



Japan Education Forum X

Collaboration Toward Self-Reliant
Educational Development

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Background and Objectives

Achieving universal quality education is a common goal of paramount importance throughout the world. Japan has been leading the international community through the occasions of G8 Summits and Tokyo International Conference on African Development (TICAD) in an attempt to realize the Education for All (EFA) goals by 2015. International cooperation in education is essential for realizing human security. In 2010, Japan launched its new education cooperation policy based on the guiding principles of “supporting self-help efforts and sustainable development,” “answering the needs of the marginalized populations” and “respecting cultural diversity and promoting mutual understanding”. Japan also proposed a basic education assistance model called “School for All,” aiming to provide a quality educational environment for all children and youths by improving the overall learning environment, working together with schools, communities and administrations. In this way, Japan reaffirmed its commitment to continued support of basic education.

As the target year 2015 for achieving EFA goals and MDGs is drawing nearer, the self-help efforts of developing countries and the international community’s support have produced significant results in expanding access to primary education. With the spread of the primary education, lower secondary education has come to play a greater role as it functions as an important bridge connecting education and skills / jobs. The UNESCO’s *EFA Global Monitoring Report 2012* focuses on skills, and the World Bank’s *World Development Report 2013* on jobs. In this context, too, the international community places a high priority on improving the quality of basic education. However, issues still remain: unsatisfactory academic achievement; the need to increase the number of teachers at lower secondary schools and to train them in order to enhance their motivation, knowledge and teaching skills so as to provide better learning opportunities for those who have completed primary education; and the need to improve teaching methods and school facilities. In order to improve the quality of education and to ensure desirable academic achievement, it is vital that we improve the organizational capacity to manage and administer teaching profession in addition to the quality and skills of teachers. We must make comprehensive efforts to improve both the quantity and quality of lower secondary education, which is a part of basic education. In Japan, too, efforts are being made to improve teachers’ quality and capacity at every stage including pre-service, induction and in-service. For bringing about good quality basic education, the issues concerning teachers are universal and of utmost priority, and in order to expand good quality basic education, renewed attention is being paid to the roles and qualifications of teachers and to the issues teachers must overcome.

The 10th JEF will once again focus on basic education, a priority of Japan’s educational cooperation, featuring the theme of “Issues concerning Teachers: Toward Expanding Good Quality Basic Education”. With prominent practitioners in educational development invited from international organizations as well as noted scholars specializing in education, we will discuss teachers’ roles and issues involved in expanding good quality basic education and how international cooperation in education should be pursued in the post-2015 years. How can Japan’s abundant field-based experiences contribute to the development of education in accordance with policy-oriented trends? We warmly welcome all participants to actively join this discussion.

The Japan Education Forum (JEF) is an annual international forum established in March 2004 through governmental and academic collaboration as part of Japan’s educational cooperation. Its purpose is to provide an opportunity for open and frank exchanges of opinions and ideas by officials in the public sector, practitioners of international development and NGOs, and scholars on ways of promoting self-efforts of developing countries toward sustainable educational development and of effective international cooperation in education. The forum also offers an opportunity to present Japan’s own experiences in educational development and its international cooperation in practice.

[Opening Session]

Opening Remarks by **Teru Fukui** Senior Vice-Minister of Education, Culture, Sports, Science and Technology, Japan

I would like to express my sincere gratitude to all of you for participating in today's Japan Education Forum X (JEF X). On behalf of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), one of the co-hosting organizations, I would like to extend a warm welcome to all of you.

This forum, jointly organized by the Ministry of Foreign Affairs (MOFA), Hiroshima University, the University of Tsukuba and MEXT, has been held annually since 2004. Practitioners at the forefront of bilateral or multilateral cooperation in education as well as experts in this area are invited to exchange views on how international cooperation in education can support the self-reliant educational development and ownership of developing countries.

The theme of this year's forum, "Issues Concerning Teachers: Toward Expanding Good Quality Basic Education," addresses the international cooperation for "post Education for All (EFA)". EFA, which the international community is making concerted efforts to achieve, aims to make every child have access to free and high-quality compulsory education and complete basic education and to improve the quality of every aspect of education. The target year, 2015, is rapidly approaching. Through various efforts in international education cooperation to promote EFA, access to primary education in developing nations has improved, as shown in the number of out-of-school children around the world, which was approximately 61 million in 2010, down from 108 million in 1999. In South East Asia, in particular, it decreased by nearly 70 percent. However, this also means there are still 61 million people who are unable to have any access to primary education for different reasons: due to poverty; because they are women; because they have disabilities; because they live in rural areas or conflict areas; and because they are ethnic or language minorities.

In addition to ensuring equal opportunities in education, international education cooperation will have to address various issues to achieve EFA, such as improving the quality of education and expanding post-primary education. Of 650 million school-aged children, 130 million repeat grades without learning the basic skills of reading, writing or arithmetic, and 120 million drop out before they reach the fourth grade. Furthermore, with the expansion of primary education, there is a greater demand in lower secondary education. In low-income countries, only 52 percent can enter lower secondary schools, leaving millions of young people unable to acquire the basic skills to earn their living. In 2010, 71 million young people had no access to lower secondary education.

In the knowledge-based society of today, improving the quality of education as well as ensuring equal opportunities in education are tasks shared by the international community. The quality of teachers and school management must be improved in order to bring about quality education, and it is also urgently needed to improve the educational system and environment to do it.

We aim to realize a society where all children throughout the world can acquire knowledge and skills in school that will serve as a foundation for their lives so that they can fulfill their potential. In order to create such a society, we must comprehensively review international education cooperation provided by Japan and by the international community, by evaluating the outcomes of past international education cooperation and identifying the issues that remain.

Dr. Dzingai Mutumbuka, chair of the Association for the Development of Education in Africa, has extensive knowledge of the educational issues in Africa. As a keynote speaker, he will discuss teachers' roles and issues related to expanding high-quality basic education from an African perspective. The other keynote speaker is Professor Shinji Kubota from the Faculty of Human Sciences, University of Tsukuba. He will discuss issues concerning Japanese teachers at compulsory education level.

We have also invited four panelists for our afternoon session, from Africa, Southeast Asia, South America and Japan. I am sure we will have a lively discussion as they offer their views on future international cooperation. I sincerely hope that sharing the knowledge of each country through today's lectures and discussions will contribute to improving the quality of education in every country.

In closing, I would like to thank all of those who gave their time and effort to organize this forum. I hope that it will be useful in your future endeavors. Thank you.

[Opening Session]

Opening Remarks by **Toshiko Abe**
Parliamentary Vice-Minister for Foreign Affairs, Japan

1. Introduction

Ladies and gentlemen, On behalf of the Ministry of Foreign Affairs (MOFA), one of the co-hosting organizations, it is my great pleasure to welcome you to the Japan Education Forum X.

2. The international community's initiatives toward 2015

There is only a little time left until the target year of 2015, set by Education for All (EFA), a global movement led by UNESCO, and by the United Nations Millennium Development Goals (MDGs). Although the global enrolment rate in primary education has improved greatly through the efforts of developing nations, their partners, NGOs and many others, the world is not on course to achieve universal primary education by the target year. The international community must accelerate its efforts to achieve EFA and the MDGs.

