications set under the National Preschool Quality Standard (SKPK) are met by all preschool operators.

Increasing Access to Education from Preschool to Upper Secondary

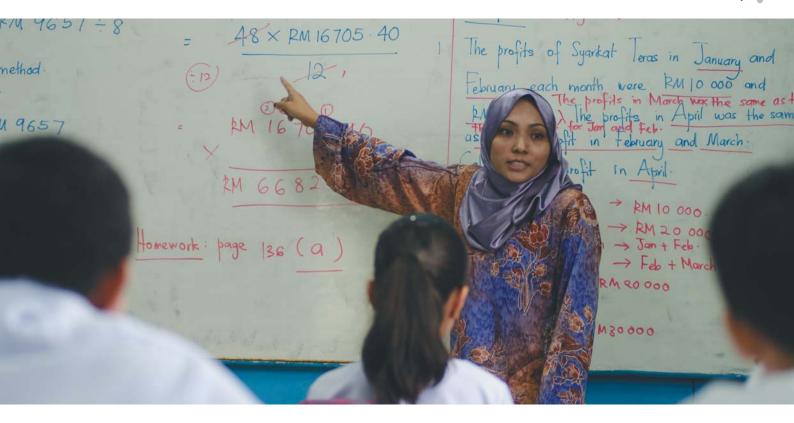
UNESCO acknowledges that education is a human right for all throughout life and that access must be matched by quality. We will continue to closely monitor the enrolment rate of our children from preschool to upper secondary levels while efforts to minimise dropouts at primary and secondary levels is intensified through specific and differentiated programmes by JPN, PPD and schools.

MOVING FORWARD 2016 ANNUAL REPORT

Raising the Quality of Vocational Education

The Ministry aspires to produce semi to highly skilled graduates to fulfil the demand of the industries. In 2017, we will put our best efforts to work with the industries to ensure our graduates are employed upon graduating in key economic sectors with good starting salaries. Efforts to increase the quality of vocational education are in progress to ensure 16 pilot programmes obtain full accreditation whilst another 20 vocational programmes obtain provisional accreditation from the Malaysian Qualifications Agency (MQA).





QUALITY

All children will have the opportunity to attain an excellent education which is uniquely Malaysian and comparable to the best international systems. The aspiration is for Malaysia to be in the top third of countries in terms of performance in international assessments, as measured by outcomes in TIMSS and PISA, within 15 years. TIMSS and PISA, currently, test for Mathematics, Science, and literacy. Additional assessments which address other dimensions of quality which are relevant to the Malaysian context may be included as they are developed and become accepted international standards.

Implementing Activities under Teacher Charter

Professional development of teachers is vital to elevate the standard of education in Malaysia. Therefore, it is integral to raise the bar for teachers' competencies by ensuring low performing teachers meet the minimum competency level to a minimum of 88% based on PSYNNOVA-iBMT (Teachers) instrument upon completing the performance enhancement course. In 2017, approvals for a more structured career pathway will be sought and implemented concurrently with the execution of teacher licensing. To ensure the transformation agenda is a success, the Ministry also aims to ensure at least 50% of private school teachers are registered with the Ministry.

MOVING FORWARD 2016 ANNUAL REPORT

Inculcating Higher Order Thinking Skills (HOTS) in 21st Century Learning

The term "21st Century Skills" is generally used to refer to certain core competencies such as collaborative skills, digital literacy, critical thinking, and problem-solving which advocates the belief that schools need to teach and help students thrive in today's world. The Ministry aims to get at least 40% of students tested using the Competency Assessment on Mathematics, Science and Reading Literacy (*Pentaksiran Kompetensi Literasi Sains, Matematik dan Bacaan*, PKLSMB) achieve the minimum score of 500 in all the three domains. To achieve this target, more than 200,000 teachers will be given full exposure on approaches and strategies of incorporating HOTS in their teaching and learning. Consequently, schools which successfully adopt and inculcate HOTS in students will be given recognition for their efforts.

