



Minister for Education, Mr Ong Ye Kung's response at the 11 July 2018 Parliamentary motion 'Education for Our Future'

THE MERITOCRACY PARADOX

Meritocracy recognises talent and ability, over wealth and circumstance of birth. It motivates society to work hard. It encourages us to develop strengths and talents, and put them to good use. This approach has uplifted many families over the decades. And as families do well, they spare no effort investing in the abilities of their children, even from a very young age, as they believe in meritocracy.

Hence, children today from more affluent families are now doing better from those from lower income families in school. Unlike the first generation of Singaporeans where students are mostly from humble backgrounds, the next generation is pushing off blocks from different starting points, and students from affluent families have a head start. So meritocracy, arising from a belief in fairness, seems to have paradoxically resulted in systemic unfairness.

THE INEQUALITY PARADOX

When I was young, most of my classmates, including myself, were from humble backgrounds. By the sheer law of probability, some of us end up as top performers in schools. Today, the percentage of students from similar backgrounds are much smaller, and continues to shrink. 10 years ago, about 20% of our employed households had an income of \$3,000 or less, at 2017 dollars. Today, that has gone down to well below 15%.

But as we successfully uplift more poor families, the smaller group of families that remained poor are facing increasingly difficult challenges. Their challenges are also translated to their children's performances in school. So as we uplift poor families, the greater the achievement gap between the rich and poor.

THE PSLE

The PSLE is far from a perfect system and does add stress, a lot of stress sometimes, to some parents and students. And the Minister too. But it happens to be the most meritocratic, and probably the most fair of all imperfect systems. If we scrap it, whatever we replace it with to decide on secondary school postings, is likely to be worse. This sacred cow survived over the years for some very valid reasons. But what I think we need to do and we must do, is to reduce the stakes of the examination. Make it less of a do or die examination, that is so important as if it will determine your whole life, which it does not.

DON'T CAP THE TOP, LIFT THE BOTTOM

The easiest way to close the [achievement] gap is to cap the top. Some of the suggestions raised in public, such as banning tuition and enrichment classes, redistributing resources from popular to less popular schools, are pointing in that direction.

Excessive tuition to the point of causing undue stress and killing the joy of learning is not good for the child. But I don't think capping achievements and limiting opportunities is the right approach either. It runs against a very fundamental philosophy of our education system. As the educators in MOE will say in Chinese — 保底不封顶 — don't cap the top, but uplift the bottom.

IN SUMMARY

There is no contradiction between meritocracy and fairness, nor reducing inequality and raising our collective standards. Instead, we should double up on meritocracy, by broadening its definition to embrace various talents and skills. We should not cap achievement at the top, but work harder to lift the bottom.

There are so many opinions on education because it is close to our hearts and it affects the closest people in our lives. It also means that discussions on education can be frustrating and sometimes end up in a stalemate. Parents say MOE needs to change; MOE says parents need to change; and children don't say it, but probably think — "both better change."

The truth is, we are all in this together, as partners to build a better future.

1 Mr Speaker, Sir, I thank our five Nominated Members of Parliament for tabling this Motion, and the Members who have spoken during this debate. Everyone has spoken passionately, and many from personal experiences. I also like to thank Mdm Rahayu, for her proposed additions to the Motion, which I support.

2 SPS Faishal and Second Minister Indranee will address many of the issues raised. Amidst all the ideas and views raised, I thought it will be useful for me to speak on the key principles of Singapore's education system.

THE PARADOXES OF EDUCATION

3 Last week David Brooks wrote a piece called, 'The paradox of the gender divide'. He observed that in the Nordic countries, where gender equality is the highest, many women exercise their choice and opt out of the corporate rat race. So, the greater the gender equality, the fewer the number of female corporate managers.



4 In education, we encounter paradoxes too. There are at least two. The first paradox is that of meritocracy. Meritocracy recognises talent and ability, over wealth and circumstance of birth. It motivates society to work hard. It encourages us to develop their strengths and talents, and put them to good use.

