





About Asia Society

Asia Society is the leading global and pan-Asian organization Working to strengthen relationships and promote understanding among the people, leaders, and institutions of the United States and Asia. The Asia Society Partnership for Global Learning focuses in part on creating forums for educators in the United States, Asia, and elsewhere in the world to exchange ideas on how education systems can be improved to support academic achievement and global competence. Building on a decade of experience, the Asia Society Partnership for Global Learning seeks to create opportunities for nations and regions to spotlight effective practices for systemic reform and consider how these practices can be adapted and implemented in their own contexts. AsiaSociety.org/education

This report is available at: <u>AsiaSociety.org/teachingsummit.</u>

EXCELLENCE, EQUITY, AND INCLUSIVENESS HIGH QUALITY TEACHING FOR ALL

THE 2014 INTERNATIONAL SUMMIT ON THE TEACHING PROFESSION

TABLE OF CONTENTS

Introduction	2
Results of Previous Summits	6
Attracting High-Quality Teachers and Leaders to Schools of Greatest Need	11
Achieving Equity in Increasingly Devolved Education Systems	16
Creating Learning Environments that Address the Needs of All Children	22
Conclusions and Next Steps	27
Participants	32

INTRODUCTION

ena koutou katoa—greetings!

From the spectacular views of Wellington Harbour to the resonating challenge and songs of the pōwhiri welcoming ceremony, to the settings for the discussions in the national museum Te Papa Tongarewa and the beehive shaped Parliament Building, to the community celebration of education on the Wellington waterfront and the farewell poroporoaki, the 2014 International Summit on the Teaching Profession had a distinctly New Zealand flavor.

Although cultural settings differ, governments face similar challenges in providing equal educational opportunity to all their students—whether in Māori and Pasifika communities in New Zealand, or deprived urban neighborhoods, isolated rural areas, and new immigrant populations in many other countries. This challenge is growing more acute as individuals and societies increasingly need higher-level skills to prosper in the modern, knowledge-based economy. The 2014 International Summit on the Teaching Profession was hosted by New Zealand Minister of Education Hekia Parata, and organized in cooperation with the Organisation for Economic Cooperation and Development (OECD), Education International, and the New Zealand teachers' unions, NZEI and PPTA. Previous Summits, held in the United States and the Netherlands, had focused on raising the quality and status of the teaching profession as key drivers of the quality of modern education systems. This Summit built on those earlier discussions by focusing on the fundamental issue of how to simultaneously achieve excellence, equity, and inclusiveness—high-quality teaching for all.

The Summit brought together official delegations of ministers of education, union leaders, outstanding teachers, and other education experts from Canada, China- Hong Kong, Denmark, Estonia, Finland, Germany, Japan, the Netherlands, New Zealand, Poland, Singapore, Sweden, the United Kingdom (Scotland), and the United States of America. These countries are all high achievers or rapid performers as measured by performance on OECD's 2012 Programme for International Student Assessment (PISA). In addition to these official delegations, observer delegations attended from Australia, Brazil, Hungary, Malaysia, Mexico, and Vietnam. Special delegations also attended, as guests of the New Zealand government, from Cook Islands, Niue, Samoa, Solomon Islands, Tokelau, Tonga, and Vanuatu. The Summit discussion did not

only take place in the formal meetings of ministers and teacher leaders. More than one hundred New Zealand educators attended the Summit and were lively participants in the informal sessions that surrounded the official Summit.

Although delegates had travelled a long way around the globe and represented education systems of very different sizes and configurations, they found they shared similar challenges. The purpose of the Summit, therefore, was to share emerging best practices and issues around the following questions:

- How can high-quality teachers and leaders be attracted to the schools of greatest need?
- What are the levers for increasing equity in increasingly devolved education systems?
- How are learning environments created that address the needs of all children and young people?

This report is not a proceedings of the Summit, but tries to capture the themes of the main presentations and the issues that arose during the general discussion. It attempts to show where there was agreement and where there was disagreement, as well as where there is simply not enough evidence to evaluate different paths. Its intention is to spread the discussion that took place in the New Zealand Parliament to a wider global audience of people interested in how education systems can provide high-quality teaching and learning for all.

SUMMIT OPENING

The New Zealand Deputy Prime Minister, the Honourable Bill English, welcomed Summit participants to the New Zealand Parliament. Noting that a fundamental role of public education systems is to ensure ladders of opportunity for the most disadvantaged, he welcomed the Summit's focus on equity and inclusiveness and said that New Zealand hoped to learn from the experience of other countries as it focuses more energetically on this challenge.

In her opening remarks, Hekia Parata, New Zealand Minister of Education, emphasized the critical importance of engaging parents and young people, especially those from disadvantaged communities, so that they can move from being bystanders to active participants in their own education. The goal of national education systems should be to help young people gain the skills and knowledge they need for the global knowledge-based economy, while retaining the richness of their own cultural identity. She said that teachers, with their training and expertise, with their experience and insight, and with their care and commitment, are critical to the learning journey of every child. She called on the delegates to "do in our time what is needed to prepare all young people for their time."

U.S. Secretary of Education, Arne Duncan, host of the 2011 and 2012 Summits, reflected on how the Summit had grown from small beginnings over a breakfast conversation in Washington, D.C., to a landmark international benchmarking event,

> providing practical advice for individual governments as well as a global platform for advancing the interests of children around the world. Jet Bussemaker. Minister of Education. Culture and Science of the Netherlands and host of the 2013 Summit, described how the Summits had helped the Netherlands to improve its clinical training for prospective teachers, expand professional development for existing teachers, and introduce peer evaluation.



Speaking for the OECD, Barbara Ischinger, Director for Education and Skills, stressed that education can be the great equalizer, the one force that can consistently overcome differences in background and culture. This promise, however, only holds true when every student has access to great teachers. She also argued that school systems cannot meet the challenges of overcoming inequality on their own: they need to develop effective partnerships—between teachers, between schools, and between schools and the wider community.

"A fundamental role of public education systems is to ensure ladders of opportunity for the most disadvantaged."

In his opening remarks, Fred van Leeuwen, General Secretary of Education International, the global federation of teachers' unions, emphasized the importance of continuing this unique annual gathering of ministers and teachers' union leaders. Governments and unions can and do differ over paths to education reform, but to be successful, education systems

had to be coherent and enabling, providing support to teachers in sharing knowledge and preparing them professionally. He particularly welcomed the theme of this Summit and the opportunity to go deeper than ideological disputes to ask fundamental questions about the responsibilities of governments, school communities. and teachers in making sure that, whatever their background, all young people achieve their full potential.

An OECD background report prepared by Andreas Schleicher, entitled "Equity, Excellence and Inclusiveness in Education: Policy Lessons from Around the World" served to frame the Summit's two-day discussion by laying out international research evidence, best practices, general principles, and innovations that might lead to better policies in this area. In his opening remarks, Schleicher emphasized that in modern, knowledge-based economies, skills drive lives and economies. Adults with higher skills have better outcomes in work, health, and civic participation. On the other side, people with low skills have an uphill struggle in life, a problem that both stems from and contributes to the increasing income inequality across OECD member countries.²

Excellence and equity are often seen as competing policy priorities. In many countries, there is a strong relationship between the socio-economic background of students and their academic performance. In these countries, schools simply reproduce the existing patterns of socio-economic advantage and disadvantage. However, the hopeful news is that there are high-performing systems that get both things right: they combine high levels of student performance with an equitable distribution of learning opportunities. Differences in student attainment between higher-performing and lower-performing systems are so striking that, in fact, the country

 $^{^2}$ The OECD report, "Growing Unequal? : Income Distribution and Poverty in OECD Countries," can be found at http://www.oecd.org/els/soc/41527936.pdf.



¹ The OECD report, "Equity, Excellence and Inclusiveness in Education," can be found at http://www.istp2014.org/assets/OECD_Report_-_Equity_Excellence_and_Inclusiveness_in_Education.pdf.

"Excellence and equity are not incompatible policy goals"

where students go to class is more important than what social class students come from. The poorest students in Singapore and in Shanghai, China, for example, do better in math than students in professional classes in some other countries. OECD analyses show that the level of financial expenditures in a system is not closely related to its quality or equity. It is how the resources are used to address

key challenges that make a difference. Schleicher outlined OECD's key research findings related to the Summit's three questions, issues that were taken up in greater depth in the sessions that followed.

John Bangs reported on Education International's briefing paper for the Summit. He reflected on the fragility of schools

that serve large numbers of children from socially deprived backgrounds and on strategies that could be applied to support them. In particular, they need staff with a long-term commitment to their schools, good relations with communities, and the ability to engage with parents and to influence students' attitudes towards their education. Education systems

need to find a way to support the teachers in such schools—to reduce high attrition and promote effectiveness. In such schools, teacher and student self-efficacy are closely intertwined.

The Summit was facilitated by Anthony Mackay, CEO of the Centre for Strategic Education in Australia. For each of the Summit's main topics, rep-

EQUITY

According to OECD, equity in education can be seen through two dimensions: fairness and inclusion. Equity as **fairness** implies that personal or socio-economic circumstances, such as gender, ethnic origin, or family background, are not obstacles to success in education. Equity as **inclusion** means ensuring that all students reach at least a basic minimum level of skills. Equitable education systems are fair and inclusive, and support their students in reaching their learning potential without either formally or informally erecting barriers or lowering expectations.

resentatives from selected education systems led off by describing their own experiences and challenges in promoting both excellence and equity. This was followed by a general discussion among the country delegations. International experts also provided periodic commentary from research on key points (see list of participants).



The Summit also included smaller meetings of ministers and teachers' union leaders and, at the end of the Summit, country teams of government officials and teachers' union leaders shared the follow up actions they intend to take over the next year, before reconvening at the fifth International Summit on the Teaching Profession, which will be held in Alberta, Canada.

