Improving Malaysia's IMD Competitiveness Ranking for the Pupil–Teacher Ratio

(Secondary Education) Indicator

DOKUMEN DIPERAKUI BENAR

MOHAMAD MUZAFFAR ABDUL HAMID
TIMBALAN PENGARAH
PCD

Presentation by Dr Mohhidin Othman

Objectives

- To highlight Malaysia’s current ranking for pupil–teacher ratio (secondary education) in the WCY 2020; IMD
- To analyze the reasons or drivers that have determined the current position
- To recommend initiatives that can help Malaysia to improve on its current ranking on this indicator and consequently its overall competitive ranking

Background

- Malaysia has made significant improvement in increasing access to formal schooling, the quality of the education system has come under greater scrutiny. The prevailing challenge today is improving the quality of education, particularly in terms of helping students develop higher-order thinking capabilities. In addressing this pressing issue, Malaysia's pivotal education planning blueprint was launched by Ministry of Education (Ministry of Education Malaysia, 2013)

- The blueprint explicitly addresses the importance of engaging students in types of learning experiences that cultivate higher order thinking which broadly identifies issues of practice in Malaysian classrooms but does not adequately describe and conceptualiz specific aspects of teacher practice for development

- Pupil-teacher ratio (PTR) is an important key indicator in measuring quality and equity in education. PTR could be defined as the total number of pupils in a particular school divided by the total number of qualified teachers

- In many developing countries, free education inevitably increases the PTR because of increased access and subscription, and due to high enrollment rate. On the contrary, in the developed countries, free education reduces the PTR because of calculated efforts are being done to increase the carrying capacity of schools and recruitment of more qualified teachers

- Lowering the PTR is not a simple task, when the student-teacher ratios are to be lowered, there is a huge funding that must be allocated to recruit more qualified teachers

- Malaysia currently has a population of 32.7 million in the first quarter 2020, with breakdown by age group as follows, 0-5 (3.12 million), 6-14 (4.58 million), 15-59 (21.44 million) 60 and above (3.23 million).

- In term of number of schools to cater for the schooling age group of the population, there are 7,772 primary and 2,436 secondary schools in the country. Students enrollment of more than 2.72 million students for primary and more than 2.00 million for secondary schools.

- A total of 237,317 is the primary school teachers and 182,587 teachers for secondary schools Nevertheless, there are also a total of 6,606 private secondary school teachers while other agencies have a total of 9,743 teachers.

(Ministry of Education Malaysia, 2019)

Table 1 Pupil-Teacher Ratio

(Primary & Secondary)

Percentage(%)

	2016	2017	2018
Primary	11.59	11.61	11.73
Secondary	11.97	11.75	11.31

According to MOE (Table 1), a pupil-teacher ratio for primary school is 11.73 and 11.31 for secondary school respectively based on 2018 data. While,the average class size or pupils per class for primary schools is 25.6 and for secondary is 25.18 based on the latest data available.

Table 2 Pupil-Teacher Ratio

(Secondary Education) 2015-2017

	Finland	Malaysia	Japan	Germany	Republic Of Korea	Uk	USA
Reference Year	2016	2017	2016	2016	2016	2016	2015
Pre-Primary	11.54	15.32	27.30	7.81	13.25	20.04	13.76
Primary	13.32	11.66	15.87	12.15	16.31	15.05	14.46
Secondary	13.24	12.28	11.21	12.01	13.84	19.45	14.70

The most recent WCY 2020 report indicated that Malaysia ranks at 24 (2020) an improvement by 2 ranks compared to 26 (2019). Under this criteria Malaysia is ahead of Singapore (26), Indonesia (49), Philippines (56) and Thailand (53 within the ASEAN countries. Malaysia also beat her western counterparts such as Canada(41), United Kingdom(51) and France(34) by having a much better pupil-teacher ratio (secondary education) ranking. Comparison can be made with other nations in term of PTR based Table 2 above.

WCY Criteria	4.5.06 Pupil-teacher ratio (secondary education)	2020/2018 Value	11.30	2019 Value	11.97