Meanwhile, the post-2015 agenda after the expiration of the MDGs has already been discussed at various forums including the United Nations. In the education sector, not only enrolment in primary education but also the quality of education and of learning outcomes is important. The UN Secretary-General launched a new education initiative, Education First, at the general meeting last year with a firm determination to make education a top priority. In this initiative as well, improvement of learning outcomes is given a high priority.

3. Japan's initiatives

Based on these discussions in the international arena, this 10th Japan Education Forum deals with issues concerning teachers. In order to improve the quality of education and of learning, school facilities and learning materials are certainly important, but teachers' roles are crucial as they are the ones who teach children. It is imperative that teachers are well qualified. In 2010, Japan launched its new education cooperation policy to contribute to the achievement of EFA and the MDGs, and to realize human security. As part of this policy, Japan proposes a basic education cooperation model called "School for All," which also emphasizes the importance of providing high-quality education. Under this policy, Japan has been providing assistance to many countries to support strengthening teachers' abilities.

This year in Yokohama, Japan will host the Fifth Tokyo International Conference on African Development (TICAD), which is held every five years. As you know, while its economy is rapidly growing, Africa remains the furthest of any region from achieving the targets of the MDGs. At this conference, we would like to discuss fully the MDGs and post-MDGs with African nations and development partners and reconfirm the importance of improving the quality of education to promote our joint efforts toward that goal. We would also like to communicate the content of the discussion at TICAD to the international community as part of Japan's contribution to addressing the post-MDG issues.

4. Closing

By inviting experts from Japan and abroad, this forum provides an important opportunity for open and frank exchange of opinions. I sincerely hope that lively discussions on the important educational theme of teachers will take place and that today's forum will be a productive one for all of you. Thank you.

Executive Summary of The Japan Education Forum X (JEF-X)

- Collaboration Toward Self-Reliant Educational Development -

Outline of the Forum

The Japan Education Forum (JEF) is an annual international forum established in March 2004 through governmental and academic collaboration as part of Japan's educational cooperation. Its purpose is to provide an opportunity for an open and frank exchange of opinions and ideas by officials in the public sector, practitioners of international development and NGOs, and scholars, on ways of promoting self-efforts of developing countries toward sustainable educational development and of effective international cooperation in education. The forum also offers an opportunity to present Japan's own experience in educational development and its international cooperation in practice. This year's topic was "Issues concerning Teachers: Toward Expanding Good Quality Basic Education" and invited discussion on the key component of quality education—a good teacher. The forum is jointly organized by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the Ministry of Foreign Affairs (MOFA), Hiroshima University and the University of Tsukuba. The event is also supported by the Japan International Cooperation Agency (JICA).

This year JEF X was held in the Assembly Hall of the Ministry of Education, Culture, Sports, Science and Technology on February 7, 2013 in Tokyo. In accordance with the theme, the forum focused on issues concerning teachers of compulsory education at the primary and lower secondary levels. In the morning, two featured keynote speakers addressed the assembly. The first keynote speaker, Dzingai Mutumbuka, Chair of the Association for the Development of Education in Africa (ADEA) was followed by a keynote speech from Shinji Kubota, Professor of the Division of Education, Faculty of Human Sciences at the University of Tsukuba. A question and answer session followed in which the audience could discuss the issues freely with the keynote speakers. The afternoon featured a panel session which presented multiple viewpoints on "Issues concerning Teachers, Affecting the Learning Achievement of Students in Primary Education" and "Challenges Faced by Teachers of Lower Secondary Education". The event concluded with an open floor discussion among all of the speakers followed by concluding discussions from the keynote speakers and panelists. In total, more than 150 people participated in the forum including diplomats from many foreign embassies, various ministry officials, development cooperation agency representatives, university faculty members, NGO/NPOs, and the general public.

Keynote Speech by Dr. Dzingai Mutumbuka, Chair of the Association for the Development of Education in Africa (ADEA)

In his keynote address entitled "Teachers: the Bridge to the Future of African Education", Dr. Mutumbuka stressed that a good system of education is the result of appropriate learning materials, willing students and competent and motivated teachers. As the single-most important input into the education process, teachers and their effectiveness should be at the center of education strategies but this is rarely the case. Moreover, while progress is being made on teacher provision, 1.7 million new teachers will be needed to achieve Universal Primary Education in 2015 with 993,000 of these posts in Africa. Teacher student ratios are still very high and in the case of Malawi the ratio of 1:80 is common. Dr. Mutumbuka then outlined five major challenges centering on teacher issues beginning with the fact that trained teachers are not necessarily knowledgeable or professionally skilled to be considered qualified in Africa. Second, he addressed the issue of high variability in teacher salaries which can range from 1.6 to 9 times per capita GDP across the African continent. The issue of the undersupply of science, mathematics and technology teachers also has serious implications which makes JICA's training of Math and Science teachers through the SMASE program based

in Nairobi, Kenya so very important. Fourth, attention needs to be given to the allocation of teachers and to improve upon inequitable distribution which has a negative impact on education quality. He concluded that the challenge of service conditions, status and motivation have a direct impact on whether the teaching profession can attract the best talent. Teacher issues such as these are a major concern for education policy makers and will only continue to grow in importance in the coming years.

Keynote Speech by Shinji Kubota, Professor of the Division of Education, Faculty of Human Sciences, University of Tsukuba

Dr. Shinji Kubota examined the issues concerning Japanese teachers at compulsory education schools many of which were similar to those found on the African continent. In Japan, according to a 2010 survey on local educational expenditures, 70% of the total educational expenditures go to teachers' salaries and when combined with salaries for other school personnel the figure rises to 85% leaving a very small amount for educational activities, maintenance and auxiliary programs. There has been a significant decline in the number of teachers with insufficient abilities since a peak in 2004 and new jobs have been created in the schools such as Deputy Principals, Chief teachers and Teacher advisors. A growing concern in Japan is the attention teachers must give to issues such as bullying at school, non-attendance of students, special needs education as well as foreign student education resulting in large hours of overtime work. This also results in great variability in the competition rate for teaching positions due to geographical location. Another related issue to the strenuous workload, is the increasing number of public school teachers on sick leave and those experiencing mental stress. In 1998, the figure was 39% but this has risen to 62% in 2007. Dr. Kubota concluded his speech by saying these issues can be addressed through improvement in the quality of pre-service training, employment and in-service training which will restore parents and local people's trust in teachers.

At the conclusion of both keynote speeches, a question and answer session was held. Questions were received from audience participants of Indonesia, Vietnam, and cabinet offices in Japan. Topics included 3rd party evaluation of schools, in-service and student teacher training, education in conflict affected areas and the alignment of parent and school values.

Panel Session

A panel session was held in the afternoon under the themes of "Issues concerning Teachers, Affecting the Learning Achievement of Students in Primary Education" and "Challenges Faced by Teachers of Lower Secondary Education." Ramon Bacani, Director of the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) served as a presenter and was also the moderator for this session. Three more panelists provided the audience with first-hand reports of teacher issues from global perspectives to local efforts. Panelists represented UNESCO's International Task Force on Teachers for EFA, the JICA GUATEMATICA Project and a former JOCV participant now serving as an elementary school teacher in Japan.