RESULTS OF PREVIOUS SUMMITS

he first three Summits (see Box) not only encouraged serious international conversation and sharing of best practices, but have also helped to stimulate action. In fact, since the Summits began, many countries have been working on different measures to enhance their teaching professions. The foci vary between countries, depending on their local context, but include establishing professional standards for teaching, improving initial teacher education, promoting the further professional development of teachers and school leaders, developing career ladders to offer new roles for teachers, and establishing professional learning communities within and across schools. As the 2014 Summit began, a number of countries reported on their progress:

Canada: Education is the responsibility of provinces in Canada. A number of provinces have taken action to improve the quality of teaching. For example, Ontario has increased in-service training for teachers in math to upgrade the math skills of teachers who did not major in math. Prince Edward Island has increased the number of professional development days as part of an overall effort to increase student achievement.

Estonia: After broad consultation, Estonia has adopted a new set of teacher professional standards that are intended to promote lifelong learning. Cross-subject cooperative networks led by teachers have been established and a plan has been developed, to be implemented from 2015, to expand in-service training for teachers and school leaders, based on needs and with attention to evaluation of impact.

Germany: Germany is focused on raising the quality of teacher training and inservice education, especially in dealing with heterogeneity, intercultural skills, and learning strategies for underachievers. The Länder (German states) have also developed a system of school quality evaluation.

Japan: Following last year's Summit on teacher evaluation, Japanese boards of education are moving forward in their development of teacher appraisals to recognize teachers' strengths and provide professional development for areas that need improvement. They are also seeking to lighten teachers' workload to allow time for professional development through increased use of community volunteers.

Netherlands: Drawing on the Amsterdam Summit, the Netherlands has created a Teachers Program 2013-2020. Developed in consultation with educators, it lays out a number of initiatives, including strengthening the professional body, expanding coaching for new teachers, creating alliances between fiftyeight teacher training institutions and schools, and developing a peer evaluation system.



New Zealand: After the

2012 Summit, New Zealand created a cross-sector forum on raising achievement, modelled on the Summit, which brought together representatives of every sector to collaborate in providing advice to the Ministry on how to ensure that every young person leaves school with the knowledge and skills to succeed. Educational excellence awards and community celebrations have also showcased New Zealand's educational strengths.

Poland: In 2007, Poland began a major national reform program that modernized the curriculum and examination standards and created a new approach to inspection through the development of better evaluation data. Now, Poland is enhancing professional learning networks among teachers and school leaders to share best practices in meeting these new goals.

Singapore: Singapore is continuing to revamp its teacher education in line with twenty-first-century

skills and is strengthening its ongoing professional development for teachers through the Academy of Singapore Teachers.

Sweden: Since the 2012 Summit, Sweden has been focused on efforts to attract more strong students into the teaching profession and to introduce career steps to keep talented teachers in the profession.

United States: To ensure that students are career and college ready, most US states have established higher, internationally benchmarked, academic standards for all students. In 2013 and 2014, the annual convening of teachers' unions and local state and federal leaders focused on how government and teachers' organizations could collaboratively support teachers and school leaders in implementing these standards. The president also called for expanded funding for preschool education, and at least fifteen states increased funding for early learning in 2013.

RESULTS OF PREVIOUS SUMMITS

How did the International Summits on the Teaching Profession come about and what have been their results?

Research has repeatedly shown that teachers are the single biggest in-school influence on student achievement, so the quality of teachers is therefore critical to the quality of education systems. But there is wide variation in the quality and status of the teaching profession around the world: Highperforming countries have a plentiful supply of high-quality teachers, but many countries struggle to compete with other sectors for teaching and leadership talent And all countries face the challenge of radically improving their education systems to prepare students for the rapidly changing global, knowledge-based economy.

As the United States attempted to address these issues, Secretary of Education Arne Duncan and the leaders of the two U.S. teachers' unions agreed that it would be useful to learn from the experiences of other countries, especially those that were high-performers on international assessments of student progress. So, at the invitation of the United States and drawn together by a common belief in the centrality of the teaching profession and the importance of learning from the world's best practice, ministers of education and leaders of teachers' unions from sixteen countries came to the first International Summit on the Teaching Profession in New York City in March 2011.

2011: Improving Teacher Quality around the World

The Summit represented many firsts. It was the first ever international summit on the teaching profession and it was the first to bring ministers of education and teachers' union leaders together at the same table. It took place against a background of harsh criticism of teachers, low morale in the profession, and conflict between governments and teachers' unions in many countries. The Summit's goals were to identify the world's best practices in building a high-quality profession and to initiate an ongoing dialogue about improving the status and quality of the profession.

The 2011 Summit was convened by the U.S. Department of Education, the OECD, and Education International, with partnership in the United States from the National Education Association, the American Federation of Teachers, the Council of Chief State School Officers, Asia Society, and the New York public television station, WNET.

The discussions echoed the importance of taking a comprehensive career approach to the teaching profession. High-performing systems build their human resource systems by putting the energy up front in attracting, training, and supporting good teachers, rather than on the back end of reducing attrition and firing weak teachers. They actively recruit into the profession students who are

academically strong, but also deeply committed to children. They train them well and provide ongoing professional development and career opportunities.

In most countries, significant steps need to be taken to substantially raise the quality and rigor of teacher preparation programs to ensure consistently great teachers across the system and to give teachers the skills and knowledge that enable them to feel prepared for the greater challenges of education today. This should include redesigning programs with clear standards for what graduates should know and be able to do in each subject; accountability on the part of teacher preparation programs for ensuring that teachers have these competencies; more emphasis right from the start on guided practice in classroom settings; greater capacity by teachers to use inquiry and problemsolving methods and to incorporate information and communication technology; greater facility by teachers in using student assessment and data to guide instruction; experiences that promote understanding of local and global diversity; and research and diagnostic skills to solve classroom problems based on evidence.

Since even the best pre-service education cannot possibly prepare teachers for all of the challenges and changes they will meet in these rapidly changing times, teachers also need effective forms of professional development. Meaningful mentoring for every new teacher, under supervision of a master teacher, is particularly important in helping them to become effective practitioners and to reduce the wasteful high attrition rates among new teachers. To retain experienced talented teachers in schools, it will also be important to create career paths from novice to master teacher with consistent professional development, appraisal, and feedback, as well as increasing responsibility for the instructional quality of the school.

The hopeful message from the first Summit was that significant change is possible. Contrary to what is often assumed, a high-quality attractive teaching force is not due simply to a traditional cultural respect for teachers; it is a result of deliberate policy choices that are carefully implemented over time. Cultural context matters, but there are many commonalities among high-performing

countries. Success requires collaboration among all the institutions involved—governments, teachers' unions, schools, and universities.

2012: Teaching and Leadership for the Twenty-First Century

The 2012 Summit, which was also held in New York City, turned to the issues of the skills and knowledge students will need in a world that is changing at seemingly breakneck speed. There was a palpable sense of urgency among the delegates that the aims and processes of education in the twenty-first century need to be fundamentally different than those in the twentieth. No longer are providing basic literacy skills for the majority of students and higher order skills for a few adequate goals. Instead, schooling needs to develop a broader range of skills and dispositions for every student, including critical thinking, problem-solving, creativity, communication and collaboration, motivation, learning how to learn, and cross-cultural and global awareness. To meet these new challenges will require significant strengthening of the teaching profession—in recruitment, preparation, and ongoing support.

A major shift appears to be taking place in education, from a twentieth-century knowledge transmission model to one organized around twenty-firstcentury skills and learning environments. There was a broad consensus across all of the participating countries that this is the right direction, albeit with significant caveats about not trivializing subject matter knowledge or basic skills. Education systems, however, have a long way to go in understanding how to develop these new skills on a wide scale, how to ensure that teachers have the capacity to teach them, and how to create twentyfirst-century learning environments. There are profound implications for teacher education and professional development. Moreover, there is a fundamental mismatch between these new, more complex goals of schooling and how they are currently measured in large-scale assessments. The gap between the rhetoric of twenty-firstcentury skills and the current reality is very large. The Summit participants concluded, in particular, that significant steps will be needed to close the gap between what we measure and what we value, or we risk driving education systems in the

wrong direction.

To meet these more complex goals for education in the twenty-first century, countries are devolving more authority to the school level. This devolution makes very apparent the difference between effective and ineffective leaders. A consistent thread throughout the 2012 Summit discussions was that high-performing systems rely on effective leadership at the school level. They are implementing new standards and policies to ensure professionalized recruitment, systematic and highquality training experiences, and ongoing support and appraisal of principals. In these systems, school leaders do not focus on "bells, buildings, and buses," rather they focus on what matters most: supporting the development of effective teaching, setting school goals, measuring performance, strategically allocating resources for teaching and learning, and partnering with community institutions to support the development of the whole child.

Since a single person cannot carry out all of the leadership functions of a school, distributed or collaborative teacher leadership models are also necessary. They can serve both to strengthen leadership and to create career paths for talented teachers. There is considerable innovation around the world in creating new standards for principals and new models of leadership development, but there has been relatively little research so far on their effectiveness.

2013: Teacher Quality

The third Summit, held in Amsterdam in 2013 was hosted by Dutch Minister of Education, Jet Bussemaker, with organizing partners OECD, El, the two Dutch teachers unions, AOb and CNV-O, and the Education Cooperative. The focus was the often controversial issue of teacher evaluation.

Why evaluate teachers? Education systems around the world are setting ambitious goals for both high performance and high equity. This will require high-quality teaching for each and every student. OECD surveys have shown that the vast majority of teachers (83 percent) welcome informed feedback on their teaching as a way for them to improve their teaching and felt that the feedback they had

received had been fair. In the countries surveyed, however, more than one in five teachers report never receiving any feedback from their principal or a senior teacher; others report that there is no recognition for superior performance; and in some places, 95 percent of teachers receive satisfactory ratings even where student achievement is weak. Teacher evaluation or appraisal systems are seen as potentially powerful engines for improving teaching and offering new roles for outstanding teachers. At the same time, the scale of public investment in education and the urgent need for improved student outcomes has led to increased demands for accountability. Propelled by the twin imperatives of improving teaching and strengthening accountability, teacher appraisal systems are the subject of increasing attention around the world.