Factor/Sub-Factor	Education	2020 Rank	24	2019 Rank	26

Economy Ranked #1	KAZAKHSTAN	2020 Value	6.59

Kazakhstan Emblem

Kazakhstan Flag

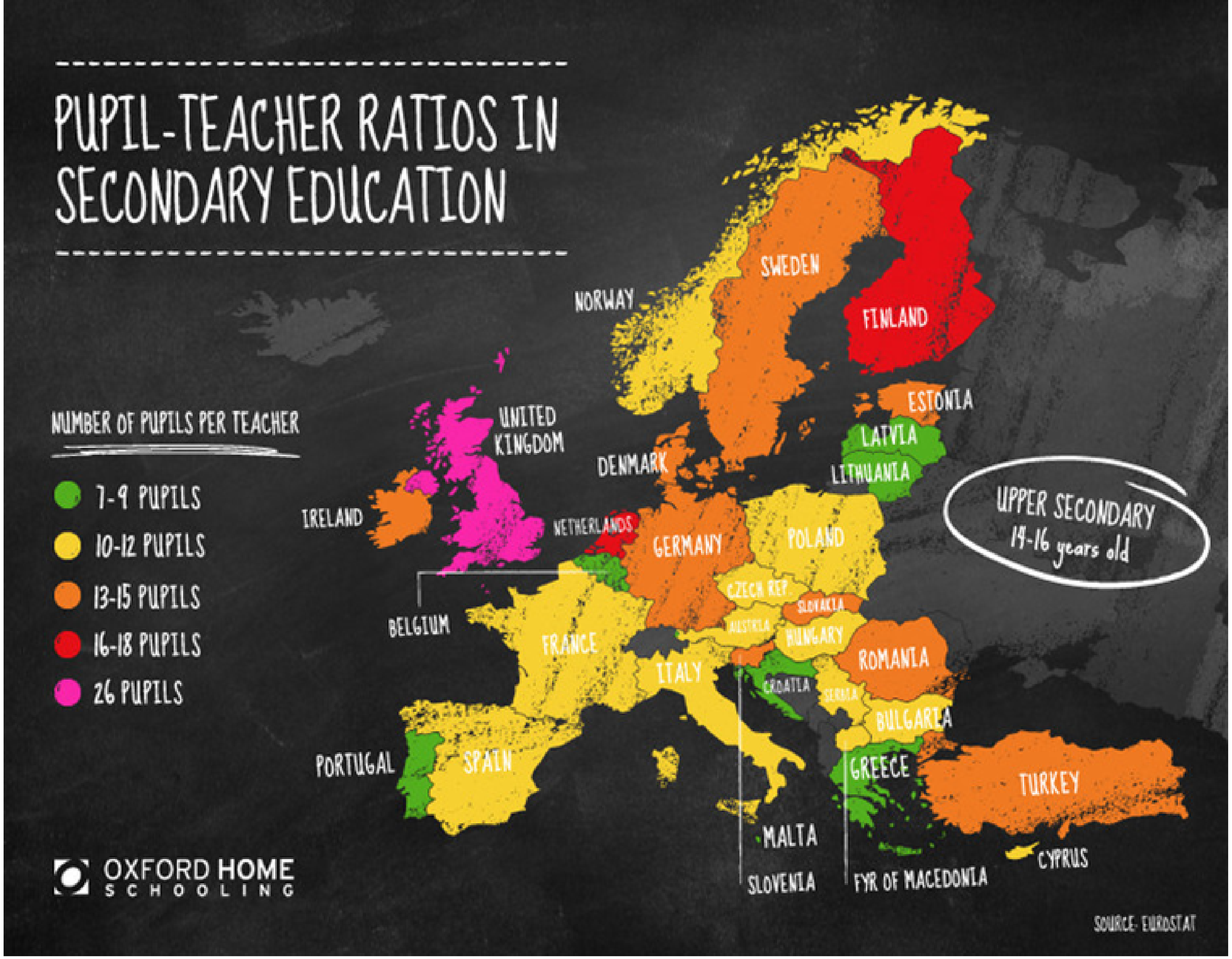
Education is universal and mandatory through to the secondary level and the adult literacy rate is 99.5%. On average, these statistics are equal to both women and men in Kazakhstan

Area	
• Total	2,724,900 km^2 (1,052,100 sq mi) (9th)
• Water (%)	1.7
Population	
• 2020 estimate	▲ 18,711,200[5] (64th)
• Density	7/km^2 (18.1/sq mi) (236th)
GDP (PPP)	2020 estimate
• Total	▲ $569.813 billion[6] (41st)
• Per capita	▲ $30,178[6] (53rd)
GDP (nominal)	2020 estimate
• Total	▲ $179.332 billion[6] (55th)
• Per capita	▲ $9,686[6] (69th)

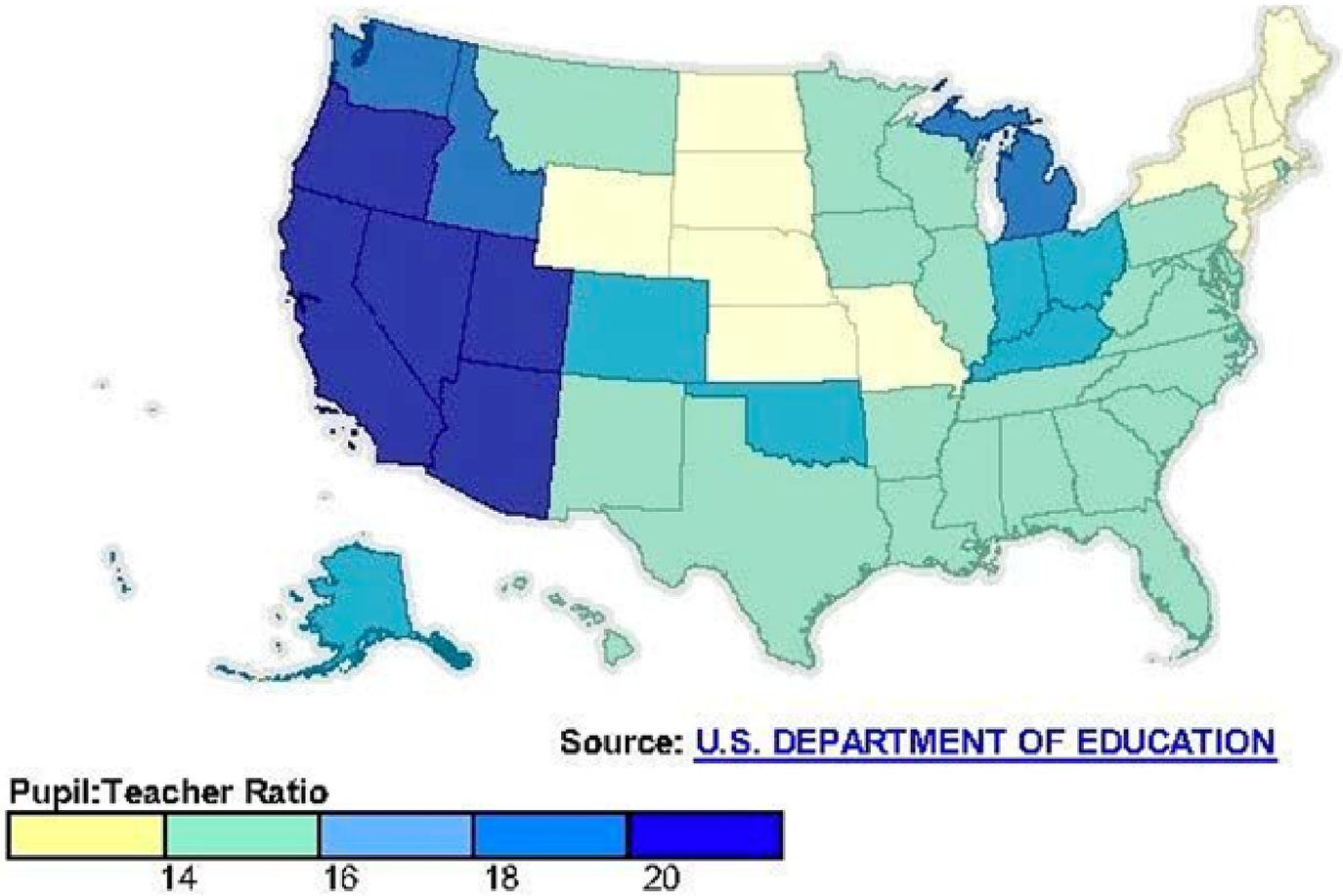
Table 3 Pupil–Teacher Ratio

(Secondary Education)