The Ministry will also be introducing the Malaysian 21st Century Learning Framework to align all aspects of our education system towards preparing young Malaysians to possess 21st century skills which would enable them to be competitive in the global arena. A feasibility study on the introduction of Design Thinking concept in schools will be explored as part of the framework methodology to bring about change in the teaching and learning process.

Enhancing STEM Education

In the 21st century, scientific and technological innovations have become increasingly important as we reap the benefits and face challenges of both globalization and a knowledge-based economy. To succeed in this new information-based and technology-savvy society, students need to develop their capabilities in STEM to levels much beyond what was considered acceptable in the past. As such, the Ministry aims to increase awareness on STEM among school administrators, teachers, students and parents through the implementation of fun learning such as STEM gamification and reality TV programme. The revival of practical science will provide students with hands-on experience and better understanding of STEM education. Concurrently, the number and quality of apparatus in science labs around Malaysia will be audited to ensure sufficient and suitable apparatus are available for student use.

Expanding Parental and Community Involvement in the School Ecosystem

Parental involvement is often seen as a foundation in the success of a child's education. Parents participation in school contributes significantly towards students' achievement and their enjoyment at school. The Ministry hopes to further raise awareness on the need for parents and communities to collaborate with schools in pursuit of a holistic education by providing clear guidelines and best practices. An improved School and Parental Toolkit 2.0 with contemporary, proven methods in education and current reforms undertaken by the Ministry will be developed and made available online that facilitate access for parents.

Expanding Private Sector Involvement in Education

International best practices have shown that involving the private sector in education can improve school performance, accountability and autonomy as well as increase access. The Ministry aspires to reignite the interest of the private sector to work with the Ministry in education development through collaboration and the provision of comparative advantage.

In 2017, the Ministry sets 5% (cumulatively) as the overall targeted percentage to increase private sector contributions in basic education. To realise the target, the Ministry will develop a portal as a virtual one-stop centre for information on schools which need assistance. This portal will also be a source of information to channel interested investors to contribute in any relevant field deemed appropriate by them based on the organisational areas of expertise. Key officers in-charge for PPP at divisional level will also be accessible through this portal.

In line with the Education NKEA Entry Point Projects (EPP), EPP13 is aimed at introducing PPP at newly built schools. A new PPP model will also be introduced in addition to the existing spectrum of PPP models to increase private sectors contributions to education programmes, provide more options on types of programmes and PPP models, and to make PPP more flexible based on sponsor's interests. The new PPP model will be developed based on feedback and input from focus group sessions involving internal and external key stakeholders and experts in the field. The Ministry also aims to increase the number of Trust School to 105 from 83 in 2017.

MOVING FORWARD 2016 ANNUAL REPORT

Implementation of the Principal Charter

To ensure continuous organisational excellence, a solid succession plan must be in place to replace school leaders when they leave the service or retire. Successors must not be selected based merely on seniority. Succession planning entails identifying and developing middle leaders with the potential to fill key organizational leadership positions in the schools. The move will not only prepare future leaders but also prepares the organization for ease of transition and leadership change. We will also aim to fill 80% of vacant leadership positions back-to-back at the school level with high performing leaders. Aminuddin Baki Institute will ensure at their level best to produce graduates who excel in the National Professional Qualification for Executive Leadership (NPQEL) course.

Transforming IPG to Improve the Quality of Teacher Training

The Ministry aspires to transform Institutes of Teacher Education (IPG) into a world class teacher training institution in Malaysia through a dynamic training and development programme for our teachers. Still in its first phase of the 10-year transformation journey, the initial transformation process for IPG will focus on upgrading delivery and support systems. As such, Institut Pendidikan Guru Malaysia (IPGM) sets the target to achieve 28% of the whole transformation process in 2017 to establish a solid foundation for total transformation.

Strengthening English Language Education

The English Language Roadmap 2015-2025 was developed to reform the English Language education in the country. In 2017, all initiatives pertaining to the development of English language will be consolidated to produce holistic student outcomes. The upskilling of English language teachers through ProELT will continue while programmes like Dual Language Programme (DLP) and Highly Immersive Programme (HIP) will be expanded to ensure greater opportunities for our children to improve their English language proficiency. With some of these efforts coupled with hard work at the school and district levels, we aim to achieve 80% passing rate in the 2017 SPM English language paper.