Despite the often contentious nature of discussions of teacher evaluation, there are, in fact, broad areas of agreement between governments and teachers' organizations. Most countries do have teacher standards that define teaching quality. They also have appraisal systems, although these vary enormously in design: ranging from informal conversations between principals and teachers in Finland, to peer review systems as in the Netherlands, to highly developed annual performance management systems like in Singapore. The definition of the role of the teacher, the education governance structure of the country, the existence or absence of career ladders, and the styles of evaluation in other careers in the country all influence the design of teacher appraisal systems in different contexts. There is no single universal approach, but there was general agreement that to be meaningful, appraisals have to be in the context of professional development, since research shows that feedback on its own, without opportunities for coaching and practice of new skills, does not reliably lead to improvement. Teacher appraisal systems also need to use multiple sources and measures of feedback (many countries include parent and student surveys, as well as classroom observations; self, peer, and principal assessment; and student test scores) to truly do justice to the complexity of the teacher's role, and they have to be designed in partnership with members of the teaching profession.

There are also areas of emphatic disagreement, including the weight given to student test scores or value-added measures in teacher appraisals and the relationship of performance to rewards, especially bonuses or merit pay (as opposed to salary differentials that go with different career roles). It is also difficult to balance the goals of improvement and accountability. Poorly designed or top-down appraisal systems can unintentionally create a climate of fear and resistance among teachers that inhibits creativity.

Teacher appraisal systems also require significant attention to implementation. It is critical that there is good training for the appraisers, whether principals, senior teachers, or external evaluators, so that the appraisals are clearly expert and credible. Doing serious appraisal requires time, as does the follow up professional development. How the assessment of individual teachers relates to the evaluation of schools and of broader education policies also needs careful thought, since the conditions for effective teaching may vary a lot from school to school. This is still work in progress, but the 2013 Summit had serious, honest, and sometimes difficult conversations as leaders of governments and teachers' organizations explored ways to move forward.

ATTRACTING HIGH-QUALITY TEACHERS AND LEADERS TO SCHOOLS OF GREATEST NEED

n the developed world, skills transform and drive economies. Jobs that require higher levels of education and skills are increasing, while lowerskill jobs are declining. People who are successful in education have higher wages, better health outcomes, and participate more actively as citizens, while those who emerge from the education system without significant skills suffer lower wages, higher unemployment, worse health, and are more likely to need assistance from taxpayers. As a result of these trends, there is growing income inequality in many OECD countries. There are clear costs to societies in not addressing the problem of low skills, and clear benefits to societies in achieving more equitable outcomes in education.

Excellence and equity have often been regarded as mutually exclusive goals, but the PISA 2012 assessment of mathematics showed that Australia, Canada, Estonia, Finland, Hong Kong, Japan, Korea, Liechtenstein, the Netherlands, and Macao combine high educational performance with equity in education opportunities. Other countries including Mexico, Poland, Turkey, and Germany have both improved performance and increased their levels of equity since the PISA assessments of 2003. The gap in performance between immigrant and non-immigrant students has also shrunk slightly, even while the proportion of immigrants in OECD countries has grown. In fact, there have been tremendous gains for equity in many parts of the world over the past twenty years. Students from low-income backgrounds are now taking harder courses in secondary school and going on to higher education in numbers that would have been unthinkable twenty years ago. However, the gap between the advantaged and disadvantaged remains large.

Education can be a great equalizer; the one force that can consistently overcome differences in background. But this only holds true when students have access to great teachers. One reason for the large gap between advantaged and less-advantaged students is that disadvantaged students frequently do not have access to excellent teaching. The problem of attracting teachers into disadvantaged schools is widespread around the world. Keeping teachers is equally difficult.

Estonia and Scotland (representing the United Kingdom) led off this part of the discussion.

"In Scotland, by age five, there are already major gaps between the most and least advantaged groups in problem-solving (six to thirteen months) and expressive vocabulary (eleven to eighteen months). Investing in high-quality early childhood education is essential to address inequity early."

ESTONIA

The Minister of Education from Estonia reflected on the changing situation of education worldwide as context for the goals of achieving excellence and equity and enhancing the teaching profession. He reflected that if there is broad public trust in the ability of a country's education system to perform, then it can meet the ever-changing needs of society. If there is not that public trust, that is a major barrier to moving forward.

As he sees it, there are four major pressures on education systems around the globe. First, expectations for education systems are constantly growing, but resources are not. Very few countries are likely to go beyond expenditures of 5-7 percent of GDP for education, so education systems have to face the reality of needing to do more with less. Second, the social and economic environment is changing much faster than the classical education system can adapt, which is causing severe tensions. He argued that we need to shift from a conception of education as primarily for the transmission of knowledge to one that embraces the skills needed to apply such knowledge, as well as the need for lifelong learning, a perspective that is not yet generally accepted. Third, the information society fundamentally changes the types of skills that are needed; education must therefore change to meet these new demands. Finally, information technology also provides new platforms for education. Artificial intelligence, for example, is creating interactive

learning environments that are beginning to compete with traditional classrooms.

How should national education systems be redesigned to meet the goals of excellence and equity in vastly changed world? First, the greatest resources in schools are the students, whom educators have for more than ten thousand hours during the course of compulsory education. Teachers report that students today are quite different from previous generations and PISA data show that in many countries, students are not happy or engaged in school. The Minister argued that schools need to be redesigned around the aspirations and curiosity of students.

The second key resource is teachers and school leaders, who make learning happen. Just as the relationship between teachers and students is changing, so does the relationship between governments and schools

need to change. The overregulated and bureaucratic model of education systems, which developed during the twentieth century, needs to be upended. Schools need to become more autonomous, self-directing entities. The Minister of Education from Estonia believes, although he admitted that some may think this too radical, that schools and the teaching profession are too closed and that schools need to be more open to real life, real problems, and people who may not be teachers for their whole career.

Third, preschool education is becoming ever more important. The socio-economic background of children is embedded in their preschool years. Countries that have broader preschool services show higher student achievement on international comparative assessments and this may be a high value-for-dollar investment.

SCOTLAND, UNITED KINGDOM

There is no single education policy in the United Kingdom. Scottish education is entirely distinct from education in other parts of the United Kingdom. Responsibility for education was explicitly reserved to Scotland in the Act of Union of 1707. In fact, Scotland has the longest history of compulsory education in the world, dating back to the Education Act of 1696 that established Scottish schools. The system is based on local control: there are thirty two local

authorities responsible for education in Scotland and 90 percent of students attend local comprehensive schools. The system is strongly rooted in the principles of democratic accountability, the belief that investing in education is a societal good not just an individual one, and is based on the premise of ability to learn, not ability to pay. There is a strong political consensus about the importance of education to the common good, so there is little change in direction if the political parties in power change. And the teachers' union is deeply involved in policy development and implementation. That does not mean there are not disagreements but the partnership is based on a clear shared vision and the systematic development of consensus.

Despite this firm basis of common values and partnership in Scottish education, there is a significant achievement gap in Scotland, which is related to poverty and to rural versus urban residence. Scotland is taking two main approaches to this: early intervention and investing in the quality of the education workforce. The data on young children in Scotland are stark: By the age of five, there are already major gaps between the most and least advantaged groups in problem-solving (six to thirteen months) and expressive vocabulary (eleven to eighteen months). Early childhood education has been expanded and some progress has been made in closing these gaps, but much more needs to be done.

With respect to the education workforce, in Scotland the problem is not in attracting high-quality teachers into poor schools, because Scotland has high standards for entry into teaching through its longestablished General Teaching Council, but rather how to support teachers in poor schools to be effective through professional learning and other resources. Overcoming the effects of poverty is a shared agenda between the minister and the leaders of the teachers' unions, who jointly presented the Scottish case.

DISCUSSION

Countries are in very different places with respect to getting high-quality teachers in front of the neediest students. And there are different types of high-need students. For example, isolated rural or indigenous students may need a different approach than those students who are concentrated in high-poverty urban schools, or from those students who are in schools that contain a mixture of advantaged and disadvantaged children.

In some countries, teaching is simply not an attractive profession, so policies need to get to the root of the problem—the quality of available teachers. In Sweden, for example, which scores below average on international assessments of reading, math, and science, teaching is not an attractive profession and there are shortages, especially in math and science. Sweden is experimenting with a special bonus of €5.000 to attract math and science teachers. It has also introduced a teacher registration system to ensure the quality and subject matter competence of teachers. Still, overall salaries are too low to attract people into the profession and there are too few differentials between teachers. Believing that if Sweden is to improve its results, it must start with the teachers the government awarded teachers the

> best collective bargaining agreement in the Swedish labor market in 2012. Sweden is now also introducing a form of career ladders for teachers: One out of six teachers will be enabled to become a "first" teacher, with a substantial salary bump of 15-20 percent. Schools in disadvantaged areas will be enabled to have an even higher proportion of first teachers. These reforms will be paid for by both the national and local governments.



In other countries, structural problems get in the way of equitable distribution of high-quality teachers. In Germany, for example, young teachers want to teach in the Gymnasium level of secondary schools, where the pay is better, they have to teach fewer lessons, and there are better career prospects. But a relatively small proportion of poor or immigrant students attend the Gymnasium, so it is difficult to get the best teachers to teach high-need students at the secondary level. The German teachers' union favors the development of comprehensive secondary schools, but the idea lacks broad enough political support.

