

TRANSCRIPT OF PRIME MINISTER LEE HSIEN LOONG'S SPEECH AT THE 9th WORLD CONVENTION OF THE INTERNATIONAL CONFEDERATION OF PRINCIPALS ON 7 JULY 2009 AT SUNTEC CITY CONVENTION CENTRE

Minister Ng Eng Hen, education ministers and senior officials from Australia, Canada, China, Hong Kong, Sweden and the US, ladies and gentlemen. A very warm welcome to all of you to this 9th World Convention of the International Confederation of Principals. I am told we have principals and teachers from 40 countries - 1,500 of you. We are also privileged to welcome education ministers from different countries for the 1st International Education Roundtable.

Education is the most vital investment that societies can make for their future. In today's knowledge-based world, it is the only sustainable basis for progress, for prosperity, for generating growth, and it is also a vital ingredient in building a sense of identity of values, social cohesion of who we are in a confusing and rapidly changing world. It is the way to lift and help disadvantaged communities and the poor to advance and to do better in the next generation, and it is crucial for developing economies if they are to go beyond being developing economies and reach developed status one day.

Education also bridges dissimilar cultures and promotes understandings between different peoples and, therefore, a key priority for many different countries, whatever their preoccupations, wherever they may be in the world, is to upgrade their education systems. This convention is a chance to share our experiences, pick up new, good ideas, learn from one another and go back and do a little better. Today, I will talk something about what we have done in Singapore, what our experience has been, what we have sought to achieve and later on in our dialogues, I hope we will have a chance to learn of your experiences and what we may pick up from one another.

We are products of our history. The Singapore education system has evolved from our history, which was as a British colony and, therefore, our model is of a British education system, as it is, I think, for many of you. Generally speaking, it is based on six years of primary education and then four years or five years of secondary education and then going on to post-secondary education by various routes. We have about 170 primary schools and another 170 secondary schools. That is very small by international standards but large enough to be complicated to manage. Education is compulsory under the law only at the primary level for six years, but nearly everybody goes to school. Ninety-nine per cent go not only for their primary school education but complete ten years of schooling (primary plus secondary). In fact, nine out of ten go on to post-secondary education. That means junior colleges, polytechnics or the Institute of Technical Education. Eventually, nearly half the cohort receives university degrees. Among them, one-half in publicly-funded universities in Singapore and the other half by various routes, including distance learning and mature students going overseas after they complete their post-secondary education here.

Overall, it is a system which has enabled different students with different talents to advance by different routes and at different paces and achieve success in different ways. It is critical to us because given our limited natural resources, our tiny size, our absence of any gold or uranium or oil or gas, we only have people, and the talent and the energies of our people. We have to ensure that they are as well-prepared as they can to take care of themselves, to work together and to make the country prosper. And so, we have to make the most effort to run an education system which releases these energies and human talents.

Today, it is a system which emphasizes rigour and relevance at all levels. We go by results - not results of exams, but results in life, results in outcomes, results in the overall success of the country and I think overall, we have got value for our money. We have not stinted but neither have we been lavish. We spend three-and-a-half per cent of our GDP on education. It is less than the OECD average of 5.8 per cent, but I think we have tried to take care to make good use of this money. Wherever the students graduate, whether they go to the ITE, the polytechnic or the universities, they receive a solid grounding and an education which gives them valuable skills and attitudes for life. We did not start off like this. In fact, 30 years ago, only 60 per cent of our kids completed secondary school. Many dropped out early, but over the years we have made successive reforms, transformed the system, overhauled our processes, our curriculum, changed mindsets and arrived here - still one stage in our journey. I will explain a little bit today how we came here, focusing mainly on the primary and secondary levels.