Upholding Bahasa Melayu Education

The Blueprint aspires that the percentage of students who acquire Credit in SPM Bahasa Melayu (BM) paper by 2025 will be at 90%. A nine-year plan was developed in the BM lab conducted in 2016 to achieve this bold target. The BM Standard Framework, Professional Development for BM Teachers, and the BM Roadmap documents are expected to be ready in 2017 which will set the direction towards raising the language proficiency of students and teachers. Based on the 2016 SPM Bahasa Melayu results, the Ministry hopes to achieve the percentage of students who acquire Credit in 2017 at 70%. All available resources allocated to strengthen the proficiency of students in BM will be used to realise the aim.

Moving forward, the Ministry plans to address issues on non-option teachers teaching BM in national-types schools (Sekolah Jenis Kebangsaan, SJK) and enhance teachers' pedagogical skills in remote areas using various methods and approaches to improve acquisition and usage of BM inside and outside the classrooms. BM tool kits or activity kits will be developed to make learning fun.

Developing Soft Skills Through Co-Curricular Activities

A holistic education must not only emphasise on academic excellence but also provides the development of emotional, physical and spiritual aspects. The Ministry hopes to develop students' soft skills through co-curricular activities. Leadership and entrepreneurial skills, problem solving and decision making, among others can be nurtured and practised through many projects under the varied societies and clubs in schools, and through sports and games. The baseline data on mastery level of soft skills will be acquired through the usage of Pentaksiran Aktiviti Jasmani Sukan dan Kokurikulum (PAJSK) instrument.

Expanding the Literacy and Numeracy Screening 2.0 (LINUS 2.0) Programme

The objective of the LINUS programme is to ensure our children acquire the basic skills of literacy and numeracy after the initial three years at the primary level. Based on the encouraging results in 2016, the Ministry sets an ambitious target of 100% literacy in BM and English, and numeracy for students at the end of Year 3 for 2017. We hope parents will also be on board to achieve the target set by providing guidance and assistance at home and in schools to increase their children's level of literacy and numeracy.

MOVING FORWARD 2016 ANNUAL REPORT

Developing Gifted and Talented Education Programme

The Ministry is also crafting a dynamic education programme for gifted and talented children. In 2017, we hope to identify the number of potential prodigies. Work will also focus on putting in place suitable policies to support the educational needs of our gifted and talented students.

Optimising Human Resource Services in School

A research on teachers' workload in 2016 provided early indicators of non-alignment between supply and placement of teachers which created discontent among teachers. The Human Resource Management Division (BPSM) will be conducting a research to develop a guideline to define the roles and responsibilities of teachers which will classify their duties into main tasks, secondary tasks and additional tasks in 2017. The Ministry will also be collecting the baseline data to identify the actual number of teachers needed for each subject to correctly filled the posts in schools.

EQUITY

Top-performing school systems deliver the best possible education for every child, regardless of geography, gender, or socioeconomic background. Towards achieving equity in education, the Ministry aspires to halve the current urban-rural gap and reduce the socioeconomic and gender achievement gaps by 25% by 2020.

Enhancing the Implementation of the District Transformation Programme

The District Transformation Programme (DTP) aims to narrow the gap between urban and rural achievement in student outcomes. The mobilisation of qualified SISC+ and SIPartner+, especially to disadvantaged schools in rural and remote areas is crucial to bridge the urban-rural gap. The Five Steps Intervention Plan (*Pelan Intervensi Lima Langkah*, PILL) developed at the PPD level, if done meticulously and correctly, will enable districts to identify issues and plan specific interventions to resolve various academic and non-academic concerns. The initiative will move a step further by planning to conduct a research on gender and socioeconomic gap on academic achievement.