In Alberta, Canada, the schools with the greatest needs are the rural and remote schools, many of which serve indigenous communities. They are provided with equal or greater resources than other schools, but that is not enough; tiny and remote schools cannot achieve the economies of scale and cannot access the other resources that more urbanized schools can. Alberta's approach is to open up the system to find other resources within the community. For example, Alberta is blurring the lines between systems, allowing students to get academic credit from work experience or from post-secondary institutions, not just from schools. It is also recruiting teachers from the community in fields where there are subject matter shortages, using fast track programs to get these non-traditional teachers the pedagogical training they need.

Around the world, education systems use a range of strategies, often in combination, to respond to disadvantaged students:

For example, in addition to all the policies Singapore has in place to develop a top notch teaching profession, Singapore also assigns teachers to schools and may rotate teachers periodically to ensure an equal mix of experienced and less-experienced teachers in neighborhood schools. In Japan, teachers are assigned to schools by the provincial or municipal authorities, although assignment to rural schools is often unpopular with teachers.

Other systems do not assign teachers, but use salary incentives to attract teachers to the most challenging schools. "Grow your own" scholarships that focus on training teachers from low-income or ethnic minority communities can also work. And for schools in isolated rural areas, technology can be a useful adjunct: An experienced teacher in another jurisdiction can deliver high-quality instruction electronically in subjects where local teachers may not be proficient.

Career incentives can be powerful ways of attracting teachers to work in needier schools. Shanghai, China, reported in a previous Summit that teachers are expected to work in needier schools or to be part of a project to assist needier schools as part of their progression up the teacher career ladder.

For teachers to remain and be effective in challenging situations, they have to have been equipped with the skills that are needed to identify struggling learners, understand cultural differences, diagnose student problems, and differentiate instruction based on students' needs. Many countries are now working to

"The development of collaborative cultures among teachers and school leaders is one of the most powerful ways to improve the quality of teaching."

ensure that their teacher professional standards and teacher preparation programs prepare prospective teachers more deeply with these skills.

In the Netherlands, for example, there are special programs at universities of applied sciences for those who are going to teach in disadvantaged areas or in vocational education. The government has also set aside funds to which teachers can apply for further education. One of the most popular uses of these funds is for a master's degree in special education needs. So the funding stream is a government policy instrument, but the need is recognized by teachers themselves. Germany is putting new emphasis in its teacher education programs on training for differentiated instruction and intercultural communication. In Singapore, there is strong emphasis in initial teacher training on preparing teachers with the values and expectations that all children can learn. All Singapore teachers spend time doing community service as part of their training to ensure that they understand cultures different from their own. And in the United States, urban teacher residency programs recruit talented college graduates, who are paid to work for a year in an inner city school under the tutelage of a successful teacher, while taking paired

courses at a local university. These teachers, who have had deep exposure to teaching disadvantaged students, then commit to teaching in that city for at least four years.

Most high-performing systems ensure that the resources available to disadvantaged schools are equal to or greater than the resources provided to other schools. But resources alone are not enough; they need to be used well.

Schools in challenging environments are often fragile institutions. They tend to have high attrition rates among teachers—in some places up to 50 percent in the first five years—and teachers in these schools also need ongoing support to increase their sense of efficacy. Such support may be more important to teachers than salary incentives. Research has shown that mentoring programs for new teachers, in which an experienced and successful teacher mentors a new colleague for one or two years, can be highly effective in reducing attrition and promoting teachers' sense of self-efficacy. Such programs are universal in high-performing systems, but spotty in others.

The development of collaborative cultures among teachers and leaders in schools is one of the most powerful ways to improve the quality of teaching and the commitment of teachers to their schools. The synergies that come from teachers and school leaders working together in a culture of inquiry to create more compelling environments for students are important in attracting and keeping teachers in the toughest schools. Throughout the Summit, numerous examples were cited. Two adjacent schools in a poor area of Brooklyn, New York, were contrasted. One was much more effective than the other because it had developed a powerful culture of collaboration among the teachers. Another example cited was in California, where all the teachers in a poor school worked together to prepare themselves for the National Board for Professional Teaching Standards (a form of advanced certification), a process that raised achievement in the school and decreased turnover. Some participants argued that the focus of policy discussions should be less about attracting teachers to poor schools and more about developing teachers in poor schools.

Participants also discussed the role and design of accountability systems in producing equity. In some systems, it is only teachers who are held accountable. Accountability systems that have severe consequences for teachers in poor schools could inadvertently

reduce the likelihood of good teachers being willing to teach in such schools. Accountability systems in challenging schools need to be more formative and less punitive, more encouraging and less discouraging. The idea should be to build a culture of progress, using assessment and feedback to help everyone, including parents and students, understand the progress being made and to continually drive up the quality of teaching and learning.

Also in terms of system design, rather than talk about accountability systems, do we need to talk about accountability for the system? For example, who do we hold accountable for getting great teachers into the classroom? Who is accountable for having children come to school ready to learn? Who is responsible for resources and social supports to make the system work? Who is responsible for formative assessments? Who is responsible for the quality of the work environment that is conducive to learning? The components of the system need to be well articulated to support students, with clarity as to who is responsible for each element. Otherwise, you can take a talented teacher and put them in a dysfunctional system and the system wins every time.

Participants agreed that important as it is, focusing on teacher quality alone will not produce equity in educational outcomes. Summit participants discussed effective ways to engage low-income parents in their children's educational journeys and the use of schools as hubs of social and educational services. There was also a strong consensus, taken up again later in the Summit, about the critical need to expand and raise the quality of early learning opportunities to address the developmental gaps identified by Scotland and create a more level playing field at school entry.

Getting high-quality teachers to the most disadvantaged students is critical to increasing equitable outcomes, but it is also a complex and multidimensional undertaking. The fact that it has been done relatively successfully by a number of countries at the Summit provides grounds for optimism. Replicating this success in other systems, however, is the challenge.

Solving this problem will require a national commitment and a coherent strategy. It cannot be solved at the local level, where the effects of devolution and choice can lead to greater segregation of children with the highest needs, further compounding the problem. It was to this discussion of the balance between national policy and local autonomy that the Summit then turned.

ACHIEVING EQUITY IN INCREASINGLY DEVOLVED EDUCATION SYSTEMS

n many countries, especially larger ones like the United States, Germany, Canada, and Brazil, the education system is not the responsibility of the na-L tional government, but of the state, province or local governments. Making national progress on excellence and equity therefore requires collaboration across these jurisdictions. But as countries, large and small, are establishing more ambitious national goals for education, they are increasingly devolving more authority to individual schools to decide how to meet these goals. This occurs in a variety of ways. Sometimes authority is delegated for curriculum and assessment; other times for resources and personnel as well. Sometimes the raison d'etre for decentralization is one of providing greater choice to parents and increasing innovation and competition among schools. Greater autonomy allows schools the flexibility to tailor their programs to better meet the needs of students. It has led to a greater variety of types of schools to cater to the interests of students and has allowed teachers to devise pedagogy appropriate to their own circumstances. But the results in terms of student achievement have been mixed. Depending on the design, school choice schemes can lead to increased socio-economic segregation. And in cases, where the capacities of local schools or communities to manage schools themselves are quite varied, it can maintain the underlying social inequality.

What, then, are the key levers for equity in highly decentralized education systems? Two countries that are working hard to tackle equity in the context of decentralized systems—New Zealand and Germany—led off this discussion.

NEW ZEALAND

New Zealand is a small country with approximately 762,000 students in about 2500 elementary and secondary schools. About 1,000 of these schools have less than 100 students, so there are a high proportion of small schools. There are also about 250,000 children in some form of early childhood program, either centeror home-based.

The New Zealand education system has been highly decentralized for twenty five years, with no governmental layer between the Ministry of Education and the

schools. Choice is an undergirding principle of education in New Zealand. Schools are self-governing and are governed by parents who are elected to school boards every three years.

In this highly decentralized system, the levers that exist to produce quality are:

- A high-quality teaching and leadership profession that is trusted by the public
- A bilingual/bicultural national curriculum framework designed around learning areas and key competencies, within which individual schools choose their own program of instruction
- An accountability system including publically available school charters, annual reports, and a government review of schools' aspirations and achievements every three years
- An assessment system that relies on teacher judgment and includes teacher-moderated subject-area examinations
- A single national qualifications framework that unites secondary and post-secondary credentials and provides transparent standards
- A national evaluation process for teachers, including self-review and reporting to parents
- Use of a "best evidence" synthesis of national and international research to inform practice
- Increasing use of data to inform teachers, parents, students, and the labor market
- Clear academic and vocational pathways with funding to support students' choices

Beyond these levers, there are also national public service targets for which the Ministry of Education is responsible. These are:

- In 2016, 98 percent of new entrants to school will have participated in early childhood education
- In 2017, 85 percent of seventeen-year-olds will have achieved level two (minimum education qualifications) on the National Certificate of Educational Achievement (NCEA)
- In 2017, 55 percent of seventeen-year-olds will have achieved level four or above on NCEA

To reach these goals, targets are being set through the rest of the system to achieve a "joined up learner pathway" from early childhood through tertiary education.

Current challenges in New Zealand include the need to strengthen the governance capacity of some school boards, the need for better career paths for teachers, and the need for mechanisms to promote consistent quality within and across schools.

GERMANY

In the Federal Republic of Germany, responsibility for education and cultural affairs lies with the



Länder, which work together nationally through the Standing Conference of the Ministers of Education and Cultural Affairs. In 2000, the results of the PISA assessment showed that Germany was not as high performing in global terms as it wished, and that the dependence of educational attainment on social background was higher in Germany than in almost any other OECD country. This "PISA shock" was a wake-up call and led to a widespread national debate and a number of important policy initiatives.