The starting point for my story is 1959, 50 years ago when Singapore first gained self-government. We were a colony. We took something short of independence but everything except defence and foreign affairs. We gained control of education most importantly and we had a crisis on our hands. The population was growing rapidly. Our maternity hospital was the world champion in terms of babies per day, a long time ago. We had a desperate need for school places because all these babies became children. We needed to educate them and we had to expand the capacity by any means. So, we did so and built more schools, produced more teachers, made double sessions (morning school, afternoon school). The results were predictable - output went up and quality went down. Standards declined, students who were promoted from year to year, regardless of whether they passed or failed and dropout rates went up. Pupils left school illiterate. They went from school to National Service when eventually, we had National Service. They did not have a single written language. They did not speak any of the four languages which Mrs Charles spoke just now. Not English, Chinese, Mandarin or Malay. They spoke some kind of dialect, mostly Hokkien, which is the most common dialect amongst the Chinese here, a pidgin form, and we had to form them into platoons of Hokkien speakers so that we could talk to them and safely give them a rifle and let them shoot. They wore a special red tag on their name badges so that we could tell that they only spoke Hokkien. Some did not even speak Hokkien and they wore a purple tag. That means, please take extra care if you have to speak to these soldiers.

It was not their fault. It was our fault and the system's fault and after 20 years, after many other priorities had been seen to, we had the time and energy and the attention to focus on

education. In 1979, we started a series of major reforms. Dr Goh Keng Swee, who was then the Minister of Defence and had received these soldiers and knew what the output was, went over to the Ministry of Education and became the Minister for Education. He brought in systems engineers from Ministry of Defence to overhaul the education system. It was a systems overhaul by looking at the entire process, the input, the output, the materials, the transformation and the curriculum, asking ‘how do we do this?’ and ‘what are the tradeoffs?’. He turned our whole education system into an efficient teaching machine - major changes, including streaming, which is highly non-conventional wisdom and in fact, denigrated and condemned in many countries. But we introduced streaming so that we could teach students at paces which they could accept, and which was appropriate to their abilities. Streaming started in Primary Four and continued into the secondary schools.

We developed a national curriculum which emphasized basic skills – reading, writing and arithmetic. Let us get that first before we do other things was the thinking. He directed all the schools to teach this national curriculum with no room for deviation. ‘Just do this and get the basics right’. And it worked. Gradually, the failure rates fell, grades improved, more people stayed in school and advanced to the higher levels. It was a system which was suited our rapid industrialization, but as Singapore progressed and the world changed, it was not a system which was going to stand us in good stead forever. We had to change our system and evolve to keep pace with changes in our society and in the world. We had to prepare a new generation for a new world. They still had to learn the basics of numeracy and literacy and if they had to memorize the times-tables, memorize the times-tables! You will not just imbibe this by playing games with one another, but you must go beyond that to acquire new competencies, critical and creative thinking, to work efficiently in teams, to cooperate with one another, learn life and social skills and the ability to adapt and to continue learning all your life in a changing environment. That meant changes to the education system to inculcate these new skills, to raise standards across the board, to create more diversified avenues for students and create more peaks of excellence because people differ, kids differ. They have different interests, they have different aptitudes, they have different aspirations. We have to acknowledge these differences, not iron them out. The schools have to adapt to this and provide education to suit the different kids. The schools have to provide opportunities so that if you are a brilliant scientist, you can do biology or physics or Maths. If you are a brilliant artist, you have the opportunity to develop your talent. If you are a musician or dancer or sportsman, our slogan is not one mountain peak but the whole mountain range of success.

This is what we wanted to do to enhance the system, but there were also weaknesses which we could see and which needed to be fixed. The control of this education system was too centralised. It is 340 schools, but you cannot run 340 schools from one headquarters. There were not enough authority and resources devolved to the schools. Everything was from the centre. If the centre decided you needed computers, you will get computers. If the centre decided that you needed to go on a trip, you went on a trip. If you thought you wanted a trip, you had to ask the centre and if you wanted money, then you had to ask the centre, which is even harder. There was not enough support structure to oversee and to guide the schools. The next level up above the school principal is the

Director of Schools, but the Director of Schools has to attend to so many. How does he give attention, guidance, support to these individual schools?