Transforming the Orang Asli Education

A lab was organised in 2016 to develop a comprehensive plan to transform Orang Asli education. Thus, an initiative has been put into place to bridge the gap of Orang Asli students' achievement in accordance with the national aspiration to provide equity in education. Efforts to boost the attendance rate among Orang Asli children include inculcating community interest focus at every Orang Asli schools. The remodelling of Orang Asli schools lights the hope of improving UPSR performance and ignites children's excitement to come to school. Other out-of-the-box solutions identified are to make Orang Asli schooling close to home as much as possible by rebranding of *Kurikulum Asli Penan* into *Modul Intervensi Pedagogi Pribumi*. This includes the additional pull out to the existing textbooks to allow contextual learning for Orang Asli children.



MOVING FORWARD 2016 ANNUAL REPORT

UNITY

Schools are central in the inculcation and fostering of unity among the young as students spend over a quarter of their time in school from the ages of 7 to 17. Through interactions with individuals from a wide range of socioeconomic, religious, and ethnic backgrounds, students learn to understand, accept, and embrace differences. This creates a shared set of experience and aspirations to build a united Malaysia. The Ministry aspires to create a system where students have opportunities to build on these shared experiences and aspirations which are the foundation for unity.

Strengthening Unity in Schools

Achieving unity among the diverse Rakyat of different races, religions and heritage is the nation's biggest challenge. Social cohesion and national unity is a national agenda, and the Ministry plays a vital role in ensuring its success. Latching on the National Unity Blueprint, the Ministry aims to develop its own 5-year roadmap for unity in education. School leaders at all levels of education are expected to be the change agents to guide teachers in designing and implementing unity-related activities, and fostering unity among students. Modules on unity have been prepared to guide schools in executing activities to help our children understand and appreciate diversity. Participation of parents and communities is also pivotal in supporting the unification of the school community as well as the extended community.



EFFICIENCY

The Malaysian education system has always been well funded, yet improvements in student outcomes have not always matched the resources invested into the system. While the Government will maintain current levels of investment, the aspiration is to further maximise student outcomes within the current budget levels.

Optimising Expenditure Based on Programme Outcomes

The Ministry is considering new ways to fully optimise the contract of service providers in schools by including new scopes in the procurement process. To maximise the usage of school facilities, the facilities need to be maintained and upgraded. To this end, the Ministry will only prioritise activities and projects which will greatly accelerate student outcomes in its planning and remove less effective programmes to ensure budget allocated is used prudently.

Implementing the New Organisational Structure for the Ministry

The Ministry aims to communicate the new structure of the Ministry to all relevant stakeholders after all the necessary processes have been finalised before its actual implementation. Communication plans will be developed for each stakeholder at every level. The development of a leadership succession plan of the Ministry is also expected to be completed in 2017.

Providing Basic Infrastructure in All Schools

Creating a conducive learning environment is fundamental in making the learning process a success. In 2017, 120 dilapidated schools identified will be provided with maintenance and upgrading while the Ministry continues to enhance its database to allow for better planning and maintenance in 2018. We hope the development budget provided by the central agency will enable the targeted schools to be upgraded with deserving facilities and buildings as proposed.

MOVING FORWARD 2016 ANNUAL REPORT

Developing Education Data Repository and Expanding Usage of Dashboard

The Ministry aspires to enhance its service delivery system and resource management efficiency by having an integrated and efficient data repository. The data repository, which consolidates existing key education databases, will empower the education management at all levels to make accurate and informed decisions. New education dashboards are being developed using the latest Business Intelligence tool to aid the Ministry in data analysis and data exploration. To achieve this ambition, the Ministry is committed to build its internal capability and capacity by providing the required technology exposure and training.

Increasing the Use of Technology in Teaching and Learning

Improvements in the usage of the Virtual Learning Environment (VLE) in 2016 signals the readiness and the acceptance by students and teachers in integrating technology inside and outside the classroom. Technology infused classrooms with digital learning tools, such as computers and handheld devices, offers expansion in course offerings, learning experiences, and learning materials. In addition, with technology, students can have access to learning 24 hours a day, 7 days a week, enhance 21st century skills, increase students' engagement and learning motivation, and accelerate the learning process. New and improved VLE contents will continue to be developed in 2017 as it is important to provide attractive teaching and learning aids to students to enable them to explore alternative learning materials to increase their knowledge and skills.