Edem Adubra, Head of the Secretariat, International Task Force on Teachers for EFA, Division for Teachers and Higher Education, UNESCO, began the session by emphasizing that solutions cannot be found if the issues are unknown. This requires careful monitoring which UNESCO meets through its General Education Quality Analysis/Diagnosis Framework (GEQAF). One of the 15 analytical tools is designed as a guide for teachers and educators reflection. Questions focus on the entire system in which teachers and educators exist from first entering the teaching profession to the training, recruitment, deployment, retention and the management of teachers and educators. Evidence from the research shows that considering the profile of the teacher alone is not sufficient to determine what is really happening in the classroom and thus the system as a whole needs to be examined. Through use of the GEQAF

diagnostics areas of strength and weaknesses can be identified along with specific gaps that need to be addressed leading to the development of action plans which allow for improving the education system to deliver equity and quality.

Ramon Bacani, Center Director for SEAMEO INNOTECH was the second presenter. He addressed the challenges of teachers in promoting quality basic education. He described first the ideal characteristics of a teacher as someone who is technically competent, physically, mentally and emotionally fit, and motivated and committed. To expound on the “technically competent” dimension, Dr. Bacani presented the competency standards for Southeast Asian teachers of the 21st Century which is the result of an action research conducted by SEAMEO INNOTECH in collaboration with the Ministries of Education of SEAMEO member countries. To elaborate on the two other dimensions of the ideal teacher, he presented the profile of a passionate teacher which was generated through a Regional Policy Forum conducted by SEAMEO INNOTECH. After having focused on the ideal, Mr. Bacani went on to illustrate the challenges found in pre-service teacher preparation, the learning environment and actual working conditions. Teaching is not usually a “first-choice” among high school graduates and class sizes tend to be particularly large while salaries remain generally low. Solutions for these issues are a strong system of instructional support, continuing professional development and creating a policy environment that promotes teacher welfare and assures sustained increases in budgetary support for public education in line with UNESCO benchmarks.

Rina Rouanet de Núñez, Education Specialist and the JICA GUATEMATICA Project Local Coordinator continued the discussion by focusing on issues related to the internal efficiency of primary and secondary education in Guatemala as well as the challenges ahead for teacher education. The results from the Second Regional Comparative and Explanatory Study of Educational Quality in Latin America (SERCE) show that to improve the quality of education the training of teachers must be supported. JICA has been addressing this issue through the GUATEMATICA Project with the result that students’ performance in mathematics at the primary level of professionalized teachers was significantly influenced. Moreover, mastery and appropriate methodology can be observed in math classes which reflect the improvement of teachers. As many of the issues found in primary education are similar to those in the state of teaching in secondary education, Ms. Rouanet de Núñez concluded that teacher training and retraining at all levels are imperative and can no longer be delayed for the improvement of education in Guatemala.

The final presentation of the session was made by Tomoko Udagawa, Teacher, Sashiogi Elementary School in Saitama city and a former participant in the Japan Overseas Cooperation Volunteers’ special program for in-service teachers. She compared issues concerning teachers in the field of arithmetic from the Republic of Palau and Japan where she currently teaches at Saitama Municipal Sashiogi Elementary School. She found that both countries share similar problems which constitute a need for veteran teachers. In the absence of veteran teachers in Palau, advice given by JOCVs led to the improvement of teaching skills and confidence in teaching. However, Japan must also confront a lack of human resources as many veteran teachers retire and it will be harder for Japanese teachers to improve their skills by getting advice and exchanging information with experienced teachers.

After the panel session, Dr. Bacani moderated an open floor question and answer session with the panelists. Questions were taken from participants representing various government offices and NGOs in Japan, as well as a student, a former Bangladesh Embassy employee and a Vietnamese scholar. Topics addressed were the means to recognize high achieving teachers and not at the expense of promotion out of the classroom and into administration, JICA’s lesson study as a form of in-service training abroad and how to provide stable investment in education despite natural disasters.

At the end of the afternoon, Prof. Riho Sakurai, Hiroshima University, moderated a concluding discussion with the panelists, panel session moderator, and keynote speakers to briefly summarize the day’s main points and to challenge the audience to reflect upon them sincerely. In conclusion, it was stressed that educational collaboration should continue

to put emphasis on the enhancement of education through efforts to effectively resolve the issues facing teachers. In this way, the 10th Japan Education Forum on collaboration toward self-reliant educational development provided a venue for thought provoking discussion on what should be done in the future to enhance quality education as an international community.

[Keynote Speech]

“Teachers: the Bridge to Future of African Education”

Dzingai Mutumbuka

Chair, Association for the Development of Education in Africa (ADEA)

From Chemistry to Education

When the organizers of this Forum saw my short biography they thought it might be interesting for me to talk about how I went from chemistry to education. The simple explanation is that this journey is in large part due to a series of fortuitous events, perhaps being in the wrong place at the wrong time. Although my doctorate is in physical chemistry and I taught the subject in two universities, in Ireland and Zambia, I have betrayed my training and spent nearly 40 years of my working life in education. But I have no regrets because it has been a fulfilling career.

While driving from the University of Zambia campus in April 1975 I saw a Land Rover with wounded people sitting by the roadside. Out of curiosity I stopped to check and was surprised to hear them speak my mother tongue. I then found they were wounded combatants coming from the war front. This incident had a profound effect on me. For days on end all I could think of was the site of those wounded soldiers fighting to free the people of Zimbabwe, then Rhodesia including me. The more I thought about the sacrifices they were making the more my life appeared empty.

It did not take me long before I resigned my teaching job – actually broke my contract with the university and joined the struggle. At first the fighters were very suspicious of me -- why would a person with a comfy teaching job join their struggle. A couple of years later I was elected into the leadership and assigned the portfolio of human resources including education. My remit was to organize education programs for youths who were too young to fight i.e. under 18 years of age and training programs for wounded fighters.

In Mozambique I organized 12 schools for over 12,000 students and a teachers college. The college and schools were all under trees. I learnt a lot about education specifically that with competent and motivated teachers, appropriate learning materials and willing students, one can implement a very good system of education. When we were not being attacked by the Rhodesian forces, my colleagues and I spent our time researching and developing the underpinnings of Zimbabwe's future education system. The efforts culminated in two important innovations that we took to the new education system; (i) a new system of training teachers that formed the basis of ZINTEC -- Zimbabwe Integrated National Teacher Education Course and (ii) ZIMSCI – Zimbabwe Science, an approach that uses kits to teach science without the use of conventional laboratories. The latter played a central role in the teaching and learning of science and mathematics as secondary education was expanded more than 400% in the early years of independence. Many people have said that in the early years of independence Zimbabwe had one of the best education systems in Africa. This is in large part due to the foundations laid down during the struggle for independence.

In addition, I organized training programs for wounded combatants and other students in various disciplines including aircraft pilots, engineers, doctors, economists etc. in a number of countries, for example, Ethiopia, the Federal Republic of Germany, Malta, Cyprus, Pakistan and Guyana. I basically sought and took every opportunity to get our people trained for when the country would be free and in need of skills.

After nine years as education minister I went to the World Bank where I served in various capacities including as Sector Manager for Human Development – Education and Training, Health and HIV/AIDS and Social Protection for 16 countries in Eastern and Southern Africa. Since retired, I have been Chair of the Association for the Development of Education in Africa (ADEA), continued to consult and sit on the boards of a number of organizations including Results for Development Institute, a Washington think tank and Friends of FAWE USA, all concerned with education. That in a nutshell is how a chemist betrayed his profession.