Recognizing that social background plays an important role in children's level of development when they start school and that the school system cannot be expected to achieve social justice on its own, the Standing Conference of Ministers nevertheless tried to make a realistic appraisal of the key contributions of the education system to increasing equity. In their view, the key education policy lever to improving excellence and reducing the impact of social background on educational success lies in consistently improving the quality of teaching over the long term. In particular, a collective effort is being made in the approximately 120 universities that train teachers in Germany to ensure that new teachers are prepared to deal effectively with heterogeneous student bodies and have the necessary skills to diagnose student learning needs.

Since international research has also shown the importance of universal high expectations for students, the *Länder* also worked together to develop a set of national, but not federal, educational standards and an accompanying monitoring and reporting system.

At the school level, external evaluation through school inspection and internal evaluation capacities have been strengthened to help teachers and principals understand the progress of the pupils in their charge, as well as the challenges that their students face. Full-day schooling has been expanded to more than half the schools in Germany to compensate for lack of support opportunities at home, and work is beginning on promoting successful transitions from education to vocational training.

As a result of these policy measures and intensive efforts by teachers and school leaders, the 2012 PISA assessments provided tangible evidence of improvement. There were significant increases in performance by poorer performing pupils from less advantaged social groups, especially in reading, and the gap with peers from higher social groups has been substantially reduced. Attendance at the *Gymnasium*

(academic) type of secondary school by pupils from poorer backgrounds also increased between 2000 and 2012. A critical, but less visible, underlying condition for the success of these specific policies is the broad social consensus that has been developed on the need to address excellence and equity.

Tangible progress has been made in Germany, but there is much more to be done. In particular, the teachers' unions, while recognizing the positive trends and the value of higher standards and monitoring systems, believe that more support should be provided to teachers, both pre-service and in-service, to give them the skills to be effective with more diverse student bodies. The teachers' unions also believe that kindergarten is critical, especially for immigrant children, and that it needs to become a universal legal right.

DISCUSSION

Participants discussed some of the problems that accompany decentralization of responsibility to schools. In Hungary, for example, after the end of the Communist era, everything in education was decentralized to the schools; schools employed teachers, developed the curriculum, and maintained the buildings. This did not work very well and there is now an effort to rebalance national and local responsibilities. In some systems, unregulated choice and competition among schools has led to unintended ethnic or socio-economic segregation,

"You cannot overestimate the importance of quality teachers for excellence and equity."

which affects the learning environment for students. In other settings, however, controlled-choice system designs manage to combine the goals of choice and equity. A recurring problem brought up by Summit participants is that poor parents often lack information or other resources to access better schools, and that more attention needs to be paid to this in de-



centralization schemes. Competition among schools can also cause great tension between schools in local areas, as exists, for example, in Australia, between subsidized private and autonomous public schools.

The Netherlands and Canada both reflected on the difficulties of getting the right balance between giving freedom to schools to enable personalization, innovation, and the exercise of teachers' professional judgment, and the government's need for accountability and quality-assurance mechanisms. This is a balance that no country is yet satisfied with. Teachers' perceptions are that, in decentralized systems, governments' need for accountability often leads to an overload of paperwork, which creates enormous time burdens for teachers and may not contribute to effective improvement. What are the right accountability measures? Has any country gotten this right? It is also critical to develop trust between the government and teachers; no accountability system will work without that.

The more devolved decision making is in education systems, the greater the capacity that is needed at the school level. Research in many countries has shown that strong school leadership, both by principals and teacher leaders, is essential to success. Variations in capacity between schools can significantly exacerbate inequity. Also since a great deal of variation in achievement is within schools, it is essential that school leaders and teacher leaders have a clear vision of the educational outcomes they are trying to achieve, know how to use data to identify student learning difficulties, and know how to support teachers in working intentionally and

collectively to address problems and meet the school's learning goals. Leadership preparation programs can be an important lever for equity if they help leaders learn how to achieve this.

There is also significant variation in capacity and performance between schools and, in recent years, there has been a growth of attention to networks, clusters, and partnerships of schools - intentional, well-specified ways of schools

working together. For example, inspired by previous Summits, Denmark has developed national teams of consultant teachers, recruited from schools and kindergartens, to help spread best practices and try to build networks between schools and between early childhood programs. The effort has been piloted successfully and is now going national.

Early education is another important lever for equity and excellence. Many countries are increasing their investments in this area, some substantially so, but decentralization in this sector causes significant quality problems. Different types of providers, each with differently qualified or often unqualified staff and often reporting to different ministries, as well as a lack of connection between early childhood programs and elementary schools, reduces the benefits that might otherwise flow from this investment.

These problems can be addressed. In January 2014 the Hong Kong government announced its intention to provide fifteen years of free public education, starting at three years of age. In anticipation of this expansion, it began a pilot program six years ago to incentivize training of preschool providers, working with five local universities. Today, 96 percent of preschool teachers are qualified, with 32 percent holding degrees.

There was also a substantial discussion of needed support for equity outside of schools and early education programs. In Brazil, which is ramping up its large education system to better serve its fifteen million students, funds are provided to schools to mobilize community resources to extend the hours of schooling in high poverty areas and offer a wider range of after-school activities. Income transfers are also made available to families to keep children in school who would otherwise go to work.

Japan, which has also gradually decentralized its education system over the years within a framework of national education standards, has recently taken action on child poverty more broadly. A 2011 OECD report, entitled "Growing Unequal? Income Distribution and Poverty in OECD Countries" shocked Japan by revealing that it had the fourth highest poverty rate among OECD member nations and that income disparities were becoming more

"Across OECD, a more socio-economically advantaged student scores 39 percent higher on junior high schools mathematics than a less advantaged student, the equivalent of nearly one year of schooling."

entrenched. The Japanese Ministry of Education conducted their own study in 2013 on the relationship between family socio-economic status and scholastic performance, in conjunction with the National Survey of Scholastic Aptitude. This study showed a big gap in knowledge and performance based on socio-economic status. For example, children from the highest end of the socio-economic ladder scored 39 percent higher than children at the lowest end on measures of junior high school mathematics.

These reports of growing inequalities in Japan led to the enactment of an anti-child poverty law, which took effect in January 2014. The central aim of the law is to create an environment in which children from poor families can be given a sound

and healthful upbringing and to ensure equality of educational opportunity, so that a child's future is not determined by the environment in which he or she is raised. The law outlines a comprehensive set of measures to provide support to poor families in education, social welfare, employment and financial assistance, and to monitor child poverty. Within the education sector, the Ministry study also examined schools where students succeed academically despite family poverty and found that effective efforts included after-school academic support, small group guidance in class, and working with parents to improve study at home. More efforts along these lines will therefore be undertaken.

Participants recognized that equity is "a long journey" and that many alternative approaches are being tried. In New Zealand, a major focus has been on targeting support to priority groups such as Māori or Pasifika, but, some participants argued, there can be a stigma attached to naming groups and there is sometimes more variation within groups than between them. Ontario, Canada, took a different approach, focusing its major reform efforts since 2004 on measures to help all students rather than targeting specific, high-need groups.

Where should the focus of equity efforts be? What are the right and wrong drivers for reform? Participants debated whether individually focused strategies were antithetical to collectively focused ones. For example, do systems of teacher evaluation and rewards based on individual performance undermine collaborative culture? Or can human capital and social capital approaches be married? Do some strategies have bigger pay off than others?

There are no definitive answers, but some key lessons emerged about the levers for equity in systems that are devolving authority to schools. Market mechanisms work on the demand side and can drive down equity. A strong system provides an appropriate balance between local responsibility and system oversight. Resources need to be equitably distributed between schools. There also needs to be a serious commitment to developing the capability of teachers and school leaders to identify and collectively respond to problems in student learning. Finally, certain key levers, such as high academic standards, mechanisms to produce a high-quality teaching and leadership profession, a

 $^{^3}$ The OECD report, "Growing Unequal? : Income Distribution and Poverty in OECD Countries," can be found at http://www.oecd.org/els/soc/41527936.pdf.

public accountability system, and policies to prevent extreme socio-economic segregation of schools, need to be held centrally.

The Host Country: Education in New Zealand

Te Marautanga o Aotearoa

"A country of open spaces and open minds"; this is how New Zealand represented its aspirations for education to delegates at the fourth International Summit on the Teaching Profession, A small country of 4.2 million people, New Zealand is also very diverse, with 68 percent of the population of European origin, 15 percent Māori, 10 percent Asian, and 7 percent Pacific Islanders. It also has considerable numbers of international students at the tertiary level. New Zealand invests significantly in education (7.3 percent of GDP) and is a highperforming country in global terms, scoring well above the OECD average on PISA. Its early childhood and tertiary enrollments are also above the OECD average. However, it has a long "tail" of low achievement among some groups, which it is now trying to address. New Zealand's geography means that many of its schools are small (under one hundred students), and the defining feature of its education system is that most of the authority is devolved to the school level.

The fundamental structure of modern elementary and secondary education in New Zealand was established in 1989, through the set of reforms known as Tomorrow's Schools. These reforms decentralized authority to the school level, defined specific roles for the national government, and led to a greater diversity of schools—public schools, private schools, integrated (religion-based) schools, Māori-medium, and partnerships (charter-like) schools in low-achieving areas. Each school is governed by a board of parents and other community members. Schools hire their own staff

from qualified teachers and develop their own budget and character.

There are only two levels in the elementary and secondary education system, the Ministry of Education and the schools. The roles of the national government are to develop and support a national curriculum framework, set system-wide national education goals, manage quality-assurance mechanisms, set teacher requirements and salaries, supply schools with operational funding, and administer the New Zealand Qualifications Framework.

One problem with this marked decentralization is the paucity of structures for collaboration among schools. This is now being addressed by the Investing in Education Success Initiative, the most important new phase in New Zealand education in the past twenty years, currently being designed with input from the teachers' unions and representatives of other sectors. This initiative, which is informed by New Zealand's international benchmarking research, will create pipeline clusters of ten to twelve schools that incorporate early childhood, primary, secondary, and tertiary institutions. Clusters will be led by "executive" principals—successful principals on leave from their own school—with a focus on raising achievement of the cluster. Along with the clusters, career pathways are being developed that will allow new roles for excellent teachers without them having to leave teaching. "Lead" teachers will be enabled to work with other teachers in their school to improve performance while "expert" teachers will share expertise across schools in the cluster.4

⁴For more information, see www.minedu.govt.nz/.