Implementing the ICT Transformation

In accordance with the Digital Government Agenda in the Eleventh Malaysian Plan and in support of the Blueprint implementation, the Ministry is developing a 6-year ICT Strategic Roadmap towards delivering ICT Transformation within the Ministry. This initiative aims at enhancing the effectiveness and the efficiency in the education service delivery system by leveraging on the latest available performance technology.

Implementing the Roadmap for Under-Enrolled Schools

To optimise budget expenditure, the Ministry is also considering to greatly reduce the operating cost of under-enrolled schools. Currently, there are 2,996 schools in Malaysia with enrolment less than 150 students per school. The cost of operating an under-enrolled school is double the amount needed to operate an optimal enrolment school. Hence, the Ministry is exploring ideas of combining a few of these schools. The initial project is to

focus on schools within the same vicinity. In 2017, the Ministry will provide professional development training to headmasters and teachers from 393 under-enrolled schools (30 students and below) to implement multi-grade teaching in 2018.

Developing Equitable Funding Principles to Support Schools

Malaysia has achieved significant growth in the enrolment at primary and lower secondary levels. Education expenditure appears to be progressive in basic education. However, the level of efficiency and effectiveness of expenditure has raised concerns. The equitable funding initiative aims at improving equity in education spending and outcomes across all types of schools. Instead of using uniform per capita grant funding for all types of school, the Ministry intends to incorporate variations in the funding formula to reflect the differentiated needs of schools with different characteristics. This new approach particularly aims at increasing support to disadvantaged schools, and narrowing the school performance gap. Thus, a two-year pilot project was introduced in 2015 with the initial 232 schools in Negeri Sembilan. The intended outcome was to review the current school funding mechanism and complemented with measures in improving school autonomy and accountability. Schools would have more flexibility to manage the grant as per the needs of their schools. In addition, per student allocation can also vary per the needs of the students allowing for more allocation to be channelled to deserving students. The linkage between clarity of formula and school based discretion in managing allocation is important because schools can eliminate management inefficiencies and drive performance in the school system.

SUMMARY

Initiatives under Wave 2 of the Blueprint are designed with the aim to accelerate change accomplished in Wave 1. To realise the aspirations in the Blueprint at the end of Wave 2 and ultimately transform the education landscape in 2025, all within the Ministry must understand the goals set, work together and have unwavering determination towards success. Parents, communities and the private sector should invest in the education reform to provide a successful future for our children.

GLOSSARY

2016 ANNUAL REPORT

1BestariNet A project to equip all public schools in Malaysia with high-speed 4G internet and a VLE

3R Reading, Writing, Arithmetic

4R Reading, Writing, Arithmetic and Reasoning

4G Fourth-generation wireless is a type of technology that can be used with cellular phones,