Then, we had not done enough for our teachers who are the critical component in any education system. I say this not because you are all teachers but because it is true, and we had not put enough attention on keeping teaching an attractive and challenging vocation, one which an idealistic young person setting out in life can say, 'yes, I will go that way, I think that is a meaningful career for me'. So in the late 1990s, 20 years after the previous set of reforms, we launched into a new series of reforms, this time, focusing on school leaders and on teachers. We put in more resources, dollars and people. We built new infrastructure and new schools and we call it the PRIME programme. The schools went around Singapore in a merry-go-round. Those which were originally named after one part of Singapore found themselves strangers in an alien land from the east to the west and back again, keeping their old names. After we built new schools, eventually most returned to where they had started out from but with vastly superior buildings, facilities, classrooms and laboratories. We deployed technology - IT, computers, equipment to support the kids and the teachers so that you don't just have chalk and blackboards or even marker pens, but multimedia and engagement and participation by the kids, using all the technology which is current and relevant.

But all this hardware and money were not the key factors because finally, the new skills cannot just be taught through hardware, through textbooks or edicts. They need enthusiastic and dedicated teachers led by resourceful and passionate principals, supported by a very high quality staff at the headquarters in the Ministry and that meant nothing short of revamping the whole system. This is a very difficult thing to do because you are dealing with education. Hundreds of thousands of kids are involved. If you get it wrong for that whole generation of kids, you have no second chance with them, even if you fix it in the next generation. The kids and their parents need a lot of warning, guidance, advance notice, shepherding, so that they can adapt to the new system and so that the new system can gradually run in and work properly. That takes a long process and cumulatively, it is a revolution. But any day you wake up, there has to be continuity with what went yesterday and the day before.

So, what did we do? First, we strengthened the Ministry of Education Headquarters. It was such a centralized system, but we did not have enough power in the centre to run the system - not as a centralized one and not even as a decentralized one because to run a decentralized system, actually you need even smarter power in the middle to keep track of what is happening and to guide it without commanding it. We had to build up the Ministry HQ to supervise the running of the system and also to plan ahead to develop and upgrade the schools and the whole process, the curriculum, the opportunities. How did we do that? Well, we brought in more high-calibre people to supplement the people who were there, doing their best and making a heroic contribution, but we needed more people to reinforce them, generalists as well as specialists. The generalists were administrative officers who had served elsewhere in the government. These are the people who spent their time working out policies and seeing to plans in many ministries. So, they know how the government works. They understand what the economy needs. They know how

to get resources out of the system and they needed to be in the Ministry of Education so that the Ministry of Education could get its fair share of resources and support from the rest of the government and could present proposals which merged in with what we needed at the national level.

Then we needed specialists, Education Service Officers, people who had experience in the schools as principals, as teachers, as curriculum specialists who understood education, who understood our pupils, who could develop curricula, programmes, things that would work in the schools and would tell us what is working, what is not, what is really happening, what is not happening well. This was the first step for us to devolve authority to the schools, to the principals and it was to set up a highly-competent HQ. When you have an instrument, then you can start to play music.

We created the support structure to guide the schools. I told you we had 340 schools, one headquarters. If you ask McKinsey, who is here today, that is not a reasonable “fan-out” ratio because no supervisor can supervise 340 subordinates. It does not work. Therefore, what we needed was some intermediate level of command on coordination, so we set up school clusters. We grouped the schools (about a dozen at a time), more or less in the same geographic area and arranged according to primary, secondary, junior colleges. Some had very bright students, some had a mix of students and each cluster had a cluster supervisor, an experienced principal who would be the superintendent for the cluster and who could give guidance to the principals in her cluster, who could help the cluster to share ideas, organize joint activities and share resources. They could share exam papers and assignment papers. They could organize sports together. They could organize things on a scale which individual schools could not. This also enabled us to try younger and less experienced principals who are promising teachers or heads of department in the schools because now, there was somebody looking over his or her shoulder. If something went wrong, you could put it right.