CREATING LEARNING ENVIRONMENTS THAT ADDRESS THE NEEDS OF ALL CHILDREN

he first session of the 2014 Summit discussed how to get highquality teachers and leaders into schools with the greatest need. The second session debated system design: In increasingly decentralized education systems, what universal mechanisms are needed in order to prevent decentralization from exacerbating inequality? The third session turned to the more micro level: What kinds of learning environments within schools can promote excellence and increase equity of outcomes?

Singapore and Finland, two of the world's highest performing systems, led off this part of the discussion

SINGAPORE

Singapore's approach to creating learning environments that address the needs of all young people is to start with a common vision of outcomes so that everyone pulls in the same direction. The Singapore outcomes are:

- To develop each child to his or her full potential
- To create young people of character who embody good citizenship
- To ensure strong fundamentals in literacy, math, and science
- To develop twenty-first-century competencies to prepare students for the world of tomorrow
- To prepare students for change—a future that is volatile, uncertain, complex, and ambiguous ("VUCA")

How does Singapore do this? Education is a national priority: Education spending is 3 percent of GDP and 20 percent of government expenditure. Singapore's system differs from some of the other systems at the Summit because it is a national system, but organizationally it tries to balance centralization and school autonomy. The Singapore Ministry of Education is responsible for curriculum, assessment,

policy, teacher training, and professional development, while individual schools have considerable autonomy as to how to use their resources and how teachers teach.

Collaboration across the board is central. It is essential to have all stakeholders on board—from schools to government ministries to parents to the National Institute of Education, which trains Singapore's teachers, and employers. There is a consultation process between all of these sectors. Teachers and school leaders are also posted to the Ministry of Education for periods of time to ensure that schools' perspectives are brought into policy making.

Philosophically, the goal of education is to bring out the best in every child "in every domain of learning, in every school, at every stage of the learning journey, whatever the starting point." Even if a child does not start well in life, it does not mean he or she cannot end well.

Singapore recognizes the importance of starting early to help all children succeed. Preschool education is provided by the Ministry of Social and Family Development, which deals with childcare and early childhood policy, but the Ministry of Education is responsible for the curriculum. To strengthen early childhood learning, Singapore is now restructuring this sector around a kindergarten framework, with the goal of creating a smooth learning path from preschool to primary school. The Ministry of Education is also starting its own kindergartens.

The school curriculum is holistic. Singapore is known for its rigorous academic subjects, but the curriculum also includes music, arts, physical education, and a wide range of co-curricular activities to cater to individual student interests and help to build character and citizenship. Schools are encouraged to have different strengths and themes, which provide choices for parents and students. All schools receive equal resources in terms of buildings, information and communications technology, and teaching resources.

Schools also provide extensive academic and social support for students who are poor or who have learning difficulties. Learning support programs, in which teachers work regularly with small groups of students so that they do not fall behind in literacy and numeracy, are provided from the first years of primary school up to secondary school. There are also student care centers at schools in the after-school hours for students with family problems. Schools work with self-

help voluntary organizations, many from different ethnic groups, and with other ministries to integrate social services. And schools have full-time counselors and special services in schools to assist children with social and emotional needs. Financial assistance is available to poorer families, so that income is not a barrier to students who wish to participate in any of the school or after-school activities.

None of these system elements will work without high-quality teachers. Singapore has created a comprehensive and coherent teacher-development system by recruiting students from the top 30 percent of their academic cohort; benchmarking entry salaries to market conditions for college graduates; providing a strong teacher training program through a close collaboration between the Ministry and the National Institute of Education; providing one hundred hours of professional development per year to every teacher; and providing a well-developed set of career paths (master teacher, curriculum specialist, and principal). All beginning teachers receive systematic mentoring from an experienced teacher and teacher-led professional networks in and across schools provide mechanisms for continuous improvement.

In Singapore's view, a good learning environment is a comprehensive ecosystem, in which:

- Every school is a good school
- · Every teacher is a caring educator
- Every parent is a supportive partner, and
- Ultimately, every student is an engaged learner

FINLAND

Finland's goal is to provide an inclusive learning environment for all children, one that encourages all students, regardless of their background or learning style, to achieve their full potential. In Finland, the design of physical space is considered an important element of the learning environment that can affect students' self-esteem and participation. But learning environments are no longer defined just as schools; modern learning environments can be physical, social, or digital, and are increasingly hybrid.

Research in the learning sciences has demonstrated

that learning is a highly social activity. Finnish schools put students at the center as active members of the community. Every child builds their own learning ladder and good teachers support them.

A central objective of Finnish education is equal opportunity. Every student in Finland has access to a highly qualified teacher, irrespective of their social background. The teaching profession in Finland is highly selective, teacher preparation

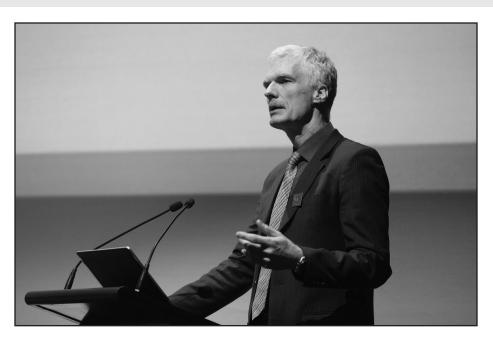
is rigorous, and teachers have considerable autonomy to determine what and how they teach. The system is based on trust of teachers. Finland's high performance on international comparisons since the year 2000 has shown that investing in quality pays off.

Still, the system is not performing as well as it could. Past success can be dangerous. People expect continuing results without investment. Funding for primary schools, for example, has been cut.

The recent decline in Finland's international standing has led the government to start an open conversation with Finnish citizens about education in the future. This discussion, entitled "The Future School of Finland: A New Beginning," was launched

"A good learning environment is a comprehensive ecosystem."

in February 2014 and will engage teachers and the public in a broad-ranging discussion of new ways to strengthen quality and equity. For example, international comparisons show that Finnish students have relatively high performance, but do not enjoy education, especially the boys. Schools are experimenting with innovative tools to make learning fun and mo-



tivating, such as game-based learning. The Finnish government is building a new cloud-based service to make learning resources accessible to all learners—to put soft pressure on schools to use more technology and equip students with twenty-first-century skills and competencies. Schools need to be part of today's digital world and benefit fully from its potential. This will be a challenge for teacher education, but ultimately, technology is just a tool; the key will be pedagogy and teachers.

In summary, Finland has a strong education tradition, high-quality teachers, and a consensus across political parties about the importance of education. But it became too satisfied with the status quo and now needs to look to the future.

DISCUSSION

Growing research in education and in the learning sciences is showing which practices in schools and classrooms are detrimental to excellence and equity and which principles and practices enhance them. Both grade repetition and early tracking have been shown to have negative effects on disadvantaged students, and schools that use them show a greater impact of socio-economic status on school performance. It is clear from research in the learning sciences, that environments that are more student-and learner-centered, and personalized to take individual differences and interests into account, are more effective. Learning is also an inherently social

activity and is effective when learners collaborate as an explicit part of the learning environment.

Information and communication technology (ICT) can be a great enabler of new learning environments, where student learning is differentiated and collaboration encouraged. For example, in the flipped classroom model, students read and work on their own at home and then participate in group projects and discussion in the classroom. ICT can also support teachers in disadvantaged schools, especially those that are geographically remote. A number of systems including Singapore, Scotland, New Zealand, Australia, and Estonia have created virtual platforms, open to all teachers, where best practices and technology tools are hosted.

A major focus of this part of the Summit discussion was the need for better professional learning and support opportunities for current teachers—to help them meet the challenges of increasingly heterogeneous classrooms and to keep up with the rapid changes in society. These activities go by different names—professional development, professional learning communities, and collaborative school cultures—but they are recognized by teachers and shown by research to be powerful means of improving teacher effectiveness, as well as student and school achievement, if properly designed. Not providing enough professional learning opportunities can doom a well-meaning policy to failure, as Hong Kong admitted with respect to its efforts to include students with special needs in Hong Kong classrooms. Many systems make large investments in

rooms. Many systems make large investments in approaches are mastered

"Modern learning environments can be physical, social or digital and are increasingly hybrid."

professional development. Yet the OECD Teaching and Learning International Surveys (TALIS), as well as smaller scale studies, show that teachers report overwhelmingly that current forms of professional development, primarily short-term workshops, are not useful.

What kinds of professional learning helps teachers develop and has an impact on student achievement? More effective forms of professional learning start from a clear identification of the learning needs of students in the particular school, as derived from data and assessments: they allow teachers sufficient time and opportunity to interact with other educators; they integrate theory and practice and encourage iterative improvement; and they are sponsored by a leader who sets a vision of learning outcomes and monitors whether the school is moving toward them. Changing practice is hard and raising teachers' expectations of struggling students cannot be imposed, but expectations develop as new teaching approaches are mastered and student learning im-

Denma

proves. According to New Zealand's "best evidence synthesis" of research in this area, these kinds of professional learning communities have led to two years' worth of gains in literacy and math in one year. Good learning conditions for students and teachers, it seems, are deeply intertwined.

The tradition of teaching and research groups, which collectively promote continuous improvement of teaching, exist in all of the East Asian cultures that perform well on PISA. They have been taken to a high art in Shanghai, where they have been used to promote Shanghai's world-beating standards in math and science and are now being used to modernize pedagogy and promote twenty-first-century skills. Teachers share the work of lesson preparation; mentor and coach younger teachers; collectively examine student progress and diagnose student learning needs; provide regular structured feedback on classroom teaching and learning; and identify, pilot, and evaluate new approaches to problems in their school.