Ranking		ratio	
1	KAZAKHSTAN	6.59	2017
2	UKRAINE	7.34	
3	LITHUANIA	7.52	2017
4	CYPRUS	8.31	2017
5	GREECE	8.56	2017
6	CROATIA	8.76	2017
7	AUSTRIA	9.17	2017
8	SLOVENIA	9.27	2017
9	LATVIA	9.33	2017
10	UAE	9.40	2017
11	BELGIUM	9.42	2017
12	PORTUGAL	9.50	2017
13	LUXEMBOURG	9.69	2016
14	POLAND	9.77	2017
15	NORWAY	9.79	2017
16	ICELAND	10.10	2017
17	ISRAEL	10.28	2017
18	RUSSIA	10.44	2017
19	ITALY	10.58	2017
20	HUNGARY	10.94	2017
21	QATAR	11.04	
22	SPAIN	11.19	2017
23	HONG KONG SAR	11.22	
24	MALAYSIA	11.30	
24	SAUDI ARABIA	11.30	
26	SINGAPORE	11.48	2017
27	CZECH REPUBLIC	11.59	2017
28	SWITZERLAND	11.99	2017
29	AUSTRALIA	11.99	2017
30	ROMANIA	12.08	2017
31	DENMARK	12.10	2016
32	JORDAN	12.26	
33	JAPAN	12.45	2017
34	FRANCE	12.60	2017
35	ESTONIA	12.70	2017
36	SLOVAK REPUBLIC	12.88	2017
37	TAIWAN, CHINA	12.90	
38	SWEDEN	12.98	2017
39	BULGARIA	13.00	
40	GERMANY	13.02	2017
41	CANADA	13.09	2017
42	CHINA	13.31	2017
43	IRELAND	13.41	2017
44	KOREA REP.	13.54	2017
45	FINLAND	13.58	2017
46	PERU	14.20	
47	TURKEY	14.68	2017
48	NEW ZEALAND	14.70	2017
49	INDONESIA	15.33	2017
50	USA	15.35	2017
51	UNITED KINGDOM	16.35	2017
52	NETHERLANDS	17.04	2017
53	ARGENTINA	17.91	
54	MONGOLIA	19.50	
55	CHILE	20.91	2017
56	PHILIPPINES	23.88	2017
57	THAILAND	24.16	2017
58	BRAZIL	24.65	2017
59	COLOMBIA	26.01	2017
60	SOUTH AFRICA	26.85	2017
61	INDIA	27.44	2017
62	MEXICO	28.65	2017
-	VENEZUELA	-	


PUPIL-TEACHER RATIOS IN SECONDARY EDUCATION
NUMBER OF PUPILS PER TEACHER
7-9 PUPILS
10-12 PUPILS
13-15 PUPILS
16-18 PUPILS
26 PUPILS
NORWAY
SWEDEN
FINLAND
ESTONIA
LATVIA
LITHUANIA
UNITED KINGDOM
IRELAND
DENMARK
NETHERLANDS
GERMANY
POLAND
CZECH REP
SLOVAKIA
AUSTRIA
HUNGARY
ROMANIA
BELGIUM
FRANCE
ITALY
CROATIA
SERBIA
BULGARIA
PORTUGAL
SPAIN
GREECE
TURKEY
MALTA
CYPRUS
SLOVENIA
FYR OF MACEDONIA
UPPER SECONDARY
14-16 years old
OXFORD HOME SCHOOLING
SOURCE: EUROSTAT

Pupil–Teacher Ratio 2013–2014



Pupil–Teacher Ratio Secondary Asia Map–2015

Analysis: Indicator Ranking

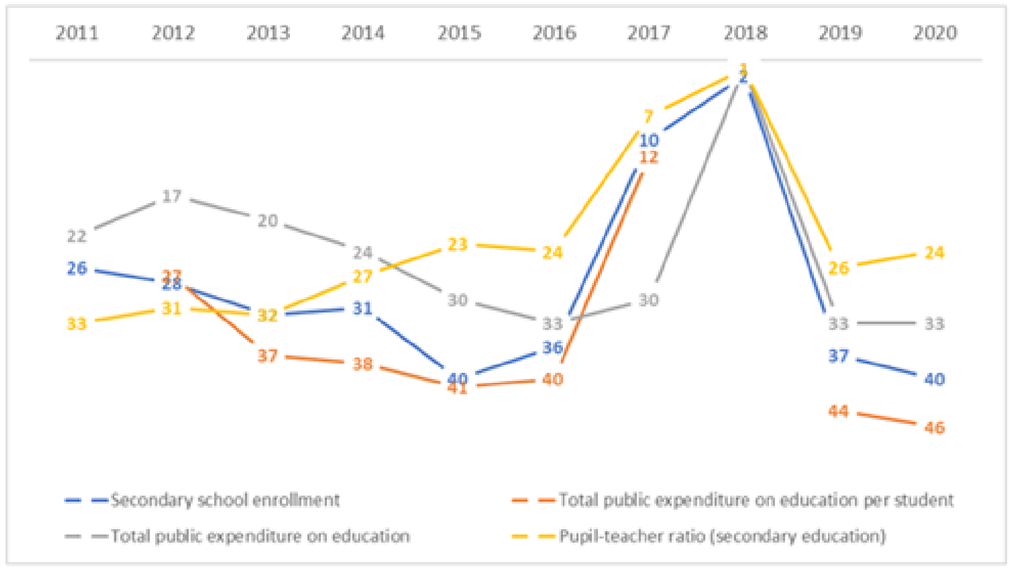
Table 4: Infrastructure: Pupii–Teacher Ratio Rank consistently Below 30 (2011 – 2020)