Next, we strengthened the teaching service. The teachers’ pay had fallen behind compared to what people could earn elsewhere in the economy and teaching was no longer seen as an attractive career. Too few young people wanted to become teachers and too many teachers were leaving the service. We still looked alright because if you look at the absolute numbers, you need X number of teachers, we had Y and the delta was not too big. But if you calculate the numbers who were coming in every year, if you calculate the numbers who were going out every year, and if you calculate how long they stayed on average and you projected the trends, which we did, we knew we had a problem. We did what was the obvious thing but not a very easy thing to do and that was to raise the pay. The principals’ pay went up by one-third, the teachers’ pay went up by about 15 per cent - some more, some less. This was in the context of a Civil Service-wide, a public sector-wide approach towards making sure that people are paid what they are worth and what their jobs are worth. But given that framework, we were able to do this in the schools with the principals, with the teachers, and it was critical that we did this so that we would get good people who would then be dedicated, committed teachers, who would make all our other ideas work. We took in trainee teachers and paid them full salaries while they were undergoing training, rather than just an allowance.

Having made this change, which was one-off, we knew the private sector was going to move. We set explicit private-sector salary benchmarks to benchmark the school teacher salaries, and we watched the private sector every year as private sector salaries moved, we adjusted school salaries - teacher salaries - to keep in pace and this allowed us to recruit more teachers, better quality teachers and not just teachers coming in fresh from school or university, but teachers who came in mid-career and brought with them working experience and a range of valuable, different backgrounds which would help to add to the richness when they taught the kids in school. We enhanced the career development of teachers. We created more promotion possibilities. We developed different advancement tracks. Not everybody wants to become an administrator. Some teachers like to teach, love to teach, love to be in the classroom. There was a teaching track. Some teachers become very good at a particular subject – Maths or Art or English or Second Language. We developed senior specialist tracks. We developed a leadership track for those who would become heads of department, school principals and cluster superintendents. We created opportunities for further training so teachers could go back to school, attend courses, and be prepared for higher responsibilities. They could get Masters' degrees, PhDs, recharge their batteries and come back with new contributions.

Then we introduced performance assessments and performance bonuses. It's not easily accepted by teachers and it is controversial. I know in some countries, it is a big argument, whether you should or should not assess teachers. They are intrinsically good, every single one. In fact, that was how we started off because when we made reforms in 1979, Dr Goh Keng Swee decided that this was one nut which was too difficult to crack and there were so many other things which was necessary to do in the school system that he decided just to leave this be. Once you join as a teacher, you have a timescale for life. So, you join at the age of 20 or so, your earning may be \$2,000, maybe less at that time and every year you will have an increment until you retire. You are on an escalator and by the time you retire, your earning may be double or three times of what you earn at the beginning. It saves a lot of performance appraisals and interviews, but it was not the way to run a system. But, what to do? There were so many other priorities and to make a promotion system work is not just having and publishing a salary scale. You have to have performance appraisal systems, you have to have people who know how to make the appraisals, you must have a culture of being willing to assess one another, you must have a culture of being willing to accept an appraisal and learn from the feedback and move on and improve, and that's very difficult.

We implemented formal appraisal systems. We have promoted and rewarded teachers on merit. We brought the teachers and, most important, the teacher's unions on board to support this and we trained the principals and the heads of the department to acquire people assessment skills. You may know how to teach in the classroom, but to assess somebody else's teaching and judge them and rank them and honestly say, well, 'you can improve', 'you are better', 'this person needs to try harder' - that is not easy. We had to put that in, but we had to make sure that there was a system where the supervisors would make right and objective judgments, which would then be accepted and respected. So, we had to get appraisal systems.

Then we had to have performance systems worked out. We had no good performance system, firstly, because you are on the escalator. Secondly, if you are going to move off the escalator and become a principal or a senior education officer, the system was totally centralized in a Public Service Commission where all the promotions had to be approved. There is one Public Service Commission and about 50,000 or 60,000 civil servants, of whom 20,000 are teachers. The system was frozen. The teachers were not even interviewed every year because there were just too many. We could not move and even when you wanted to promote them, it was so difficult to persuade because the supervisors who had direct knowledge of the people who are performing did not have authority to decide the fate of the people serving for them, under them.