Teachers

Now I will turn and talk about teachers. Nelson Mandela has said, “Education is the most important weapon with which to change society”. Education is particularly important, if Africa is to develop its human resources and catch up with the rest of the world. Education is capital and labor intensive. This is why there has been a preoccupation with initiatives that could replace classroom teachers. When the radio was invented many thought it could serve as a substitute. There have been many pilots of using the radio for instructional purpose, some of them quite successful. The advent of TV generated a lot of hype. From TV we have progressed to experimenting with videos, computers and the internet. While these tools have certainly helped in substituting some aspects of a teacher’s role they have so far failed to completely replace the classroom teacher.

Last month I read about a self teaching experiment called the *Miracle of Wenchi* in which Ethiopian kids are using tablets to teach themselves. The bold idea behind the pilot which is sponsored by the Massachusetts Institute of Technology (MIT) in Boston is that children can learn independently if they are provided with computers loaded learning programs, films about animals and far away countries, arithmetic games in both English and Amharic. The children are allowed to do as they please in the hope that they can teach themselves and learn from each other. If the experiment is a success, could the same approach be used to help over 60 million children worldwide who have no access to school? The hypothesis is that children are autodidacts – they do not have to be taught to walk or speak. The jury is still out as to whether this will work or like so many other hypes before it will prove that you cannot completely do without teachers.

Meanwhile teachers will continue to constitute the single-most important input into the education process, be it in terms of determining learning outcomes, success of education reforms or costs. They also often constitute the largest share of a country’s civil servants. And yet, education strategies often pay little attention to factors affecting teacher effectiveness, such as policies for training, deployment, management, incentives, supervision and accountability for learning outcomes. Moreover, in many countries, and especially in SSA, the economic stagnation in the 1980s and 1990s led to drastic decline in salaries, with associated decline in teacher morale.

Despite some progress over the last decade, *on average* (there are variations between countries) the real value of primary school teacher salaries in SSA is just back to where it was in the mid-1970s (UNESCO-UIS, 2011). Despite some progress over the last decade, teachers’ working conditions remain poor in most low-income countries, with large class sizes and limited access to professional support, in-service training, and learning materials.

Despite the progress made in closing the gap in teacher provision a lot remains to be done. According to UIS, 1.7 million new teaching posts are needed globally to achieve UPE by 2015 with the majority, 993,000 in Africa. Because of attrition, SSA will need to recruit 1.8 million to achieve UPE and maintain the current work force levels. Within the

continent there is a wide variation in the demand for teachers. While some countries have adequate teachers the greatest need is in 24 countries situated in Central and West Africa, with Eritrea (24%), the Central African Republic (16%), Chad (16%) having the largest gaps.

This does not include the even more difficult need to provide for the rapidly expanding coverage of ECCE. Currently the Gross Enrolment Ratio (GER) in pre-primary in SSA is only 17% compared to the next lowest region, 48% in South Asia. Expansion of ECCE will demand larger numbers of new teachers than the above figures.

While most of my focus is on primary teachers because of the EFA target to be made by 2015, one cannot ignore the needs of secondary education which are even more serious than those of primary. Because of the poor quality and lack of motivation of secondary teachers the education outcomes at this level are appalling.

Overall, the capacity of training institutions to “produce” teachers is weak, but varies greatly from country to country. For example, Kenya and Zimbabwe produce surpluses that exceed their demand. On the other hand, in Francophone West Africa, capacity is very weak. For example, Mali’s 13 teachers colleges produce 1500 teachers annually when the need is for 2000.

Because of poor working conditions teaching is viewed by many as a lowly profession, with only those students failing to enter prestigious occupations opting for teaching as a career. Many governments lack the resources to hire newly trained teachers. The result is that teacher-student ratios are often unacceptably high. For example, in some schools in Malawi ratios of 1: 80 are common.

While developing the teacher training, capacity needed is a huge challenge, that obstacle is often minor compared to the problem of financing the salaries of the teachers once trained. Therefore, recruitment of more teachers needs to be accompanied by concerted and consultative efforts to use available teachers more effectively. As shown in Bruns et al. (2011), many developing countries are now developing strategies for doing that by introducing a variety of reforms to increase teachers’ accountability for education outcomes through interventions such as generating and disseminating information about schooling rights and responsibilities, resources received and outcomes; decentralization of school-level decisions to various types of school-level bodies; and policies that link pay or regular recruitment to performance. But developing sustainable options is complicated by the fact that the ability of ministries of education and teacher unions to interact constructively is often quite poor. In many African countries these issues are often either neglected or given scant attention.

A number of factors impact on the demand for teachers including population growth, policies on repetition, teacher-student ratios, attrition rates, and conflict. The population of Africa continues to grow at an average of 1.75 annually. This means additional teachers are needed.

Repetition has serious implications for the demand of teachers and education cost. Although this varies from country to country on average 6% of students repeat a grade. Many ministries cannot even explain why students have to repeat a grade. On average teacher-student ratios were 1:53 across Africa. When I was minister of education our ratios were much more favorable than these. However there were times when we tinkered with the ratios in order to accommodate budgetary constraints.

Attrition rate – the flow of teachers leaving the system every year for various reasons – varies widely from a low of 2% in Eritrea and a high of 9% in Zambia. Conflict is very destabilizing for education as parents become preoccupied with the safety of their children. In 2007 there were 22 armed conflicts in Africa. For example, the post election violence in Kenya displaced 1800 teachers while over 80,000 students and teachers were displaced by armed conflict in the Eastern Democratic Republic Congo (DRC) this last November.

There are a number of challenges around teacher issues. First, in Africa trained teachers are not necessarily knowledgeable or professionally skilled to be considered qualified. Several countries have had to resort less qualified or even untrained teachers to man their schools. Ivory Coast, Djibouti, Mauritania, Morocco and Mauritius report that all their primary teachers are trained. Sixteen (16) countries out of 34 for which data were available in 2009 -2010 report an average of 75-99% qualified teachers. Six (6) countries (Benin, Chad, Equatorial Guinea, Ethiopia, Guinea Bissau and Sao Tome and Principe report an average of 50% trained teachers.

Second, as stated earlier that there is a high variability of average teacher's salaries, across the continent the range is 1.6 to 9 times per capita GDP. The average was reported to be 3.5 times of per capita GDP in 2006 and to have increased to 4.5 times in 2010. If this trend were to continue what are the implications for education expenditure?

Third, a key challenge is the undersupply of science, mathematics and technology teachers with serious implications for Africa's ability to produce a critical mass of scientists who will play a decisive role in propelling the continent into the knowledge economy of the 21st century. A plethora of initiatives have been launched to address this including Next Einstein Initiatives in Cape Town (South Africa), African Union (AU), African Development Bank (AfDB) and United Nations Economic Commission for Africa (UNECA) Initiative on Science in Africa.

Here I would like to acknowledge with appreciation the tremendous contribution of JICA to the training of Math and Science teachers under the rubric of ADEA's Working Group on Science and Mathematics Education, SMASE, a program that is based in Nairobi, Kenya. Under its Third Country Training Program (TCTP) the WG has trained 1,300 math and science teachers. As these trainees are Training of Trainers (TOTs) the multiplier effect has been huge. In addition SMASE has launched a large number of workshops and conferences on the teaching of math and science.