Criteria	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Min	Max	Delta	Data Type	Description
Secondary school enrollment	26	28	32	31	40	36	10	2	37	40	2	40	38	HD	Percentage of relevant age group receiving full-time education
Total public expenditure on education per student	-	27	37	38	41	40	12	-	44	46	12	46	34	HD	Spending per enrolled pupil/student, all levels
Total public expenditure on education	22	17	20	24	30	33	30	1	33	33	1	33	32	HD	Percentage of GDP
Pupil-teacher ratio (secondary education)	33	31	32	27	23	24	7	1	26	24	1	33	32	HD	Ratio of students to teaching staff

- The pupil–teacher ratio (secondary education), which is ratio of students to teaching staff specifically for secondary education. This indicator is a sub–factor (criterion) under education factor. The most recent WCY 2020 report indicated that Malaysia ranks at 24 (2020) an improvement by 2 ranks compared to 26 (2019)

- Malaysia have made a significant improvement based on this indicator. Our rank has somehow consistently improved over the years, showing increase over the 10 years period. The highest achieved was 1* (2018) and the lowest being 33(2011). Following the trend in 2011 the rank is 33, improved the following year and decline slightly in 2013. From 2014 onwards, slightly improve from 27 to 23 position in 2015. Eventually, move down to 24 in 2016. Surprisingly in 2017 and 2018 the position was 7 and 1 respectively. The position could be considered as a quantum leap for Malaysia. However, the following year the position stabilises at 26(2019) and 24(2020).

Table 5 Infrastructure Pupil –Teacher ratio Rank Delta > 30 (2011 – 2020)



Criteria	Sub-factor	Min	Max	Delta	Data Type	Description
Secondary school enrollment	Education	2	40	38	HD	Percentage of relevant age group receiving full-time education
Total public expenditure on education per student	Education	12	46	34	HD	Spending per enrolled pupil/student, all levels
Total public expenditure on education	Education	1	33	32	HD	Percentage of GDP
Pupil-teacher ratio (secondary education)	Education	1	33	32	HD	Ratio of students to teaching staff

This particular factor is part of the criteria under infrastructure section which was consistently delta score below 30 from 2011 to 2020

Meanwhile, data for specific years (2017–2018) seemed to be very encouraging as shown in the Table 5. The minimum rank of 1 and max of 33 posed a huge gap in term Malaysia ranking for the period. Statistically, the ranking scores for these two years (2017–2018) are very far above the average (the "mean").

Presumably, this could be attributed to improvements in methodology.

Analysis: Indicator Ranking

Table 6 Pupil–Teacher Ratio in secondary education by state, Malaysia 2001–2016

Negeri *State*	Tahun *Year*															
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Malaysia	**17.23**	**16.50**	**16.43**	**16.30**	**16.24**	**16.08**	**15.52**	**14.53**	**13.70**	**13.38**	**13.12**	**13.11**	**13.05**	**12.53**	**11.99**	**12.64**
Johor	18.09	17.45	17.32	17.20	16.75	16.52	16.01	15.25	13.78	13.49	13.64	13.62	13.60	13.23	12.50	13.55
Kedah	16.69	15.97	16.04	15.88	16.15	16.30	15.62	14.68	13.20	12.91	13.29	13.27	13.04	12.48	11.77	12.04
Kelantan	16.39	15.37	16.08	15.38	15.71	15.46	15.11	13.79	12.23	11.96	12.51	11.92	11.71	11.26	10.76	12.50
Melaka	16.73	15.85	15.38	15.24	15.26	14.98	14.44	13.73	12.67	12.23	12.51	12.54	12.59	12.01	11.45	11.63
Negeri Sembilan	16.06	15.37	15.70	15.60	15.61	15.27	14.74	13.88	12.54	12.11	12.39	12.24	12.32	11.77	11.27	11.72
Pahang	16.80	16.37	15.97	15.69	15.29	14.75	14.06	12.57	11.36	11.11	11.24	11.22	10.90	10.26	9.91	10.75
Perak	17.55	16.78	16.43	16.11	15.90	15.42	15.06	14.11	12.56	12.14	12.40	12.19	11.87	11.33	10.76	11.14
Perlis	14.85	13.97	13.07	12.68	12.79	12.79	12.79	12.49	11.06	10.69	10.88	10.98	10.51	9.99	9.55	9.62
Pulau Pinang	17.07	15.91	15.20	15.96	15.48	15.72	15.31	14.01	12.95	12.79	13.22	13.55	13.07	12.62	12.18	12.63
Sabah	17.66	17.33	17.88	17.36	17.56	17.17	15.93	15.23	13.59	12.89	13.64	13.73	12.36	13.35	12.98	13.06
Sarawak	17.81	17.43	17.67	17.94	18.16	17.71	16.92	15.16	13.58	13.20	13.74	13.62	13.71	13.28	12.62	13.10
Selangor	17.60	16.80	16.70	16.67	16.84	17.09	16.78	16.39	14.73	14.52	14.61	15.14	15.40	14.77	14.24	15.05
Terengganu	16.50	15.84	15.48	15.40	14.78	14.64	14.15	12.88	11.44	11.34	11.79	11.78	11.43	11.02	10.53	10.12
W.P. Kuala Lumpur	17.87	16.77	16.23	16.22	15.96	16.09	15.53	14.43	13.25	13.11	13.19	12.89	12.81	12.28	11.78	14.06
W.P. Labuan	13.26	12.71	10.97	11.76	11.09	10.98	11.03	10.55	11.89	10.19	10.19	10.53	10.86	10.22	9.70	9.28
W.P. Putrajaya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.70	8.91	9.58	10.21	10.00	9.74	9.94	9.29	9.45	9.85