So, we changed the system - this also was not just education system but throughout the Civil Service - to devolve promotion authority to personnel boards at many levels and within the Ministry of Education, where there are personnel boards, principals and ministry officials. You have not just your own supervisor, who may like or dislike you, but others who have some knowledge of you and who can make a balanced judgment. Then they will make the personnel promotion judgments. At the top level, the Perm Sec is on the senior personnel board, which is chaired by another more senior Perm Sec. There are also a number of different Perm Secs from different ministries on the board and they will decide on more senior promotions and the Director-General of Education, who is determined by the Public Service Commission. So, there is check and balance and you make sure that the person at the top has the integrity and the quality, that he deserves to be there and he will make the rest of the system work.

It may seem like an operational matter but, in fact, it was critical to all our changes because if you cannot influence the careers of the people working for you, then the people are not really going to be working for you. It is simple as that. In the first year after we introduced this system, we promoted more than half the teachers in the cohort in the teaching service, including many cases which were backlogs and it has made a tremendous difference. We were able to advance young and promising officers to become heads of department and to become principals.

My view is the most critical person in a school is the principal. You put a good principal in and the school blossoms. The teachers are enthused, the students enjoy coming to school and many good things happen. If you put a principal there who is waiting for retirement, then the whole school waits for retirement, including the kids. You must have experienced people, but at the same time, you must also have good mix of young people who are energetic and enterprising, who want to try new things, want to prove themselves and are willing to take chances and encourage young teachers and kids to do exciting things. Now we have that. I visit the schools where I see school principals - a good number in their 30s - full of ideas, means, showing me what they are doing and showing me their wards who are enthusiastic about what they are doing. We also have some senior principals so that there are some ballast and grey hair in the system which is still useful, and a good number of them are now in the superscale grades, which means they are at quite a high level and recognized as such.

Having done all this with the people, we gave the schools the authority to innovate and to structure the teaching as they thought fit. For example, some schools have replaced some exams with other forms of assessment. Many schools are experimenting with new approaches so that you no longer see just desks arranged in rows and the teacher in front. They may be in groups, or they may be in clusters, or they may be outside the classroom. All sorts of things are happening. They go beyond the basics to have enrichment activities. It may be art, a musical, a scientific experiment or a social work project - things beyond what the syllabus puts down as necessary. We give them the resources to match this because if we want them to do these things, they must have the time, they must have the bodies and they must have the resources. Every school is provided a certain budget to spend at its discretion. It is called Edusave. You have \$100,000 or \$200,000, and it is up to you to decide what you want to do - to run the school, to go beyond the basic curriculum or to ensure that the poor kids also can afford the optional items which the not-so-poor kids have to pay for. The kids have some money in their individual accounts, the school has some money in its account and one year when the Budget had a little bit of loose change, the Finance Minister, at that time, me, created an Opportunity Fund which was for the schools to create opportunities for their kids whose parents might not be able to afford these opportunities.

They did all sorts of interesting things. At first they did not know what to do with the money. I had this conversation with a very experienced and passionate principal very early in this process and she was telling me all the things she was doing. Then I said, 'suppose you had S\$100,000 from the Ministry, what would you do with it?' She paused and for a little while and was lost for words because never in that scheme of things at that time could a principal have money to decide what to do with or resources which she could deploy without having to consult the headquarters. But she gave me a good answer and I decided that this was something which we ought to do and we persuaded the Ministry, which was keen. The Finance side was also keen and now, all sorts of things are happening in the schools. They hire extra administrative staff to relieve the teachers of the paperwork, data entry, collecting fees and tracking attendance. They run special programmes in art and drama, they put on plays and musicals and they buy computers for poor kids. They organize study trips abroad for kids who have done well and there is an enormous impact on attitudes, on the sense of can-do and on the sense of hope and excitement amongst the kids. I once went to a school which organized a study trip to Germany. They went to some cities, did some sightseeing, and also went to some concentration camps, because this was a history trip. The kids told me it was the first time they took an aeroplane and never did they imagine that they would have a chance to go on a visit like this. But they went, took pictures, came back and made a presentation to the school in the school assembly. You imagine the impact on attitudes and on lives of so many children.