wireless computers and other mobile devices

ABM Estimated Operational Budget

Anggaran Belanja Mengurus

ADSL Asymmetric Digital Subscriber Line

AIM Agensi Inovasi Malaysia

ALD Accelerated Leadership Development

APFEC Asia Pacific Regional Forum on Early Childhood Care and Education

ASED ASEAN Education Ministers and the Senior Education Officials Meeting

ASWARA Akademi Seni Budaya Warisan dan Kebangsaan

BIG Teacher Profesionalism

Bina Insan Guru

BKew Finance Division

Bahagian Kewangan

BKK Co-curricular and Arts Division

Bahagian Kokurikulum dan Kesenian

B&P Culture and Learning

Budaya dan Pembelajaran

BLOSSOMS Blended Learning Open Source Science and Mathematics Studies

BM Malay Language

Bahasa Melayu

BPG Teacher Education Division

Bahagian Pendidikan Guru

BPI Islamic Education Division

Bahagian Pendidikan Islam

BPKhas Special Education Division

Bahagian Pendidikan Khas

BPP Education Development Division

Bahagian Pembangunan Pendidikan

BPPK Competency Development and Assessment Division

Bahagian Pembangunan dan Penilaian Kompetensi

BPSBPSK Fully Residential and Excellence Schools Management Division

Bahagian Pengurusan Sekolah Berasrama Penuh dan Kluster Kecemerlangan

BPSH School Management Division

Bahagian Pengurusan Sekolah Harian

BPSM Human Resource Management Division

Bahagian Pengurusan Sumber Manusia

BTP Education Technology Division

Bahagian Teknologi Pendidikan

CE Cambridge English

CEFR Common European Framework of Reference for Languages

CLO Course Learning Outcome

Hasil Pembelajaran Kursus

CPD Continuous Professional Development

DBP Dewan Bahasa dan Pustaka



DEAR Drop Everything And Read
DLP Dual Language Programme

DTP District Transformation Programme

DVM Malaysia Vocational Diploma

ECCE Early Childhood Care and Education

ELSQC English Language Standard and Quality Council

ELT English Language Teaching

ELTC English Language Training Centre

ELTN Enhanced Teachers Learning Network

EPP Entry Point Projects

EPRD Educational Planning and Research Division

Bahagian Perancangan dan Penyelidikan Dasar Pendidikan

FasiLINUS Facilitator for Literacy and Numeracy Screening Programme

GPN National Average Grade

Gred Purata Nasional

GPPT6 Management Guidelines for Form 6

Garis Panduan Pengurusan Tingkatan Enam

HE Ethnic Relations

Hubungan Etnik

HIEP Holistic Inclusive Education Programme

HIP Highly Immersive Programme
HOTS Higher Order Thinking Skills
HPS High Performing School

IAB Institute of Aminuddin Baki

Institut Aminuddin Baki

IB International Baccalaureate

IBMYP International Baccalaureate Middle Years Programme

ICT Information and Communication Technology

ICC In-country Consultant

ILKS

ICIR International Conference on Innovative Research

IDEAS Institute for Democracy and Economic Affairs

IEA International Association for the Evaluation of Educational Achievement

IEP Inclusive Education Programme
IET Inclusive Education Training
ILKA Public Skills Training Institute
Institut Latihan Kemahiran Awam

Private Skills Training Institute

IMPaK Special Education Needs Placement Ins

Special Education Needs Placement Instrument
Instrumen Menentu Penempatan Murid Berkeperluan Khas

IPG Institute of Teacher Education

Institut Pendidikan Guru

IPGK Institute of Teacher Education (Campus)

Institut Pendidikan Guru (Kampus)