5 This approach has uplifted many families over the decades. Many Members of the House have benefited from this approach and philosophy. And as families do well, they spare no effort investing in the abilities of their children, even from a very young age, as they believe in meritocracy.

6 Hence, children today from more affluent families are now doing better from those from lower income families in school. **Unlike the first generation of Singaporeans where students are mostly from humble backgrounds, the next generation is pushing off blocks from different starting points, and students from affluent families have a head start.**

7 **So meritocracy, arising from a belief in fairness, seems to have paradoxically resulted in systemic unfairness.** This is the question we all ask ourselves.



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8 The second paradox is that of inequality. When I was young, most of my classmates, including myself, were from humble backgrounds. By the sheer law of probability, some of us end up as top performers in schools.

9 Today, the percentage of students from similar backgrounds are much smaller, and continues to shrink. 10 years ago, about 20% of our employed households had an income of \$3,000 or less, at 2017 dollars. Today, that has gone down to well below 15%.

10 This is a happy outcome. But as we successfully uplift more poor families, the smaller group of families that remained poor are facing increasingly difficult challenges. Their challenges are also translated to their children's performances in school. So as we uplift poor families, the greater the achievement gap between the rich and poor. That is the second paradox.

11 As we confront these paradoxes, we question if our policies and approaches have run their course, and perhaps it is time to slaughter some sacred cows, and take a fundamentally different approach. It depends on which cows you are thinking of slaughtering. For some, maybe. For some, my answer, is "No".

12 Paradoxes make us think hard about our challenges and our choices. But we can resolve these apparent contradictions. Take the gender divide debate in Nordic countries. They provided more equal opportunities to men and women, but women chose not to be like men, and so there is no contradiction in both greater equality and fewer female corporate managers.

MERITOCRACY - NEVER LOSE FAITH

13 How do we deal with the two paradoxes I mentioned of meritocracy and achievement gap? Let's start with meritocracy. It is recently in danger of becoming a dirty word.

SETTING QUOTAS

14 A couple of education-related controversies arose in the US recently. The first was a law suit filed against University of Harvard for systemic bias against Asians over the years. It was alleged that Asians who tended to score highest in the admission tests for Harvard were marked down by the University on soft criteria, such as personality. So it is not just Singaporeans who are studying hard and scoring well in exams. Asians overseas, like those in the US, ace their exams too. Apparently, Harvard did this to preserve ethnic diversity in the University.

15 The second controversy was that the mayor of New York recently suggested to scrap the highly competitive admission examinations for eight of the city's specialised public high schools. 62% of the students in these schools are Asians, who tend to perform well in these examinations. The move will reduce the number of Asians, and increase the number of black and Hispanic students being admitted into these specialised high schools.

16 Some ideas we have come across in recent weeks — but not from this House — are along the lines of what the US schools are doing. There was a suggestion that we set a quota for lower income students in popular schools. I am not in a position to comment on the admission policies for US schools. But Singapore's circumstances are different and unique, and we cannot assume that we will have to eventually do what other countries like the US have done.

17 Many of our popular schools are putting in extra efforts to attract eligible students from lower income families, encouraging diversity amongst students and mingling of students from different backgrounds. Mr Mahdev Mohan noted this in his speech. And we should encourage them to do more, and try even harder.

18 **But setting a quota sends the wrong signal. I don't think it is aligned to our societal ethos. It can even be seen as patronising.**



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SCRAPPING PSLE

19 **Another common suggestion that was raised is to scrap the PSLE, one of the sacred cows. The PSLE is far from a perfect system and does add stress, a lot of stress sometimes, to some parents and students. And the Minister too. But it happens to be the most meritocratic, and probably the most fair of all imperfect systems. If we scrap it, whatever we replace it with to decide on secondary school postings, is likely to be worse.**