Sumber: Kementerian Pendidikan Malaysia (KPM)
Source: Ministry of Education Malaysia (MOE)

Nota/*Notes* :
Hanya sekolah KPM/*Only MOE schools*
n.a. tidak diperoleh/*not available*

- Table 6 shows the breakdown of PTR according to states since 2001. Generally based on the trend the ratio is getting improved with PTR ratio decrease over the years. However, the PTR ratio for certain states such as Sabah and Sarawak still higher than most of the states in west Malaysia. Meanwhile, Selangor and Wilayah Persekutuan are amongst the states in West Malaysia which recorded higher PTR apart from Johor.

Analysis: Data Source

Definition: Pupil or student–teacher ratio refers to the number of learners enrolled in a given level of education divided by the number of teachers in the system.

The data sourced mainly from two sources.
(i) UNESCO http://stats.uis.unesco.org
(ii) National sources: (DOSM & MOE) Department of Statistics and Ministry of Education. UNESCO or national estimates, UNESCO is said to be using national estimates.

According to WCY, the national source of data is mainly from Department of Statistics, Malaysia (DOSM) and Ministry of Education (MOE).

Pupil–teacher ratio (secondary education) under the Education Sub–Factor of the Infrastructure Factor of Competitiveness. It consists of hard data collected by DOSM from various sources, mainly schools and various States Department of Education.

Other data source was gathered by MOE from the listed ministries & agencies as below:

(1) Ministry of Education
(2) State Department of Education
(3) District Education Office (PPD)
(4) School: Primary and Secondary
(5) Department of statistics, Malaysia
(6) Private institutions and other agencies which might have teachers in their system

Analysis: Data Source

In determining Malaysia's ranking of PTR 2020 the IMD indicates using 2018 data. The data was indicated as being sourced from UNESCO, http://stats.uis.unesco.org and national source. If locally source, presumably from the Ministry of Education. However, upon checking with the ministry, the national data seemed to be systematically gathered and updated by MOE and make available for public by the ministry data unit.

IMD should be getting the latest data from the ministry, not using the data from 2018 (or estimates) in calculating the 2020 ranking. Hence, there is an issue of relationship between the MOE and UN/IMD. Perhaps, this could be addressed by Malaysia data providers and IMD in future.

Analysis: Measurement

Measurement of PTR

Measurement of Pupil–Teacher Ratio or Computation of PTR is according to a formula:

$$\text{Total Number PTR} = \frac{\text{Total number of Pupils in a school}}{\text{Total number of Teachers in a school}}$$

Meaning:

The higher the pupil–qualified teacher ratio, the lower the relative access of pupils to qualified teachers. Results can be compared with established national norms on the number of pupils per qualified teacher for each level of education. In calculating and interpreting this indicator, one should take into account the existence of part–time teaching, school–shifts, multi–grade classes and other practices that may affect the precision and meaningfulness of pupil–teacher ratios.

Analysis: Data Sourcing Issues

Discrepancies in data reporting

Discrepancies in data reporting or inconsistency is mainly due to method of calculation employed or sourcing the data from different source,

While some data originated from UNESCO or OECD estimates from national statistics in which for Malaysia is Department of Statistics of Malaysia. DOSM on the other hand also gather data from MOE. This could also be a systematic coordination between the parties involved.

Inconsistencies in data sources

Due to no standardised method, data used are based on UNESCO or OECD estimates and from national statistics. As for example these are some of the inconsistencies highlighted. Bulgaria, Cyprus, Greece, Hong Kong, Jordan, Kazakhstan, Peru, Philippines, Qatar, Romania, Singapore, Thailand, UAE, Ukraine and Venezuela: Based on headcounts. Australia: general programs only.

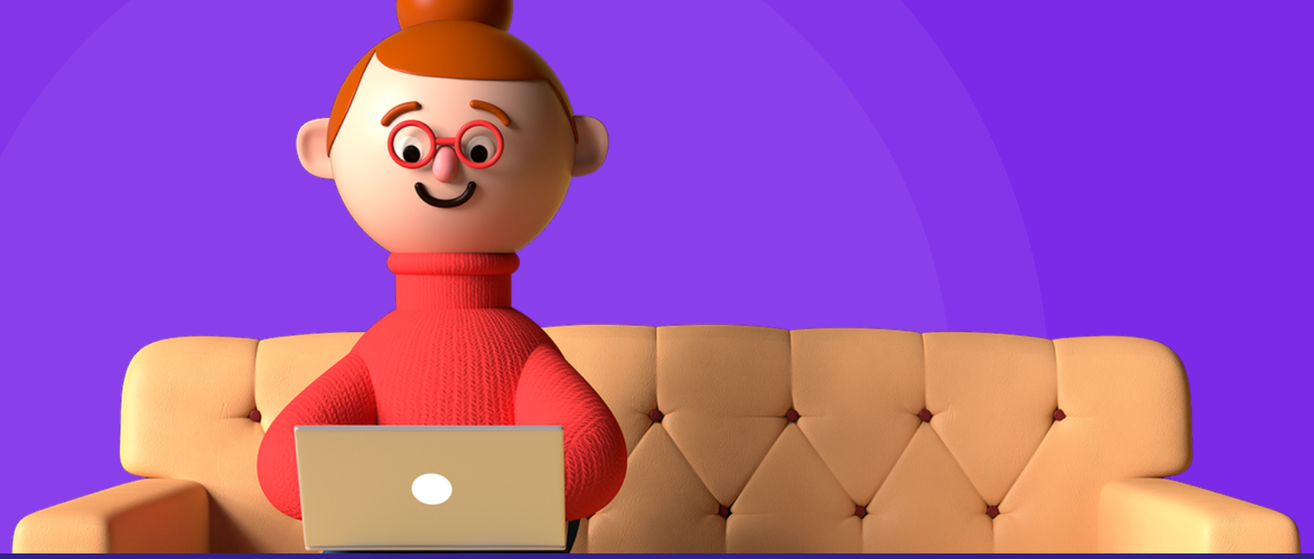
Ireland, Israel and Switzerland: public institutions only. France: Public and government-dependent private institutions only. Iceland: lower secondary only. This could be potential discrepancies of the data being provided