The schools also got the community involved in their work. The enterprising principals roped in parents, VWOs and companies. We have community organizations in our housing estates which linked up with the schools so that the schools would come and do projects with them and look after their old folks. They built up local networks. Some of them built up international networks when they go overseas, to Southeast Asia and other

countries including some poorer neighborhoods where they do social projects, help other kids there and teach English. Sometimes, they build a little community facility there. All these are beyond the curriculum but critical to keeping an outstanding system.

One thing we did not do in a hurry was to reduce class sizes, which was also very close to teachers' hearts. But we took our time doing this as a conscious decision. There was some pressure to do this. Of course, parents would like it, and MPs would ask for it in Parliament but we resisted this pressure because we could see from other countries' experiences that it was very expensive. It would mean many more teachers and if our system was not ready, getting many more teachers did not mean more of the same quality. It would mean more poorer quality teachers and finally, more effort and less results. So, we resisted the pressures and we focused on the other reforms. Only recently have we revisited this issue as the size of our cohorts have come down, as our teacher recruitment has improved because of the other reforms and as we have been able to maintain quality. We are now starting to improve our teacher-student ratio. Recently, we have reduced the lower primary classes from 40 kids per class to 30 kids per class. By international standards, this is probably still a little bit high, but we have used our additional resources in other ways to start new programmes, to focus on weaker students and to have specialist teaching teams. We have also relieved the burden on teachers by adding a new group of people into our schools: allied educators, counsellors, people who support the children with mild learning disabilities or people who help teachers in classrooms so that more attention could be given to each child.

These are just some of the reforms we have done. There are many others too to the curriculum: from our slogan “teach less, learn more”, to the structure of schools offering more diverse options in our secondary schools, to the way we admit students into schools and to allowing schools to admit not based strictly on examination results. I will have to skip over the details today, otherwise, it would be another lecture. But we have been busy for this last decade and these are changes which take time and persistent efforts to take effect. But gradually, we have seen positive signs. I do not want to give you the impression that we have solved all our problems. Not all schools have the same student profiles and not all students do equally well. Some schools do better than others, but we are achieving, I think, our main aim. Schools are developing their own identities and expertise. They are maintaining a high standard across the board and there are a good number of outstanding schools and students, who emerge well-educated, employable and with a sense of social responsibility, generally speaking. So, I think we can be proud of our principals and teachers and they can be proud of their students.

McKinsey has done a report which suggests there are three essential ingredients to produce good performing schools - getting the right people to become the teachers, developing them into effective instructors and then ensuring the system is able to deliver the best possible instruction for every child. Simple points which you can put on one PowerPoint slide, but very difficult to do. But our experience corroborates these findings because we have tried to produce energised, capable principals, backed by capable teachers. We have tried to provide resources for the schools to customise the programmes according to the needs of the students. We have given strong but not too heavy-handed

central support and guidance. We have had to provide political leadership to drive the process, to put heavy emphasis on education nationally so that you get the budget and so that parents know that this is an emphasis and will support what we are trying to do, and to shield the education system from politics so that the teachers can do what they need to do and not have their work disrupted or confused or led astray by extraneous political considerations which are educationally unsound.

Therefore, what I am describing to you is work in progress. We are continuing to improve the system and there are many more things we want to do to enhance the capacity of our teaching force. We are aiming for all teachers to be graduates by 2015 and we are aiming for a stronger body to champion professional development amongst our teaching staff. We need to rebalance our curriculum to place more emphasis on soft skills. I think, like many other systems, we need to get people to pay a little bit less attention to exams without giving up attention to results. We need to find ways to give more opportunities for all and create more pathways to success. Therefore, our educators are always keen to learn from models in other countries and despite our many different contexts, there are many common lessons which we can pick up. We look forward to sharing these experiences and to doing our best, because we owe it to our children to constantly upgrade our education systems and give them the best future that we can prepare for them. Thank you very much.