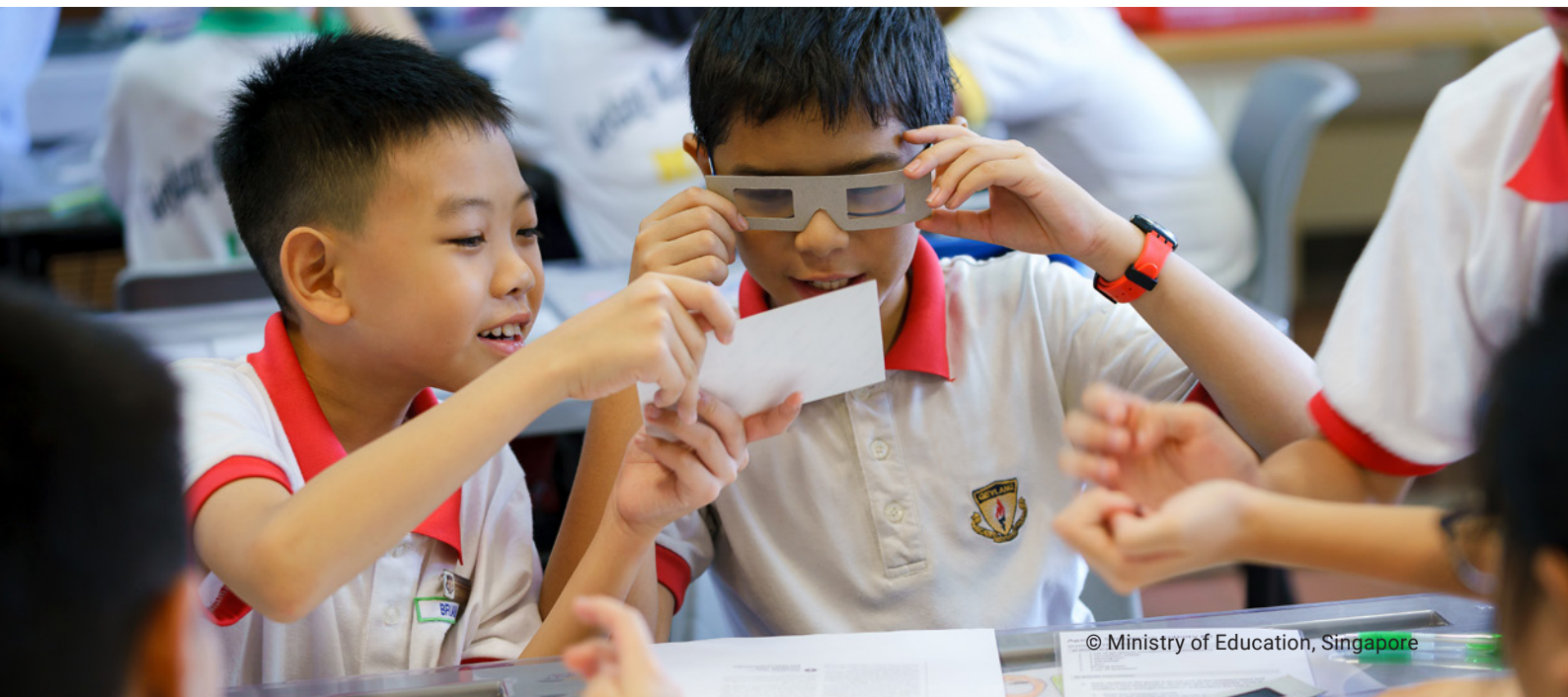
20 I came across two alternate systems recently. The Swiss do not have the equivalent of PSLE. But neither do students have a choice on what secondary school to go to, or work towards to. They are simply assigned to the school nearest to their homes. However, the affluent has a choice, because they can pay for their children to attend private schools. 7% of Swiss students attend private schools today.

21 Hong Kong also did away with its equivalent of PSLE some years ago. In its place, Hong Kong uses the school examination scores for primary 5 and 6 to decide on secondary school postings. Since schools have different standards, they devised a tool to normalise the standards, so that they are comparable. So the stress is somewhat transferred upstream. And like the Swiss, there is also a thriving private school sector in Hong Kong, which accounts for nearly 30% of the student intake.