GLOSSARY

2016 ANNUAL REPORT

IPGM Institute of Teacher Education Malaysia

Institut Pendidikan Guru Malaysia

ISTE International Society for Technology in Education

JIPS Steering Committee for Staff Development

Jawatankuasa Induk Pembangunan Staf

JKR Malaysian Public Works Department

Jabatan Kerja Raya

JNJK Schools Inspectorate and Quality Assurance

Jemaah Nazir dan Jaminan Kualiti

JPA Public Service Department

Jabatan Perkhidmatan Awam

JPK Department of Skills Development

Jabatan Pembangunan Kemahiran

JPN State Education Department

Jabatan Pendidikan Negeri

JPNIN Department of National Unity and Integration

Jabatan Perpaduan dan Integrasi Nasional

K9 Comprehensive Special Model School

Sekolah Model Khas Komprehensif

KAP Curriculum for the Orang Asli and Penan

Kurikulum Orang Asli dan Penan

KBK Compound and Building Cleaning Services

Kebersihan Bangunan dan Kawasan

KEDAP Adult Class for Orang Asli and Penan

Kelas Dewasa Orang Asli dan Pribumi

KiDT i-THINK Online Course

Kursus i-THINK Dalam Talian

KITA Ethnics Research Institute

Institut Kajian Etnik

KMK Communicative Malay Literature

Kesusasteraan Melayu Komunikatif

KPI Key Performance Indicator

KSBM Bahasa Melayu Standard Framework

Kerangka Standard Bahasa Melayu

KSIB Parents Support Group

Kumpulan Sokongan Ibubapa

KSSM Standard Curriculum for Secondary School

Kurikulum Standard Sekolah Menengah

KSSR Standard Curriculum for Primary school

Kurikulum Standard Sekolah Rendah

KV Vocational College

Kolej Vokasional

LCML Leadership Course for Middle Leaders

LINUS Literacy and Numeracy Screening

LNPT Annual Performance Evaluation Report

Laporan Nilaian Prestasi Tahunan

LP Examination Syndicate

Lembaga Peperiksaan

MBMMBI Upholding Bahasa Malaysia, Strengthening English Language Policy

Dasar Memartabatkan Bahasa Melayu dan Memperkukuh Bahasa Inggeris



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

MFIT Malaysia Fund-In-Trust

MIGHT Malaysian Industry-Government Group for High Technology

MOE Ministry of Education
MOF Ministry of Finance

MQA Malaysian Qualifications Agency
MSP Managing Successful Programmes

MYP Middle Years Programme

MYR Mid-Year Review

NBOS National Blue Ocean Strategy
NGO Non-Governmental Organisation
NKEA National Key Economic Area
NKRA National Key Result Area