Fourth, improving coherence in teacher allocation to schools is a key challenge. A basic criterion is that schools with similar size of enrollment should have more or the same number of teachers. This should be applied throughout the territory to combat urban/rural and rich/poor disparity. Inequitable distribution can compromise the achievement of UPE and negatively impact on education quality. For example, in Burkina Faso some schools with 400 students have 8 teachers, while others have as few as four. Similarly schools with 10 teachers can have enrollments varying from 210 to 877 students.

Fifth, service conditions, status and motivation have a direct impact on whether the profession can attract the best talent. Teaching is today viewed in very unfavorable terms and fails to attract and retain the brightest talent. ADEA has done some work on this under the Bamako Initiative (2004) and Bamako+5 (2009) focused on contract teachers but also taking on board various category of teachers, civil servants, contract, community, voluntary and others.

Several initiatives are in play to address the need for qualified teachers in Africa with the following being the most

significant:

- UNESCO Teacher Training Initiative for Sub-Saharan Africa (TTISA) launched in 2005 aims at improving the quality and supply of teachers.
- African Union Pan-African Conference on Teacher Education and Development (PACTED) launched in 2011 aims at also improving conditions of service and the supply of primary teachers.
- Commonwealth Secretariat Teacher Education in Sub-Saharan Africa (TESSA) launched in 2006 aims at improving the supply and quantity of teachers in Africa.
- International Task Force on Teachers for EFA, an initiative hosted by UNESCO Headquarters in Paris strives to improve the supply of teachers to meet the EFA goals by 2015.

In short, from whatever angle the “teacher issue” is approached, it is a major concern for education policy makers, a concern that will grow in importance in the coming decades.

Dzingai Mutumbuka is Chair of the Association for the Development of Education in Africa (ADEA), a network that brings together all African education ministers, researchers and donors supporting education in Africa. He also serves on the Board of a Washington Think Tank, Results for Development and is a Board member of the Forum of African Women Educationists (FAWE), USA. Previously, Mr. Mutumbuka held various senior positions in the education sector at the World Bank from 1990-2007. Prior to joining the World Bank, he held major elected and political appointments in Zimbabwe, including supervising the implementation policies in six ministries (Education, Health, Social Welfare, Youth and Sports, Community Development and Women's Affairs). He served as Minister of Education and Culture from 1980 to 1998 and Minister of Higher Education from 1988 to 1989 when the former portfolio was split into two ministries, Primary and Secondary Education and Higher Education. He served as Chairman of the Zimbabwe National Commission since Zimbabwe joined UNESCO in 1980. Mr. Mutumbuka holds a B.Sc from the University of London and a Doctorate in Physical Chemistry from the University of Sussex in the UK.

[Keynote Speech]

“Issues concerning Japanese Teachers at Compulsory Education Level”

Shinji Kubota

Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba

1. Outline of the institutional systems concerning Japanese teachers at compulsory education schools

First, I would like to explain the outline of the institutional systems concerning Japanese teachers at compulsory education schools (elementary and junior high schools) to illustrate the institutional conditions related to the issues of improving the quality of teachers.

First of all, with regard to the pre-service teacher training system, students can receive teacher training at the universities accredited to conduct such training. While elementary school teacher training is mainly conducted at teacher training colleges, faculties and departments (almost 60% of elementary school teachers), secondary school (junior and senior high school) teacher training is conducted at regular universities as well. The educational reform after World War II has enabled students at regular universities to obtain a teacher's certificate (*Gakusei Hyakunenshi* [A 100-year History of the School System], Ministry of Education, 1972, p.760). More than 80% of senior high school teachers and more than 60% of junior high school teachers are graduates of regular universities.

Secondly, most compulsory education schools are municipal public schools, and 98.4% of elementary school teachers and 93.5% of junior high school teachers teach at these public schools (The 2011 Basic School Survey).

Thirdly, most of the salaries for teachers at municipal schools are paid by prefectural governments, and one-third of this prefectural government budget is provided by the national government. With regard to the number of teachers, the Act on Standards for Class Formation and Fixed Number of School Personnel of Public Compulsory Education Schools stipulates that the class size at elementary schools and junior high schools must not exceed 40 (35 for the first grade of elementary school). This system was introduced to ensure equal educational opportunities by securing the financial resources for personnel expenditure that account for more than 70% of the total educational expenditure (88% of the total consumptive expenditure) as municipal governments cannot cover these expenses on a stable basis.

Fourth, public school teachers of compulsory education are appointed by prefectural governments or by “government-ordinance-designated cities”, which have a population of 500,000 or more. These local governments have appointive power. They assign teachers to schools and decide their promotion, demotion, employment and dismissal. Teachers at municipal schools are public employees of the municipal governments, but they can be transferred to other municipalities (the wide-area personnel system).

Fifth, public school teachers are public employees, but unlike other public employees, they are categorized as “educational public employees”. All public employees have a probationary term. Usually it is six months, but for teachers, it is one year. There are other differences between teaching personnel and other public employees. For example, receiving training is obligatory for teachers while it is a right for other public employees; the salary and allowance system gives teachers special advantages including the “salary adjustment for teachers”, and there are unique obligations arising from the status of educational public employees (e.g. restrictions on political acts).

2. Recent institutional reforms related to teachers

Next, I would like to discuss the recent institutional reforms related to teachers.

First, basically speaking, school teachers from primary to secondary education must have a teacher's certificate

issued by the accredited universities or colleges (the certificate principle), but in 1988, a special part-time teacher system was introduced to allow more flexibility in employing teachers who do not have a teacher's certificate. In the same year, a special certificate system was introduced in order to recruit people with excellent knowledge and skills from outside schools. In 2000, another system was introduced to employ principals, their deputies and vice-principals who do not have a teacher's certificate or teaching experience. In 2008, the "teaching profession graduate school system" was introduced to upgrade teacher training, and in 2009, the teacher's certificate system was reformed to introduce a term of validity, which required teachers to receive training every 10 years to renew their certificates.

Secondly, in order to make compulsory education schools (mostly public schools) more competitive, the Standards for Establishing Elementary and Junior High Schools were set up in 2002 to promote establishing private schools. In 2004, a special measure was introduced to permit joint-stock companies and incorporated NPOs to establish schools. Until then, only national and local governments and school corporations could establish schools.

Thirdly, with regard to the compulsory education expenditure including teachers' salaries, the national government changed the budgetary system in 2004 from providing a "fixed amount" allocated to a fixed number of school personnel to providing a "total amount", which is used at the discretion of local governments. This allowed local governments to employ more full-time and part-time teachers than the standard level by, for example, lowering the salary standards.

Fourth, the School Education Law was revised in 2007 to add new job titles, such as "deputy principals" who share principals' job responsibilities; "chief teachers" who support deputy principals and vice-principals and under their orders manage some school affairs and teach some classes; and "teacher advisors" who give advice and supervision to other teachers to improve their teaching and guidance skills.

Fifth, in order to improve the quality of teachers and to win people's trust in school education, in 2000 prefectures started to establish teacher evaluation systems in order to properly evaluate teachers' capabilities and achievements so that teachers can review their own teaching activities and voluntarily improve their teaching practices. Teacher recognition systems have also been introduced to commend excellent teachers and to identify teachers deemed insufficient in teaching ability.