22 The Chinese Development Assistance Council (CDAC), a self-help group, has a Supervised Homework Group programme, where young volunteers spend few hours a week tutoring and helping students from lower income families with their homework. On surface, it is to help these students cope with homework, but the unspoken objective is for the volunteers to serve as role models for the children.

23 I thought the volunteers would be a very suitable group who should have their opinion heard, and so I asked if they think PSLE should be scrapped. They have no vested interests; have gone through the education system themselves, and are now helping poor students cope with schoolwork.

24 On the education system as a whole, they have many different views. But on PSLE, the great majority disagreed with scrapping it.



25 The common reasons they cite were that they felt that PSLE can in fact motivate students to work hard, and there are resources to support poorer students. One expressed frankly that we can complain that PSLE favours the rich, but the rich are better poised to prepare their children in whatever alternate system that is in place. They say support the weaker students more, but don't take away PSLE.

26 So, I think it is not a straightforward matter. This sacred cow survived over the years for some very valid reasons. But what I think we need to do and we must do, is to reduce the stakes of the examination. Make it less of a do-or-die examination, that is so important as if it will determine your whole life, which it does not. And there must be many things we can do to reduce the stakes of this examination.

BROADER DEFINITION OF MERITOCRACY

27 One way is to ensure a broader definition of merit. One that does not focus too narrowly on past academic scores, but recognises a broad meritocracy of skills, given the various strengths and talents of our people. That, at the core, is the objective of SkillsFuture.

28 That is why pedagogy is changing in schools, which many Members have acknowledged. It is more experiential, applied and exploratory. There are many more pathways in the higher education sector, leading into lifelong learning.

29 We can't change the fact that the starting points of each child is different, but our system can ensure that all of them can run a good race and finish this well.



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ACHIEVEMENT GAP – DON'T CAP THE TOP, LIFT THE BOTTOM

30 Now let's talk about the second paradox, the achievement gap. The easiest way to close the gap is to cap the top. Some of the suggestions raised in public, such as banning tuition and enrichment classes, redistributing resources from popular to less popular schools, are pointing in that direction.

31 Excessive tuition to the point of causing undue stress and killing the joy of learning is not good for the child. But I don't think capping achievements and limiting opportunities is the right approach either. It runs against a very fundamental philosophy of our education system. As the educators in MOE will say in Chinese – 保底不封顶 – don't cap the top, but uplift the bottom.

32 Indeed, a good proportion — about 7.5% — of students who live in one to three-room HDB flats emerge as top PSLE performers every year. And there are many others with great non-academic strengths and talents. We must continue to strive to help them develop their strengths to the fullest.

MOE'S RESOURCING APPROACH

33 MOE's resourcing of schools reflect this approach. The highest level of funding, about \$24,000 per student, goes to the Specialised Schools — Crest Secondary School, Spectra Secondary School, NorthLight School and Assumption Pathway School.

34 The next highest levels of resourcing, about \$20,000 and \$15,000 per student, goes to Normal (Technical) and Normal (Academic) streams respectively. A student in other courses in Government and Government Aided schools, and in Independent Schools, attracts under \$15,000 of resources per student.

35 In addition, MOE regularly rotates and ensures that our good performing teachers and principals are well spread across different types of schools. Beyond resourcing of schools, further assistance is granted to students from lower income households, in the form of financial assistance schemes, bursaries, school meal programmes, and the Opportunity Fund.



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EFFORTS OF THE PSC

36 The Public Service Commission (PSC) also reaches out to students from different schools, in a quest for diversity amongst government scholars. It has been paying special attention to applicants from lower income families.

37 Students from two Junior Colleges (JCs) — RI and Hwa Chong — used to dominate the scholarships awards. But the situation is improving. In 2007, over 80% of PSC scholars were from these two JCs. In 2017, the percentage has come down to 60%.

38 The PSC is also adjusting its interview techniques. They recognise that students from poorer backgrounds tend to be less articulate, so the Commission is assessing candidates beyond their communication skills, but on the substance of their ideas and thinking.