Key Authorities And Regulators For PTR

The drivers for pupil–teacher ratio (secondary education) to explain the reasons for the poor IMD ranking on pupil–teacher ratio (secondary education) could be identify as follows:

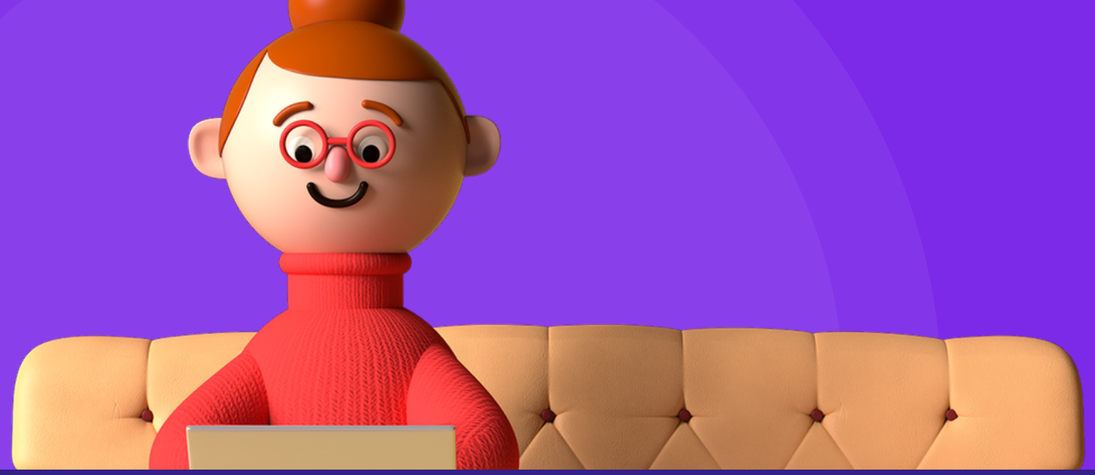
1.Ministry of Education, Malaysia
2.Public Service Department (PSD)
3.Education Service Commission, Malaysia or Suruhanjaya Perkhidmatan Pelajaran Malaysia (SPP)
4.Ministry of Finance (MoF)

KEY AUTHORITIES AND REGULATORS FOR PTR



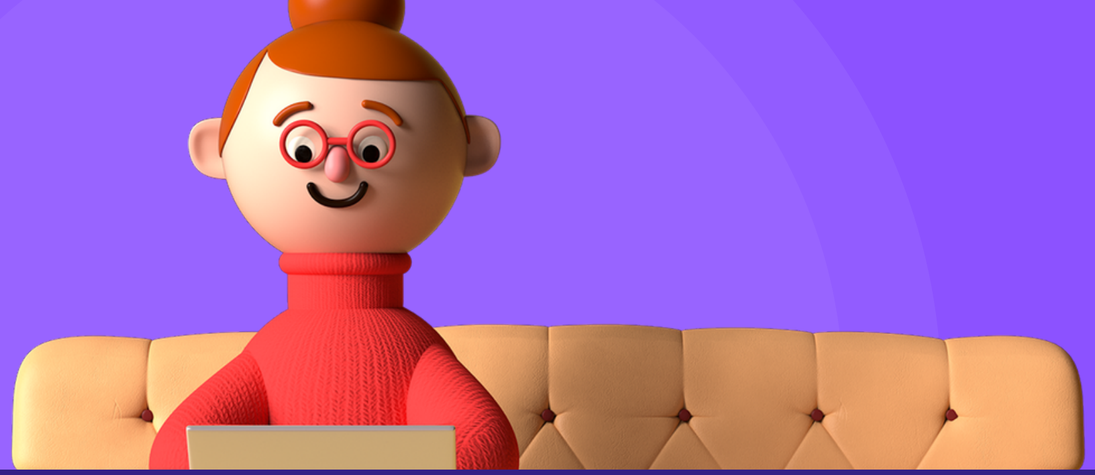
	KEY AUTHORITIES AND REGULATORS	RELATED REGULATIONS AND POLICIES
1	MINISTRY OF EDUCATION, MALAYSIA (MOE)	A MINISTRY OF THE GOVERNMENT OF MALAYSIA THAT IS RESPONSIBLE FOR EDUCATION SYSTEM, COMPULSORY EDUCATION, PRE-TERTIARY EDUCATION, TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET), CURRICULUM STANDARD, TEXTBOOK, STANDARDISED TEST, LANGUAGE POLICY, TRANSLATION, SELECTIVE SCHOOL AND COMPREHENSIVE SCHOOL. OF EDUCATION, MALAYSIA (MOE)
2	PUBLIC SERVICE DEPARTMENT, MALAYSIA (JPA)	·TO RATIONALISE THE SIZE OF THE PUBLIC SERVICE THROUGH A SYSTEMATIC AND STRUCTURED HUMAN RESOURCE PLANNING BY CONDUCTING A COMPREHENSIVE MANPOWER PROJECTION