The issues concerning the quality of teachers must be discussed with these institutional reforms in mind.

3. Issues concerning the quality of teachers at compulsory education schools

3.1. Pre-service teacher training to address the issues at school

On August 28, 2012, the Central Council for Education issued a report titled "Comprehensive Measures to Improve Teachers' Quality and Ability throughout their Teaching Careers". In order to develop students' ability to live in the rapidly changing society in the 21st century, the report says that teachers must be trained to support learning of new things by students and that an image of teachers who continue to learn must also be created. For that purpose, the report says that reforms must be carried out jointly to provide continuous support to teachers who keep on learning throughout their teaching careers.

In relation to the improvement of the quality of teachers, the report mentions the following needs: 1) to deal with various issues such as bullying, violent behaviors and non-attendance; 2) to improve special needs education; 3) to address the needs of foreign students; and 4) to effectively use information and communication technology (ICT). These are the very issues teachers face today.

With regard to bullying, the number of cases peaks in the seventh grade (the first year of junior high school). Therefore, organizational efforts are particularly needed at junior high schools. In the day-to-day efforts to stop bullying at school, teachers try to have a shared understanding of the issue, collaborate with school counselors and other staff and help improve students' personal relationships. In this way, teachers are playing a major role.

In the case of non-attendance, too, the successful cases in which students have returned to school show that making various efforts to communicate with students and parents and fostering a shared understanding of the issue among all teachers are effective.

Therefore, improving teachers' communication abilities is a key to addressing the educational agenda of today, including special needs education to support students with possible developmental disorders in regular classes, addressing the needs of foreign students and the effective use of ICT.

3.2. Issues related to recruiting teachers

As mentioned earlier, public school teachers are recruited based on the Act on Standards for Class Formation and Fixed Number of School Personnel of Public Compulsory Education Schools. The number of recruited teachers has differed greatly, depending on the number of students. As of February 2013, more than 26,000 elementary and junior high school teachers are around 54 years old. On the other hand, only slightly more than 7,000 teachers are 25 years old. In several years, many teachers will reach the mandatory retirement age of 60, and as young teachers will be newly employed, it is critical to establish a system within schools to support them.

The teacher employment examinations and the employment rates by prefecture and municipality in 2010 indicate that the highest competition rate for teaching jobs at elementary schools is more than ten times the lowest. In big cities, the competition rates are notably low, and whether or not excellent teachers can be secured in the future is an issue.

In order to increase the number of teachers at public compulsory education schools, an improvement plan comes out approximately every five years to change the fixed number of teachers. Efforts are made to increase the number of teachers in order to introduce small classes and other measures, but the number of students is decreasing at a faster pace,

Comprehensive Measures to Improve Teachers' Quality and Ability throughout their Teaching Careers

(Report by the Central Council for Education, August 28, 2012)

As our society is rapidly changing with globalization, informatization, low birthrate and the aging society, teachers must deal with more complex and difficult issues. School education must be able to respond to these changes as the type of human resources in demand is changing.

Therefore, in order to develop students' ability to live in the 21st century, school education must place greater importance on fostering the ability to think, to make decisions and to express oneself; motivation for learning; and the ability to form a wide range of human relationships. We must keep in mind that these abilities can be effectively developed through various linguistic and cooperative learning activities.

Teachers must be trained to support learning of new things by students, and an image of teachers who continue to learn must be created.

At the same time, teachers must deal with various issues such as bullying, violent behaviors and non-attendance; improving special needs education; and the effective use of ICT.

In this situation, boards of education and universities must work together and jointly carry out reforms to provide continuous support to teachers who keep on learning throughout their teaching careers.

Comprehensive Measures to Improve Teachers' Quality and Ability throughout their Teaching Careers

(Report by the Central Council for Education, August 28, 2012)

➤ More complex and diversified issues of school education

- Diversified issues teachers must deal with, including student guidance; improvement of special needs education; support for foreign students; and the effective use of ICT
- Need to establish closer collaboration with parents and local people
- Need to strengthen teachers' ability to provide practical guidance and to communicate

➤ Changing environment surrounding schools

- Diminishing trust in teachers (scandals, incapable teachers, etc.)
- Relatively lower social status of teachers as more people have higher education
- Weaker collegiality among teachers (the culture of giving mutual advice among colleagues is dying out)

so the number of newly recruited teachers has not increased as expected. There is a plan to hire 51,800 new teachers from 2011 to 2018 to promote smaller classes. However, due to the decreased number of students, the number of teachers will decline by 32,400. Therefore the net increase is expected to be only 19,400. There is also a plan to increase the number of teachers by 40,000 in five years from 2014 by increasing the basic fixed number of teachers in order to enhance educational standards and by increasing the number of teachers in charge of student guidance. Hopefully these plans will bring about the expected results. If so, the pupil-teacher ratio (PTR) at elementary schools will improve from today's 17.7 to 16.4, and at junior high schools from 14.1 to 13.0, reaching the standard level of OECD countries. Improving the quality of newly employed young teachers, however, will be an extremely important task.

3.3. Issues concerning diversified duties of teachers

In this section, I would like to discuss teachers' heavier workloads and their mental health.

As teachers' workloads depend greatly on their initiative and creativity, it is thought that the overtime payment system applied to other public employees is not suitable for teachers. Instead, a special allowance equivalent to 4% of the monthly wage is given to teachers. However, teachers are probably working much longer overtime on a routine basis at school and at home than compensated by this special allowance. They spend a lot of time working on holidays, too, preparing teaching material and doing other work. According to a survey on teachers' work, many respondents felt that their workload has increased for the following reasons particularly: 1) more individualized instruction for each student is required; 2) there is a greater demand for well-planned lessons; 3) more students need discipline; 4) teachers have more paperwork and documents to prepare; and 5) teachers have to spend more time communicating with parents and local people (Tomoko Matsuda, *Bulletin of Kyoto Koka Women's University, Junior College*, Vol. 46, "Responding to parents at public compulsory education schools of today: an analysis of parents' demands, protests and complaints," p.170, 2008).

Needless to say, the more complaints parents and local people make against schools, the more stress teachers feel. A survey of teachers shows that 78.4% of respondents said that parents who complain to schools are increasing (Benesse Educational Research & Development Center, *Report on the Fourth Basic Survey of Educational Guidance*, 2007, quotation. Matsuda, op. cit.).

Of public school teachers taking sick leave, 39% were on sick leave due to mental disorders in 1998. This rate increased to 62% in 2007. In order to provide support for teachers' mental health, the Ministry of Education, Culture, Sports, Science and Technology held the first meeting of the committee on teachers' mental health in January 2012 and issued an interim summary in October titled "Teachers' Mental Health Measures". In addition to preventive support, the committee proposes rehabilitation support to offer individualized programs to help teachers return to school.

4. Issues related to improving the quality of compulsory school teachers to address the educational issues of the 21st century

The August 28 report, as mentioned above, indicates the more complex and diversified issues teachers must deal with. The report also refers to the need to establish closer collaboration with parents and local people and the need to strengthen teachers' ability to provide practical guidance and to communicate. Furthermore, the report mentions the changing environment surrounding schools such as diminishing trust in teachers; the relatively lower social status of teachers as more parents and local people also have higher education; and weaker collegiality among teachers.