39 As a result, we continue to see President's Scholars who come from humble backgrounds or outside of the most popular JCs. In 2016, LTA Natasha Ann Lum Mei Seem became the first President's and SAF Scholar from Pioneer JC. She is now studying in the US and is an AirForce C3 Officer.

40 At last year's President's Scholar award ceremony, I sat next to Mr Lee Tat Wei, whose father was a taxi driver and mother a part-time sales assistant. Tat Wei is also studying in the US and when he graduates, he will join the Foreign Service.



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MORE OPPORTUNITIES AVAILABLE TO ALL

41 Our approach of lifting the bottom has other significant outcomes. First, what we used to regard as opportunities only available to students from more affluent backgrounds are now broadly accessible.

42 For example, most schools now organise overseas learning experiences. Schools are offering a wide variety of CCAs – Tanglin Secondary School has fencing as a CCA; Kent Ridge Secondary School offers sailing, North Vista Secondary School offers string ensemble and NorthLight School has for many years, run an equestrian programme for its students.

43 The Junior Sports Academy (JSA) is another example. It is a two-year free sports development programme for talented and interested P4 and P5 students. The Academy does not scout for high performing sportsmen and sportswomen, but look for raw diamonds – students with good motor skills and hand-eye coordination abilities, and then help them develop their sporting skills through professional coaching.

44 Since 2017, we have doubled the capacity of the Programme to about 800 a year. Some students from the Programme have gone on to gain places in secondary schools through the Direct School Admission (DSA) system. They did not go through the expensive coaches with high rates. It is done by the JSA, and is free-of-charge. MOE is now in the initial stages of developing a similar programme for the Arts. It is a good example of an alternate system that we discussed, and what will happen if there is no PSLE.

45 DSA is an alternate system to admit students into secondary school, outside of PSLE. Mr Rajaram has correctly pointed out that the affluent will always have a way, whatever the system it is, to make use of it, and DSA is one example. But in this case, **DSA also serves those from humble backgrounds, through programmes like the Junior Sports Academy, which help them enter the popular secondary schools. So are we better off with or without the alternative system? I think we are better off with it because it helps the students from humble backgrounds, even though affluent students will also be able to make use of it.**



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CLASS SIZES

46 The second significant outcome is smaller class sizes for the weaker students. The additional resources for Specialised Schools and students in Normal Streams come partly in the form of additional teaching resources. In Crest Secondary School, Spectra Secondary School, NorthLight School and Assumption Pathway School, the typical class size is 20.

47 In lower primary, Learning Support Programmes are done in groups of 8 to 10. Many Normal (Technical) classes are now taught in sizes of 20 or have two teachers in a class of 40.

48 In many Junior Colleges, consultations between students and teachers are often one-to-one. For sessions with an education and career guidance counsellor, students meet one-on-one or in very small groups.



49 There is sometimes still the perception that students study in one class and it is of a certain size. The reality and the lived experience of students is that they now regularly move around, join different groups and there is no single class size.

50 Let me put MOE's position on this straight: with good teachers, smaller class sizes help the students. Our teachers can attest to that through first-hand experience.

51 Why then is MOE cautious on the issue of class size? Because how it is implemented makes all the difference. Let me cite you the results of a few studies to illustrate this. They are done overseas, but nevertheless are scientific studies whose results we should take note of.

52 In 2009, Hong Kong did a Study on Small Class Teaching in Primary School. It put about 700 classes through an experiment over three years, varying their class sizes along the way. The study found that however they vary the class sizes, there were no significant differences on performances compared to the territory-wide averages.

53 What Hong Kong did find was that where an experimental school or class did significantly better, it was because the principal was more experienced, took an active role in developing the curriculum and the teachers, and encouraged involved parents in education.

54 Another study was done by the Taub Center for Social Policy Studies in Israel and results was published in their 2016 Annual Report. Unlike the Hong Kong study, the Taub Center did not conduct an experiment. They gathered a large volume of data on students' results, and did a multivariate analysis on the key determinants of the results, with a special focus to find out if class size made a difference.