KEY AUTHORITIES AND REGULATORS FOR PTR



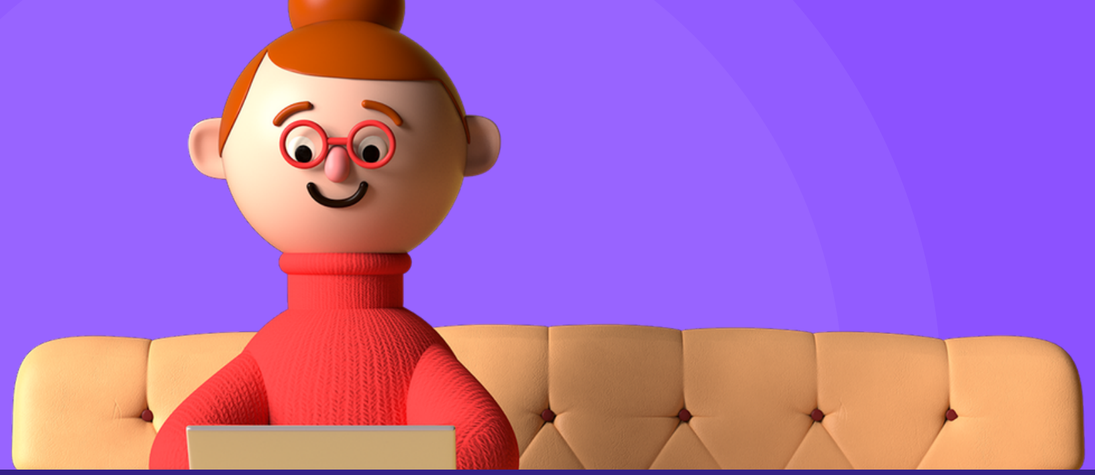
KEY AUTHORITIES AND REGULATORS	RELATED REGULATIONS AND POLICIES
PUBLIC SERVICE DEPARTMENT, MALAYSIA (JPA)	TO PROVIDE THE PUBLIC SERVICE WITH SERVICE SCHEMES AND ORGANISATIONAL STRUCTURE THAT IS RELEVANT, FLEXIBLE AND ABLE TO RESPOND TO CURRENT NEEDS POLICY, STANDARD, CIRCULAR AND GUIDELINES RELATED TO PUBLIC SERVICE HUMAN RESOURCE POLICY IN EDUCATION SERVICE
3 EDUCATION SERVICE COMMISSION, MALAYSIA OR SURUHANJAYA PERKHIDMATAN PELAJARAN MALAYSIA (SPP)	THE COMMISSION ACTS AS THE APPOINTING AUTHORITY IN THE EDUCATION SERVICE IN ACCORDANCE WITH ARTICLE 144 (1) OF THE FEDERAL CONSTITUTION

KEY AUTHORITIES AND REGULATORS FOR PTR



KEY AUTHORITIES AND REGULATORS	RELATED REGULATIONS AND POLICIES
4 MINISTRY OF FINANCE (MOF)	A MINISTRY OF THE GOVERNMENT OF MALAYSIA THAT IS IN CHARGE WITH THE RESPONSIBILITY FOR GOVERNMENT EXPENDITURE AND REVENUE RAISING. THE MINISTRY'S ROLE IS TO DEVELOP ECONOMIC POLICY AND PREPARE THE MALAYSIAN FEDERAL BUDGET. THE FINANCIAL PROCEDURE ACT 1957 (REVISED 1972) (SECTION 6) ALLOWS THE GOVERNMENT TO ISSUE GUIDELINES APPERTAINING TO THE CONTROL OF PUBLIC FINANCES (REVENUE AND EXPENDITURE). THE DEVELOPMENT FUND ACT 1966. SECTION 2 STIPULATES THAT ALL LOANS FOR DEVELOPMENT EXPENDITURE MUST BE PAID INTO THE DEVELOPMENT FUND AND CAN ONLY BE USED FOR THAT EXPENDITURE.

KEY AUTHORITIES AND REGULATORS FOR PTR



KEY AUTHORITIES AND REGULATORS	RELATED REGULATIONS AND POLICIES
MINISTRY OF FINANCE (MOF)	TREASURY INSTRUCTIONS (INSTRUCTION 13.1) REQUIRES MINISTRIES AND DEPARTMENTS TO SUBMIT THEIR BUDGET PROPOSAL TO THE MOF FOR SCRUTINY BEFORE IT GOES TO PARLIAMENT. UNDER ITS BUDGET CALL CIRCULARS, MOF HAS THE AUTHORITY TO IMPOSE EXPENDITURE CEILING. IT CAN ALSO CALL FOR EVALUATIONS TO DETERMINE NON-PERFORMING PROGRAMMES AND THOSE WHOSE EFFICIENCY CAN BE IMPROVED. UNDER ITS PROCUREMENT PROCEDURES THE MOFENSURES TRANSPARENCY AND EFFICIENCY IN PUBLIC PROCUREMENT SO THAT THE GOVERNMENT OBTAINS VALUE FOR MONEY. THROUGH ITS INVESTMENT ARM. MINISTRY OF FINANCE INCORPORATED MOF INVESTS IN PUBLIC-RELATED INVESTMENTS.

The top 5 recommendations that can be classified into two components; mainly consisting improvement of data management and drivers of the ranking criteria for possible intervention.

5 Top Recommendations

1. Standardise collection methods and data sources
2. Strengthening the infrastructure and organizational aspects
3. MOF must continue to allocate more budget
4. Exercise a rational deployment of teachers
5. Training and retraining programmes for teachers

1

- Standardise collection methods and data sources to be coordinated and provided by a central agency
- Ensuring only one agency, probably MOE as source/secretariat of data for IMD on this criterion.This will enable the release the updated version of data to IMD consistently yearly. This should not be a problem if data are being coordinated centrally and directly channelled to IMD.
- For this purpose, a system must be developed for data collection, so that schools may submit data directly to the system minus the human errors or loss in transition. This way would enable data to be submitted at a faster speed and without compromising the accuracy. Something similar to e-census implemented by DOSM but at much smaller scale.