Among the new graduates of regular universities accredited to give teacher's certificates, about 50,000 have obtained a junior high school teacher's certificate, and more than 70,000 have a senior high school teacher's certificate. Statistically, only 7% of the new graduates who have a teacher's certificate actually become teachers (only 3.5% of

those who have a senior high school teacher's certificate, but 67% of those who have an elementary school teacher's certificate). The overwhelming majority are so-called "paper teachers", who have a teacher's certificate but no teaching experience. They have a good understanding of school education, but at the same time are sometimes critical of it. But we must regard this as a condition that enables management of schools through collaboration among schools, parents and local people.

One of the practices in Japanese school education culture that can be introduced to other countries is "lesson study", a kind of school-based in-service training. Through lesson study, teachers of the same school discuss what they do in their classrooms and accumulate good practices to improve their teaching skills. This culture of mutual guidance among colleagues is said to be disappearing. As explained, the age structure of teachers will change drastically in several years. We must take action now to prepare for the changing environment.

In recent years, there has been a call for collaboration among and integration of schools across different levels such as unified elementary-junior high schools, unified junior and senior high schools and kindergarten-elementary school collaborations. These also require strengthening of communication abilities as mentioned above.

Shinji Kubota is a professor at the Faculty of Human Sciences in the University of Tsukuba's Division of Education. He also serves as a member of the boards of the Japan Comparative Education Society, Japan Educational Administration Society and Japan Society for Educational System and Organization; as chairman of the committee for third-party evaluation of public schools in Saitama Prefecture and of the council on the Tsukuba City special zone on education; and as a member of the board for the external evaluation of public schools in Shinagawa Ward, Tokyo. He has a doctorate in education. At the University of Tsukuba, he served as chair of the five-year Doctoral Program in Education Sciences at the Graduate School of Comprehensive Human Sciences, the Master's Program in Education Sciences, and the Doctoral Program in Education Sciences; and dean of the Division of Education, Faculty of Human Sciences before assuming his current post as chair of the School Leadership and Professional Development under the Master's Program in Education. His fields of expertise include educational administration and educational law. He is co-author of *Kyoiku Hoki Binran* [Education Law Handbook] and *Kyoiku Sho Roppo* [Concise Dictionary of Laws on Education], both published by Gakuyo Shobo. He has also published many articles and books on school evaluation and has endeavored to improve school management.

[Question and Answer with Keynote Speakers]

Riho Sakurai (Professor, Center for the Study of International Cooperation in Education (CICE), Hiroshima University)

I would like to now invite back the two keynote speakers to the stage. We would like to begin the question and answer session continuing until noon. Please request a microphone and to hear from as many people as possible, we ask you to restrict the number of questions you ask to only up to two questions.

Question 1

M.Iqbal Djawad (Education and Culture Section, Indonesian Embassy in Tokyo, Japan)

Professor Kubota, I believe that one of your slides showed us the number of applicants and the competition rate per geographical area in 2010. I didn't see Tokyo and I would like to know what the competition rate for Tokyo is.

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

I do not have the specific number but it would fall at the bottom near Kawasaki City and Aichi prefecture in regards to the elementary school level. There is more variability for junior and senior high schools but as for senior high schools in Tokyo, this is actually a special situation. This is due to the number of public and private senior high schools of which the private schools are quite numerous and many students go to private senior high schools in Tokyo. So the local Board of Education doesn't even know how many senior high school teachers there are. In junior and senior high schools in large cities I think there is a similar situation but for senior high schools in Tokyo the competition is less compared to others. Why is this the case? I am assuming that is the point of your question. As I mentioned toward the end of the presentation, bullying, non-attendance, and other issues that teachers face in our contemporary society are issues especially found in the major cities and teachers would have to address all of these. Teachers want to enhance student ability and help them learn but school guidance becomes more critical in metropolitan areas and is where teachers must address these issues. It is especially critical in a city like Tokyo. While that is not the only reason, I think this is the biggest reason why especially in Tokyo the competition rate is lower than in other areas.

Question 2

Kazu Oda (Study Group on Education Act)

I am from a study group researching education so I would like to ask this question to Professor Kubota. You talked about the fact that teachers are too busy and one reason is they have to evaluate students and classes as it is necessary that the parents of the local community should know more. Could this not be met through evaluation by a 3rd party with a set format focused on something? Another aspect from your presentation is the self-esteem of the teachers. I think teachers should be able to choose textbooks more closely related to issues of patriotism than those chosen by the Board of Education. I think it is important for the teachers to have a bigger say in what they think.

Question 3

Seiko Toyama (Researcher, Secretariat of the International Peace Cooperation Headquarters, Cabinet Office)

Thank you for your very strong and informative speech. Since my specialization is on post-conflict and emergency education, I would like to address this question to Dr. Mutumbuka. In the year 2007 you had two countries, the Democratic Republic of Congo and Kenya, involved in conflict and my question is how did you take care of the educational systems in these countries? And my second question is what special budget and protection did you take into

consideration at that time?

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

First I'd like to address the evaluation of schools. In my presentation I did not have the time to talk about evaluation but I have been involved in this for the past seven years. Regarding 3rd party evaluation, there are guidelines, revisions and proposals for the improvement of this. The national government does not have a unified format but self-evaluation and school evaluation are also combined with this 3rd party evaluation which compliment the other kinds of evaluation and should be different school by school. In the tasks of a teacher, the evaluation portion is taking up a lot of the workload and there is room to reduce that workload. Local communication through the parents of students who can be surveyed is also a way in which data can be collected for analysis and this is already being done. But developing these instruments and their distribution is quite a bit of work but it can be simplified or entrusted to an outside source. The teacher does not have to do everything. But more importantly, based on the results, how can schools improve themselves? We do not have enough personnel to support that reform. Everything is left up to the school which is the most serious issue in regards to the self-esteem of teachers. In Japan the prefectural government does evaluation by letter however in the case of Tokyo the government model for the evaluation is based on teachers' self-declaration. So in evaluating teachers or schools what is most important is that teachers should be encouraged or facilitated to better themselves. That should be the point. But that is not exactly the case and thus where the challenge lies.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

Thank you very much for your question. The problem of conflict affects many African countries and affects education very adversely. Conflict is not unique to Africa and even the USA was shocked on 9/11 when some of these frustrated young people flew their planes into the Twin Towers. What we learn from them is the failure of education systems to impact the right values in young people. In Africa what we have observed are old people who are frustrated and use youth. So what we have started doing there is to have an inter-generational discussion which focuses on common interests such as inter-peace education and the importance of values in being able to live with other people. We hold workshops with young people to talk about the fact that they should not be used by people to settle their own grievances. Although education is formed by policy makers or teachers, it tended to focus too much on the skills and knowledge and has forgotten a very important aspect of education which is values. So one of the things we keep talking about is the importance of values between the home and school. Bullying which was talked about by Professor Kubota is not particular to Japan but is found also in Africa and the US. If you really study it you can see the roots are both in the schools and homes. Misaligned values are where you get these problems of bullying. The parents instead of disciplining will side with the child so it is a question of realigning values. What are the values we want these adults to take? The peace started in Kenya places much importance on living in harmony together.