55 The conclusion was in the first page of the report on the study, which said "No significant relationship was found between class size and achievement." However, the study did find that for learning of Hebrew, the larger the class size, the better the results. There are various explanations behind this, but I would not go into it today.

56 The third study was done in 2011 by the Center for American Progress, and the results were particularly insightful and shed light on the results of the two studies I previously cited.

57 It observed that smaller class sizes was a popular idea, but after tens of billions of dollars were spent across states, particularly in California and Florida, it did not affect results in a statistically significant way. One reason was that in the US' context, smaller class sizes meant hiring of many new teachers, who were inexperienced and yet to be effective in the classroom.

58 The report said, "The evidence on class size indicates that smaller classes can, in some circumstances, improve student achievement if implemented in a focused way. But class size reduction policies generally take exactly the opposite approach by pursuing across the board reduction... (They are) also extremely expensive and represented wasted opportunities to make smarter educational investments."

59 When I was in Finland earlier this year, I visited a secondary school and asked the teachers for their opinion on class sizes. They told me that the political parties in Finland each has a position on the ideal class size. Whoever that is elected, would then legislate the class size and put it into law.

60 The teachers said they would rather not have the rigidity. Grant the school the teaching resources, and give them the flexibility to configure class sizes for different groups of students, for different subjects. This is what Singapore has been doing.



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CONCLUSION

61 Let me summarise. Earlier generations of Singaporeans have worked very hard to uplift their lives, and education played a major role. But success creates new problems. The doubts of many Singaporeans – whether meritocracy still works, whether inequality is worsening – are paradoxically, the results of our policies succeeding and improving the lives of Singapore families. That is why I said tackling inequality is unfinished business.

62 But I stress there is no contradiction between meritocracy and fairness, nor reducing inequality and raising our collective standards. Instead, we should double up on meritocracy, by broadening its definition to embrace various talents and skills. We should not cap achievement at the top, but work harder to lift the bottom.

63 I wanted to set out these fundamentals, because it is important to have broad agreement around them. If we have, we are in a much better position to develop the education system to better prepare our children for the future.

64 As to what exactly we need to do in terms of programmes, initiatives, and policy reviews, MOE will take in all the views and suggestions raised inside and outside of this House and consider them. Some will take time to implement. Others may involve trade-offs and we may decide not to implement them for the time being.

65 Mr Speaker asked two questions, "What is the most important school you attend? Who are our most important teachers?" My answer is that the most important school is our home and the most important teachers are our parents. Of course, it takes a village to raise a child. But the home and the parents are one of the most important education experiences all of us would have. Imagine a family is a school and a parent a teacher, it makes the job of MOE complicated. Between the parent and the child, it is a rich and complex relationship. All of us who are parents would know that there are expectations, love, respect, hope, fears, and worries, as a parent. It is a complex relationship and MOE is in the middle of it.

66 It also means that being an educator is a privilege because you get to educate a child who is most cherished and valuable to the parents. This is why Mr Darryl David mentioned that being a teacher is unlike all other professions, like a lawyer or pilot where nobody questions you on how you do your job. But when it comes to teachers, parents will question, because parents too are the most important teachers to the child.

There are so many opinions on education because it is close to our hearts and it affects the closest people in our lives. It also means that discussions on education can be frustrating and sometimes end up in a stalemate. Parents say MOE needs to change; MOE says parents need to change; and children don't say it, but probably think – "both better change".

67 The truth is, we are all in this together, as partners to build a better future. I feel optimistic and hopeful, because through all these speeches today, it may appear that we have different views. But underlying this, I believe we do have a strong consensus on the direction ahead. I don't think we ever had such a strong chorus of voices in the House, emphasising the importance of joy of learning, and cautioning against excessive tuition and relentless chasing of academic grades.

68 I believe this is a view that will reverberate beyond this Chamber. **MOE and all our partners will work together. MOE, with the resources and policy leaders, will be the initiator of changes and be the system integrator, and work together to bring about improvements and change. All of us cannot fail the young people of Singapore, and cannot fail our society.**

69 Mr Speaker Sir, I support the Motion.