A critical element in making such collaborative cultures work is time. A study of Shanghai teachers compared with teachers in California, for example, showed that teachers in both places spend about the same amount of time on the job, roughly forty two hours per week. But California teachers spent more than 70 percent of their time teaching classes whereas teachers in Shanghai spent closer to 40 percent teaching, with the rest of the time devoted to lesson preparation, meeting with students individually, grading homework, observing classes, providing feedback to other teachers, and participating in their teaching and research groups. By contrast, a recent government survey of teacher workload in England showed that primary teachers work, on average, sixty hours per week, secondary teachers fifty eight hours, and school leaders sixty three hours per week. Much of this time is spent on what teachers regard as busywork. In some places, another barrier to the development of such collaborative cultures is that parents object to students being taught by substitutes while teachers are involved in professional learning. New designs for the use of time in schools need to be developed to allow for effective professional development without large-scale use of substitute teachers.

New Zealand's new reforms, announced in early 2014, will create new roles and better career pathways for teachers and enhance the quality of teaching within and across schools through the creation of collaborative cultures. The proposed changes are informed by New Zealand's international benchmarking and the design is currently under discussion with New Zealand's teachers' unions. Clusters of schools are being established with "executive principals" who will focus on raising achievement in the cluster. "Lead" teachers will work with other teachers in their school to improve performance and "expert" teachers will be enabled to work across the clusters. A task force is also reviewing school report-

ing requirements to reduce unnecessary paperwork.

Learning environments extend beyond schools and outside-school support services for children in need are as essential as collaborative environments within school. These services can take many forms. Schools need to energetically reach out to families. since engaging parents encourages a more positive attitude towards school and has been shown to reduce absenteeism and drop-out rates. Schools as hubs for community health, recreation, youth, police, and other services can help to reduce external barriers to learning. Coaching and mentoring to raise students' confidence and hope for the future can be critical, whether a child lives in poverty or has been affected by a natural disaster. And counseling at critical junctures to help students navigate different educational pathways has been shown to reduce school drop-out rates.

The presentation of Singapore's comprehensive approach to creating effective learning environments for all children pulled together many of the threads of this discussion of learning environments: high expectations; high-quality teachers for all; early intervention; a continuum of support for struggling students; school cultures of collaborative and continuous improvement; career ladders and teacher leadership roles; and effective links between schools, parents, and communities. All of this is undergirded by strong values, trust, and collaboration between government and teachers.

CONCLUSIONS AND NEXT STEPS

This Summit, like its predecessors, gathered leaders from around the world to tackle one of the most critical problems of our time: how to achieve both excellence and equity in education. There can be no doubt about the seriousness of the issue. Growing income inequality and reduced social mobility in many OECD countries threaten the fabric of societies. The key drivers of this growing inequality are changes in labor markets, the reduced number of jobs for low-skilled and poorly educated people, and the numbers of such people who are out of work. Across OECD countries, almost one in five students does not reach the basic minimum level of skills to function in society. The effects of poverty can be mitigated through social welfare systems, but in economies that rely on high skills, the only long-term solution is to improve the educational outcomes of disadvantaged students.

Modern economies also require high skills to propel economic growth and innovation. No longer are providing basic literacy skills for the majority of students and higher order skills for a few adequate goals. Instead, schooling needs to develop a broader range of skills and dispositions for *every* student, including critical thinking skills, problem-solving, creativity, collaboration, and learning how to learn. The challenge of achieving excellence and equity is therefore even greater.

Excellence and equity are often seen as competing policy priorities. In many countries, there is a very strong relationship between the socio-economic background of the student and their academic performance. In these countries, schools' policies and practices do little to mitigate the effects of poverty. There are, however, high-performing systems that combine high levels of student achievement with a more equitable distribution of learning opportunities. This was the hopeful news and the challenge to Summit participants—education systems need to raise the bar and narrow the gap at the same time. It was not possible to cover every aspect of the problem in two days, and there were areas of considerable disagreement, but the Summit produced a number of broadly shared conclusions.

First: It is impossible to overestimate the importance of high-quality teachers to excellence and equity. Previous Summits had illustrated that the highest performing systems take a comprehensive approach to attracting, training, and retaining talented people in the profession. At this Summit, there was a particular focus on

the need for teacher preparation and professional development programs to give teachers the knowledge and skills to be successful in today's increasingly heterogeneous classrooms: the ability to diagnose student problems, understand cultural differences, and differentiate instruction based on student needs.

Where good teaching quality is not universal, the most vulnerable children often have the least experienced and least expert teachers; a recipe for poor

"We need to raise the bar and narrow the gap."

results. Countries need to develop a range of strategies to attract and retain high-quality teachers in the most challenging schools. Such measures will vary depending on whether high-need students are in remote rural areas, concentrated in high-poverty urban schools, or are in schools that contain a mixture of advantaged and disadvantaged students. Hiring and allocation systems, incentives, scholarships to train teachers from the local community, and technology may all have a role. Where schools are in areas of concentrated poverty, a broader range of ongoing supports for teachers and students will be needed to make the school successful and to help the school retain teachers. Otherwise, if you put a high-quality teacher recruit into an unchanged school environment, "the system wins every time."

Second: As many education systems move away from top-down administrative control and towards giving schools more autonomy to innovate and meet the needs of students, there are critical elements that need to be in place in the design of the system for it to promote equity. For example, resources need to be distributed equitably among schools, with additional resources for those schools that serve the neediest children. Other key levers that need to be held centrally include high academic standards, mechanisms to produce a high-quality teaching and leadership profession, some form of public accountability system, and policies to prevent further socio-economic segregation between schools. Above all, the more decentralized the system, the greater the capabilities that are needed at the school level. Collaborative school cultures, in which there is a clear vision of student learning outcomes, learning problems are identified using data, and teachers and school leaders work together to iteratively improve practice have been shown to be an effective way to increase both teacher and student learning in schools. Another trend in decentralized systems is that networks, clusters, and partnerships of schools are also forming to enable the sharing of best practices and promote more consistent performance across schools, especially those that serve the neediest students.

Third: There is considerable research on what kinds of learning environments in schools and classrooms contribute to equity. Practices such as early tracking and grade repetition tend to reduce equity, while early identification of student difficulties and provision of academic and social supports that keep students on track increase equity. Research in the learning sciences suggests that designing learning environments around the student-environments that are personalized to take student interests and cultural contexts into account and that build on the fact that learning is an inherently social activity—can promote both excellence and equity. Learning environments extend beyond the classroom door and the school day, so extending to poor students the kinds of outof-school supports and learning opportunities that middle class students receive can contribute to student motivation and success. Learning environments are also increasingly hybrid, with technology enabling greatly expanded learning time, learning resources, and learning styles. Technology has transformed many industries, but has yet to transform education. Some participants argued that more fundamental technologically-enabled transformation of learning environments will be needed to achieve societies' ambitious goals for education.

Fourth: A theme across the whole of the deliberations was the importance of early childhood education for equity and excellence. The data on how far behind disadvantaged students are when they enter school is stark, and numerous studies around the world have demonstrated that high-quality early childhood programs enhance students' overall development and academic achievement. In some countries, middle class parents have access to early childhood programs to a greater degree than poorer parents, so they do not contribute substantially toward equity. In addition, early childhood programs are often fragmented among different providers, have different standards, teachers of varying quality, and are disconnected from primary schools. The need to expand access to and strengthen the quality of this sector was suggested as a possible topic for a future Summit.

Fifth: The challenge of achieving excellence and equity on a wide scale cannot be met by any one party alone. It is a long-term agenda, one that transcends government terms. It will be essential for governments and the education professions to work together. Equity needs to be tackled at multiple levels-from system design and management, to local schools, to individual classrooms. Environments that produce high levels of learning are comprehensive ecosystems, in which schools are central organizers but parents, a continuum of social and emotional support for students, and sometimes health and other community services need to be involved. To solve the problem of low performance by low-income students will require partnerships—between teachers, between schools, and between schools and the wider community.

NEXT STEPS

As complex as the challenges are, ministers and teacher leaders took away important lessons for their own countries. At the end of the 2014 Summit, country delegations identified the priorities that they intend to work on over the next year and report back on at the 2015 Summit.

Canada: Proposes to strengthen early childhood development by raising the quality of teachers in the early years; promote collaborative cultures in schools to strengthen teaching and teachers; and mobilize wider resources to support learners and teachers by integrating social and health services, exploring partnerships, and engaging families and communities.

China-Hong Kong: Proposes to provide comprehensive support for ethnic minority students in education; to modernize teaching and learning environments through the use of information and communication technology; and to promote career and technical education to provide diversity in students' career development.

Denmark: Aims to re-establish dialogue and cooperation between the government and teachers' unions.

Estonia: Proposes to develop systems of professional development for teachers; create a mechanism to exchange or rotate experienced/excellent teachers to ensure more consistency of practice between schools; and develop teachers' competencies in early identification of children with special needs, including the gifted and talented.

Finland: Premised on Finland's strong initial teacher education, but recognizing that society is constantly changing, Finland proposes to develop modalities to strengthen teachers' lifelong development of skills and to clarify what the school is responsible for and what other institutions in society should take responsibility for.

Germany: Germany's goal is to provide every child with the necessary support to reach the highest level of education. In particular, they propose to upgrade scientifically-based teacher training to give teachers the knowledge, skills, and time to provide individual support to every child, and to improve schools through better collaboration between government and education unions.



Japan: Proposes to maintain the system that enables transfer of teachers across prefectures to equalize the distribution of experienced teachers; to support boards of education in improving quality; and, under the Child Anti-Poverty Law, to establish benchmarks to measure child development, such as high school enrollment rates.