2

- Strengthening the infrastructure and organizational aspects of the school is critical and should be made by allowing more time in class schedules for literacy instruction, emphasize the professional development of teachers in pedagogical aspect to establish teams teaching or co-teaching for the type of collaboration between teachers to decrease the PTR.
- This is done by having more than one teacher involved in the teaching of the same student group. Besides, it is recommended that the MOE strengthen the curriculum and improve school infrastructure and organization.
- Above all, strengthening the existing school infrastructure, education programmes, school ethos and the minds of principals, teachers and students are also seen as complementing the current initiatives that will produce an increased student cognition.

3

- MOF must continue to allocate more budget for Ministry of Education, especially for development of schools infrastructure to be tally with improving teacher pupil ratio.

- Reducing PTR in schools must be complemented by increasing space allocation in schools as well. Ministry of Education must continue the existing policy of enhancing the rural schools, while in Sabah and Sarawak more budget should be allocated for PTR improvements as data indicated that they are having the higher ratio compared to other states in Malaysia

4

- Exercise a rational deployment of teachers by ensuring that the specified pupil teacher ratio is maintained for each school, rather than just as filling up the spaces, thus ensuring that there is no urban-rural imbalance in term of teacher postings.

- Pupils in rural areas are not to be at educationally disadvantaged compared to their urban counterparts.

5

- Training and retraining programmes for teachers need to be strengthened in applying the understanding of pedagogical practices and the importance of addressing student learning and teaching.

- Hence, it is detrimental if teachers were not given proper training of the teaching aspects and related skills. Increasing the number quality teachers is also crucial rather than just decreasing the PTR.

Other Crucial Recommendations
Improvement on the Data Collection and Sources:

- A standardised definition for the criterion is almost clear, but what to include and not must be clear as well. On whether to include private and other agencies teachers as well.
- A system must be developed and can be used directly in countries that have not developed their own national classifications. Due to no standardised method, data used are based on UNESCO or OECD estimates and from national statistics.
- To always release the updated version of data to IMD consistently yearly. This should not be a problem if data coordinated centrally and directly channelled to IMD.
- To develop a data collection system, so that schools may submit data directly to the system minus the human errors or loss in transition. This way would enable data to be submitted faster and with accuracy assured. Something similar to e-census implemented by DOSM.

Improvements on the drivers of Pupil–Teacher Ratio (secondary education)

- Ministry must continue the existing policy, while in Sabah and Sarawak.more budget should be allocated for PTR improvements.
- Public service Department (JPA) and Education Service Commission, Malaysia to continue enhancing policies related to education services especially on appointment of teachers. Making teaching career more attractive and rewarding.
- Ministry must encourage policy of empowering teacher to be creative and able to carry out future responsibility. Moral support and infrastructure must be made available to the teachers.
- TN50 or Transformasi Nasional 2050 policy, (National Transformation 2050) a national development initiative that is spans 2020 to 2050 must continue to focus on education as a long–term investment. The important role of teacher in public sector must be properly addressed before 2050.
- MOF must continue to allocate more budget for Ministry of Education, especially for development of schools' infrastructure to be tally with improving teacher pupil ratio. Reducing PTR in schools must be complemented by increasing space allocation as well.

Improvements on the drivers of Pupil–Teacher Ratio (secondary education)

- Education Act 1996 which aims to further consolidate the national education system for the young generation in accordance with the country's aspirations of making Malaysia a centre of excellence for education must always be a reference to ensure safeguarding of national interest.

- Many existing government's policies that have been developed in relation to education services had remain as policies, sadly enough the progress has been patchy, and in some cases, the pace of change has not been compatible with the positive evidence. Hence, efforts must be made to ensure policies and guidelines are appropriately enforce and implement. This will eventually translate into better statistics which will improve Malaysia future ranking.

Good practices Learning from the Irish

Class Size in Irish Primary Schools: 1967 to 2006

Posted by Martin Ryan

I referenced the class size debates in primary-level and higher education recently on this blog. Below is an abstract (also the first item on this link) from a research paper from the ERC in Drumcondra (Irish Journal of Education: Vol. 38, 2010). The paper discusses Govt. policy relating to reduction in primary-school class size over the last 50 years. During the time-period 1967/68 to 2005/06, overall class size dropped from 32.4:1 to 16.6:1. This of course masks variation, which can be examined for the last four years here: by primary-school and class-room.

CLASS SIZE AND PUPIL-TEACHER RATIO: POLICY AND PROGRESS
Susan Weir, Peter Archer, and Laura McAvinue
Educational Research Centre, St Patrick's College, Dublin

Government policy relating to reduction in class size and pupil-teacher ratio over the past 50 years is outlined. Since the 1980s, the policy has focused on positive discrimination towards schools serving pupils in disadvantaged areas. An examination of statistics reveals a decline in overall pupil-teacher ratio from 32.4:1 to 16.6:1 over the period 1967/68 to 2005/06. Statistics for single-grade class size for the period 1985/86 to 2005/06 also show a decline, more so in junior than in senior classes. Time-series analyses indicate that the introduction of schemes involving reduction in class size to address disadvantage was associated with a perceptible departure from overall trends. Class size in the urban dimension of Giving Children an Even Break (GCEB) was found to be smaller than class size in other urban schools.

Conclusion

With the country's aspiration of becoming a developed nation by 2020 or perhaps 2050 now, education definitely will impact the development of future generation of Malaysians.

Pupil-teacher ratio is a significant measure of quality in education. This is because in a system where the ratio is high learners may lack personal attention from the teacher while the less academic learners are likely to lag behind.

The ideal pupil-qualified teacher ratios may depend on a wide variety of other complex factors, including the age and academic needs of the pupils represented in the ratio (younger children or those with special educational needs typically require more time, attention, and instructional support from teachers).

The experience, skill, and effectiveness of the teachers (highly skilled teachers may be able to achieve better academic results with larger classes than less skilled teachers with smaller classes).

All measures mentioned above can help Malaysia in improving on its current ranking for this indicator and consequently the overall competitive ranking.