NOSS National Occupational Skills Standard

NPQEL National Professional Qualification for Educational Leaders

NPQH National Professional Qualification for Headship

OBB Outcome-Based Budgeting

OECD Organisation for Economic Co-operation and Development

OIC Officer-in-Charge

PADU Education Performance and Delivery Unit

PAJSK Pentaksiran Aktiviti Jasmani, Sukan dan Kokurikulum

PAV Basic Vocational Education

PBPPP Unified Instrument

Penilaian Bersepadu Pegawai Perkhidmatan Pendidikan

PBS School Based Assessment

Pentaksiran Berasaskan Sekolah

PDE Enstek Data Centre

Pusat Data Enstek

PdP Teaching and Learning

Pengajaran dan Pembelajaran

PEMANDU Performance Management and Delivery Unit

PIKeBM Interactive Bahasa Melayu Skills Programmes

Program Interaktif Kemahiran Bahasa Melayu

PKG Teacher Activity Centre
Pusat Kegiatan Guru

Pusat Kegiatan Gurt

PKK Security Control Services

Perkhidmatan Kawalan Keselamatan

PKLSMB Assessment on Mathematics, Science and Reading Literacy

Pentaksiran Kompetensi Literasi Sains, Matematik dan Bacaan

PKS Sports Excellence Centre

Pusat Kecemerlangan Sukan

PIBG Parent-Teacher Association

Persatuan Ibubapa dan Guru

PILL Five Step Intervention Plan

Pelan Intervensi Lima Langkah

GLOSSARY

2016 ANNUAL REPORT

PIPPK Continuous Professional Development

Pelan Induk Pembangunan Profesionalisme Keguruan

PISA Programme for International Students Assessment

PISMP Bachelor of Education Programme

Program Ijazah Sarjana Muda Pendidikan

PLC Professional Learning Community

PLD District Training Centre

Pusat Latihan Daerah

PM Programme Manager

PPD District Education Office

Pejabat Pendidikan Daerah

PPI Inclusive Education Programme

Program Pendidikan Inklusif

PPISMP Program Persediaan Ijazah Sarjana Muda Pendidikan

PPKBIS English Language Upskilling Programme in School

Program Peningkatan Kemahiran Bahasa Inggeris di Sekolah

PPKI Special Education Integration Programme

Program Pendidikan Khas Integrasi

PPP Public Private Partnership

PPP Education Officer

Pegawai Perkhidmatan Pendidikan

PPP Indigenous Learning Centre

Pusat Pembelajaran Pribumi

PPPK Special Education Service Centre

Pusat Perkhidmatan Pendidikan Khas

PPsi Psychometric Assessment

Pentaksiran Psikometrik

PRIme Residency and Immersive Programme

Program Residensi dan Imersif

ProELT Professional Upskilling of English Language Teachers

PSM Problem Solving Meeting

PSMBM Strategic Plan to Uphold Bahasa Melayu

PT3 Form 3 Assessment

Pentaksiran Tingkatan 3

PVMA Upper Secondary Vocational Education

Pendidikan Vokasional Menengah Atas

QAPCC Quality Assurance and Policy Compliance Centre

RIMUP Student Integration Plan for Unity

Rancangan Integrasi Murid Untuk Perpaduan

SABK Government-Aided Religious School

Sekolah Agama Bantuan Kerajaan

SAR Peoples' Religious School

Sekolah Agama Rakyat

SBA School-based Assessment

SBT High Performing School

Sekolah Berprestasi Tinggi

SBJK Sekolah Bimbingan Jalinan Kasih

SDG Sustainable Developmental Goals



SDH School in Hospital

Sekolah Dalam Hospital

SEIP Special Education Integration Programme

SEN Special Education Needs
SES Special Education School
SHG Sekolah Henry Gurney

SI Sekolah Integriti

SIPartner+ School Improvement Partner+

SISC+ School Improvement Specialist Coach+

SJKC National-type Chinese school for primary education

Sekolah Jenis Kebangsaan Cina

SJKT National-type Tamil school for primary education

Sekolah Jenis Kebangsaan Tamil

SK National School

Sekolah Kebangsaan

SKM Malaysian Skills Certificate

Sijil Kemahiran Malaysia

SKM Under-enrolled School

Sekolah Kurang Murid

SKPK National Prescchool Quality Standard

Standard Kualiti Prasekolah Kebangsaan

SKPM Malaysian Education Quality Standard

Standard Kualiti Pendidikan Malaysia

SM Secondary School

Sekolah Menengah

SMA Religious Secondary School

Sekolah Menengah Agama

SMJKC National-type Chinese Secondary School

Sekolah Menengah Jenis Kebangsaan Cina

SMK National Secondary School

Sekolah Menengah Kebangsaan

SMKA National Religious Secondary School

Sekolah Menengah Kebangsaan Agama

SMV Vocational Secondary School

Sekolah Menengah Vokasional

SPDP Supervised Project Development Programme

SPTS School High Performance Sports

Sukan Prestasi Tinggi Sekolah

SPM Malaysian Certificate of Education

Sijil Pelajaran Malaysia

SSO Single Sign-on

STPM

STAM Malaysian Higher Religious Certificate

Sijil Tinggi Agama Malaysia

STEM Science, Technology, Engineering, Mathematics

Malaysian Higher School Certificate

Sijil Tinggi Persekolahan Malaysia

SUMUR Student Examplary Character

Sahsiah Unggul Murid

GLOSSARY 2016 ANNUAL REPORT

SVM Malaysian Vocational Certificate

Sijil Vokasional Malaysia

TFM Teach for Malaysia

TIMSS Trends in International Mathematics and Science Study

TMO Transformation Management Office

ToT Training-of-Trainers

TVET Technical and Vocational Education and Training

UI Unified Instrument

UiTM Universiti Teknologi MARA

UKBM Bahasa Melayu Proficiency Test

Ujian Kecekapan Bahasa Melayu

UKK Corporate Communications Unit

Unit Komunikasi Korporat

UKM Universiti Kebangsaan Malaysia

ULBM Bahasa Melayu Oral Test

Ujian Lisan Bahasa Melayu

UM Universiti Malaya

UMS Universiti Malaysia Sabah

UNESCO United Nations Educational, Scientific and Cultural Organisation

Pertubuhan Pendidikan Sains dan Kebudayaan Pertubuhan Bangsa-Bangsa Bersatu

UNIMAS Universiti Malaysia Sarawak

UPSI Universiti Pendidikan Sultan Idris

UPSR Primary School Assessment Test

Ujian Penilaian Sekolah Rendah

VETA Vocational Education Training Academy

VLE Virtual Learning Environment
VSAT Very Small Aperture Terminal
VTE Vocational Teacher Educators
VTM Vocational Training Managers
VTO Vocational Training Officer

WICC World Invention Creativity Contest

WP Federal Territory

Wilayah Persekutuan

WSL Work Stream Leader

YER Year End Review

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