Netherlands: Proposes to create a learning culture through form-

ing professional learning communities within and among schools and teacher education programs to learn from best practices and create the flexibility to meet the needs of all talents; to stimulate adaptive educational partnerships that will take responsibility for local pupils who need additional support; and to stimulate lifelong learning opportunities and career incentives for teachers.

New Zealand: Proposes to intensify its commitment to "system shift and lift"; to establish a systemic approach to professional learning communities in schools; and to make visible the child-centered pathway for each learner from early learning to tertiary education.

Poland: Proposes to focus on developing the professional capacity of teachers; support the leadership level of schools; and better include the community in educational processes.

Singapore: Proposes to make changes on multiple levels: At the systems level, Singapore proposes to review the teachers performance management system to be more aligned with the teachers professional development framework; at the teachers level, to enhance capability building through the development of teacher leader milestone programs for senior, lead, and master teachers; and at the student level, to create an online student learning space to share best lessons and more precise analysis of students' progress to facilitate appropriate interventions.

Sweden: Will continue to focus on attracting and retaining highly qualified teachers and school leaders

by offering incentives and good working conditions that enable teachers to concentrate on teaching; improve the allocation of resources to ensure high-quality teachers in the schools with greatest needs; and increase access to teachers for children with special needs.

United Kingdom (Scotland): The Scottish government and teachers' unions will collaboratively develop the concept of an outcome agreement to develop a measurable process to improve the attainment of young people and schools; will embed professional learning flexibly in the lives of schools; and seek to increase broader government actions to secure a more cohesive society.

United States of America: Will continue to work to expand access to high-quality early learning opportunities; increase concrete opportunities for teacher leadership by 20 percent; and support ongoing labormanagement collaboration to implement higher academic standards.

CLOSING

In her closing remarks for Education International, Susan Hopgood stressed the need for concrete mechanisms for collaboration with teachers at every level: at the policy level, at the school level, and in relation to expanding early childhood programs and community networks. She welcomed the continuing dialogue on the future of the teaching profession.



Barbara Ischinger, Director for Education and Skills, OECD, reiterated the high premium modern societies put on skills and the rapidly declining life chances of those who don't make the grade in the knowledge-based economy. Unemployment among young people has reached alarming rates in too many countries in the past few years, hence the urgency of raising both the quality and equity of education. Education needs to be

built around the needs of the children, not the rules of the system, and there needs to be a better understanding and methodologies for teaching in today's diverse classrooms.

New Zealand Minister of Education and host of the Summit, Hekia Parata, declared that the Summit had lived up to its image as a gathering of a global education network to explore, chart, and navigate new frontiers in teaching and learning. Participants

were united in a common vision of lifting up the most talented as well as those who get left behind, and had debated how to invest wisely based on data. The Summit itself had been an exercise in collaboration from its inception, and in having countries commit to goals for the next twelve months, was aspiring to be a form of collective accountability as well.

At the end of the Summit, Jeff Johnson, Chair of the Canadian Council of Ministers, offered to host the 2015 Summit in Banff, Alberta. He said that these international summits have become an international reference point for discussion of the teaching profession. Participation extends domestic dialogues about the teaching profession and practice, enabling participants to learn from promising approaches, consider the cutting edge of educational policy, and share unresolved challenges. Canada has well-trained teachers and is a high-achieving country on PISA, but no matter how high the stature of teachers, no country can afford to be complacent. Alberta has established a task force on teaching excellence, and teaching excellence is also a top issue for the thirteen Canadian provinces that make up the Council of Ministers of Education. As countries rethink what students need to know and be able to do, this also compels them to rethink what teachers need to know and be able to do. The transformation of education for the twenty-first century requires the transformation of the teaching profession. He looked forward to welcoming ministers and teacher leaders to Canada next year.



Kia kaha tatou ki te whaia i te matauranga tiketike—let's all pursue the best education possible.

This report was written by Vivien Stewart, Senior Advisor for Education at Asia Society and author of "A World-Class Education: Learning from International Models of Excellence and Innovation."

PARTICIPANTS

HOST COUNTRY

NEW ZEALAND

Hon Hekia Parata

Minister of Education

Ms. Angela Roberts

President, Post Primary Teachers Association

Mrs. Judith Nowotarski

President, New Zealand Institute of Education

Mr. Tom Parsons

Secondary School Principals Association of New Zealand

OTHER HOST ORGANIZATIONS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)

Dr. Barbara Ischinger

Director for Education and Skills

Mr. Andreas Schleicher

Deputy Director for Education and Skills

EDUCATION INTERNATIONAL

Mr. Fred van Leeuwen

General Secretary

Ms. Susan Hopgood

President

Mr. David Edwards

Deputy General Secretary

Mr. John Bangs

Senior Consultant

MODERATOR

Mr. Anthony Mackay

CEO, Centre for Strategic Education

CRITICAL FRIENDS

Prof Michael Fullan

University of Toronto

Dr. Anthony Jackson

Vice President Education, Asia Society

Prof Sing Kong Lee

Director, National Institute of Education

Prof Viviane Robinson

University of Auckland

Prof Linda Smith

Pro Vice Chancellor, Maori, University of Waikato

Ms. Vivien Stewart

Senior Advisor, Asia Society

Prof Tan Oon-Seng

Dean, Teacher Education National Institute of Education

Prof Richard Teese

University of Melbourne

PARTICIPANTS

INTERNATIONAL DELEGATIONS

CANADA

Hon Jeff Johnson

Chair, Council of Ministers

Hon Alan McIsaac

Minister of Education and Child Development

Calvin Fraser

Secretary General, Canadian Teachers Federation

Mr. Mark Ramsankar

Vice President, Canadian Teachers Federation

Mrs. Dianne Wolschuk

President, Canadian Teachers Federation

CHINA, HONG KONG

Hon Eddie Ng Hak-kim

Secretary for Education

Dr. Anne Chan

Principal, Kwei Wah Shan College

Prof Stephen Cheung

President, Hong Kong Institute of Education

Mr. Eddie Shing Chung Shee

Vice President, Hong Kong Teachers Union

DENMARK

Hon Christine Antorini

Minister for Children and Education

Mr. Anders Bondo Christensen

President, Danish Union of Teachers

Ms. Pia Ewe Jensen

Teacher

Ms. Brigitte Birkvard Pedersen

Danish Union of Teachers

ESTONIA

Dr. Jaak Aakvisoo

Minister for Education and Research

Ms. Kristi Mikiver

Head of Teacher Education

Ms. Margit Timakov

President, Estonian Association of Teachers

Mr. Toomas Kruusimagi

President, Estonian Association of School Heads

FINLAND

Mr. Pasi Patokallio

Ambassador of Finland

Mr. Olli Luukkainen

President, OAJ

Mr. Anders Rusk

International Coordinator, OAJ

Mr. Esa Suominen

Special Advisor to Minister

Mr. Jaako Meretniemi

Teacher

GERMANY

Mr. Udo Michalik

Secretary-General, Standing Conference of Ministers

Mr. Udo Beckmann

President, Verband, Bildung and Erziehung

Mr. Jurgen Fischer

Verband Bildung and Erziehung

Mrs. Marlis Tepe

President, Gewerkschaft Erziehung und Wissenschaft

JAPAN

Mr. Shinichi Yamanaka

Deputy Minister of Education, Sports, Science,

Culture, and Technology (MEXT)

Mr. Yorihisa Ohneda

Senior Specialist, MEXT

Mr. Masaki Okajima

Deputy General Secretary

Japan Teachers Union

NETHERLANDS

Dr. Jet Bussemaker

Minister of Education, Culture and Science

Mr. Joost Kentson

President, Education Cooperative

Mrs. Helen Van Den Berg

Chairman, Christian Teachers Union (CNV)

Mr. Walter Dresscher

President, General Trade Union for Education(Aob)

PARTICIPANTS

INTERNATIONAL DELEGATIONS (Continued)

POLAND

Mrs. Ewa Dudek

Undersecretary of State Polish Ministry of Education

Mr. Grzegorz Mazurkiewicz

Jagiellonian University, Krakow

Mr. Slawomir Broniarz

President, Polish Teachers Union(ZNP)

Ms. Dorota Obidniak

International Coordinator ZNP

SINGAPORE

Ms. Indranee Rajah

Senior Minister of State Ministry of Education (MOE)

Ms. Chua-Lim Yen Ching

Executive Director

Academy of Singapore Teachers

Mr. Yi Young Lam

Deputy Secretary MOE

Mr. Mike Thiruman

President, Singapore Teachers Union

SWEDEN

Mr. Bertil Ostberg

State Secretary Ministry of Education

Mr. Bo Jansson

President, Swedish Teachers Union

Mrs. Sofi Klang

Swedish Teachers Union

Mrs. Eva-lis Siren

Swedish Teachers Union

UNITED KINGDOM (SCOTLAND)

Mr. Michael Russell

Secretary for Education and Lifelong Learning

Mr. Larry Flanagan

General Secretary

Educational Institute of Scotland

Mr. Ian Mitchell

Deputy Director, Education Department

Mr. Kenneth Muir

General Teaching Council for Scotland

Mr. Darren Northcote

NASUWT

UNITED STATES OF AMERICA

Mr. Arne Duncan

Secretary of Education

Ms. Randi Weingarten

President, American Federation of Teachers

Mr. Dennis Van Roekel

President, National Education Association

Mr. Chris Minnich

Executive Director, Council of Chief State School Officers

OBSERVER DELEGATIONS

Australia

Brazil

Malaysia

Mexico

Vietnam

PACIFIC ISLAND OBSERVER DELEGATIONS

Cook Islands

Niue

Samoa

Solomon Islands

Tokelau

Tonga

Vanuatu

SUPPORT FOR THIS REPORT WAS PROVIDED BY MELLIFE FOUNdation

We thank MetLife Foundation for their support of the preparation and printing of this report. We would also like to thank all of the sponsors of the International Summit for their support.