Question 4

Akiko Ohno (Ministry of Education, Culture, Sports, Science and Technology)

I am from the international teacher training division and I would like to ask a question to both of you about in-service training. I was in Cambodia for 2 years as an advisor and I have heard people from Cambodia say there is much to learn from Japan. Developing countries face decentralization and the Japanese system is helpful for them to study. Local prefectures and training centers as well as the national government can provide support. In terms of a system of teacher training in Japan, can you talk about that, Professor Kubota? And Dr. Mutumbuka, do you think that this is something you can learn from the Japanese system of teacher training?

Question 5

Kumiko Kakinuma (Student, Hiroshima University)

I have a question for Dr. Mutumbuka. In response to an earlier question you talked about aligning values and I believe that is a very critical point. So to convey those values the adults who want to convey them to the students must clearly know what the students should be told or what is to be conveyed to the children. The adults must be clearly aware and understand those values. So what can adults do to understand the values that should be conveyed to children and how can adults develop themselves to align their values with children?

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

In-service training of teachers and is there something that Japan can do. These were the questions. As I mentioned a little in my presentation, working in public schools public servants in the 1st year have an obligation to be trained and throughout the year there are different forms of training. In the 10th year we provide in-service training. These are statutory 1st and 10th year requirements. But teachers also have to continuously train themselves or enhance themselves through study or learning. There is a national teacher training center and a prefectural one and prefectural governments, local cities and even municipalities provide training. Also each school has their own training courses for their teachers on a voluntary basis. So the teachers are not necessarily required to take these but as they feel it is necessary, they take them. And this is made possible through various reasons. I have also been an instructor for these trainings. Although it is difficult for a teacher to spend weeks in the national training center, therefore enough substitute teachers are available so that it can be done. But financial support is difficult. As for students from Cambodia, there is training assistance from the development community and some financial support, so you can participate in training courses but it is difficult to have substitute teachers. So a training course within a school is something that is in demand and that is primarily because of cost considerations. Until last year, I was engaged in receiving teachers from Southern America and they were trained by Japanese in their schools and found that the practice of lesson study is very good and something they want to bring back to their own country. So I am proud that this is an asset that we have developed in Japan. But with the imbalance of age distribution of teachers as the young teachers who are relatively inexperienced are increasing, if you want to train these teachers within their schools there might not be enough instructors or schools that can provide enough experienced teachers. So this may not be something we can transfer to other countries.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

Obviously the question of in-service training is very important in Africa, Japan or the US. The value is clear whether it is done at one level or done together by master teachers or teacher advisors. In the structure of Japan these are things that have a track record that they work. But what is the problem in Africa? It is the question of trade-offs. There is not enough money to even hire teachers. So there is not enough money to supervise the schools and so very often Ministers of Education who know the value of in-service training have very difficult policy decisions to make because the money is not there. The Minister of Education has money to give supervisors but cannot give us money to provide them transport. So I argued that it is the same as having a clinic without medicine or doctors. By not filling some of the posts they get the budget and use it to facilitate advisors and facilitators to be masters to provide in-service training. Yesterday at a seminar organized by Hiroshima University I said that a good headmaster is good at managing people, motivating them to teach and good at teaching the learning process to untrained teachers. You will see that school is making a good effort to provide good education. In-service training is key and there is no question about the validity. The real question in Africa is what gets off the table because there are not the resources. Perhaps the way of thinking is

not what is best but rather what is the biggest bun I can get from my yen. As to the question of aligning values, I think that human beings differ from other animals. Homo sapiens differ in the sense that there are certain core intrinsic values that we hold dear and that we share issues of honesty, integrity and accountability. These are immutable values that we all share across the globe. I think the problem is that many teachers and parents don't practice those values and that is where students start learning bad things. I like to give this example from Libya. There was a case where a school teacher went to Angola on a shopping trip and she came back and she went to a doctor and said "Please give me an excuse slip that week when I didn't go to school saying that I was sick." The doctor willingly gave her the slip and she took it to the director. I was helping with questions about discipline such as a teacher coming to school drunk, answering the phone in class, and you can see the kids are not getting the attention they deserve. So in that particular instance we found out that this excuse notice was phony. There was an entry in immigration that she had gone to Angola so the director played a trick and asked her, "Can you bring your passport so I can send you for training abroad?" And the entry into Angola was stamped in the passport. The medical doctor was questioned and shown the passport for the week the teacher was sick and could not come to school. He was asked, "Are you sure you did actually see the patient? As you know sir you are sworn to an oath to behave in an accountable way. You have two choices--either to withdraw the signature or I will take you to the medical association. Now the frightened doctor immediately withdrew his signature. The very problem is not the role of society but how it is embedded into our society. So we need to go back to the core values and impact them so that people can behave as homo sapiens and not wild animals.

Question 6

Arisa Oishi (Student, University of Shiga Prefecture)

I am a student and my question is for Professor Kubota. You mentioned school training during the university student period. I heard that in-school training for students who wish to be a teacher is very short in Japan compared to other countries. If we had the chance to train in schools for a longer period of time we could familiarize ourselves about the issues such as bullying more. Through a longer period of in-school training maybe we could contribute to reducing the number of paper teachers.

Question 7

Nguyen Chi Thanh (Visiting Professor, CICE, Hiroshima University)

Thank you very much for your presentations. I have a couple of questions and they come from the relationship of the issues to the Vietnamese situation now. Dr. Mutumbuka, when you mentioned Africa has a huge shortage of teachers, I would like to know what constitutes a qualified teacher. What is the criteria to assess if one is a good teacher or not? In Vietnam, we have the same problem so we have to open teacher training institutions and they have qualifications but when they go to the schools they are not able to teach because what they have learned in University is not enough. The second question is on the required number of teachers so as we open teacher training institutions we face these two problems. We need university staff and we need a good curriculum. Which do you think is the priority to solve this problem? I am also curious as to teacher mobility in Africa. As many countries speak the same language, either French or English, don't you have mobility of teachers from one country to another country? And Professor Kubota, you mentioned that sometimes you have an increase in the number of private elementary schools. I would like to know why. Is that because there is a shortage of elementary schools or because you want to reduce the number of teachers in primary schools? Is the question whether to open the schools or not.

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

I will address the question on school training and whether to lengthen the period of the students' teacher training or not. Rather than extending the duration from the current three weeks, I think it is the quality that we have to focus on and providing pre and post training for the students. By going through the in-school training program students have a higher awareness and that is exactly the target of such training. In the pre-service schools they have separate programs for seniors and sophomores based on the 1st year experience and in the following year they can promote. First you have to qualify the objectives and then in the case of secondary school the topic of your expertise. You can follow a specific teacher for the in-school training and depending on the university, school volunteer programs exist so different options are available for a student to observe. Depending on the objectives, you can have differing experiences working at a school or as a teacher or on extra-curricular activities so I think it is very significant that they experience this while in school. About the question of the increase of private schools, the number of schools has gone from 162 to 210. So it is not a big increase. The number of primary schools is 20,000 and of private ones only 1% exist in Tokyo. But why is there an increase in private schools? It is because out of 47 prefectures there are 13 with no private primary schools at all. All of their schools are public. We have one national primary school. So the prefectures without any private schools don't have to make efforts to gather students but in the private primary school. If there is a private school, public schools make efforts so that students don't go to private schools. But in 2002 the criteria to establish private schools was relaxed and there has been an increase in the number of schools but no major impact. Rather as private schools increased, public schools will be more competitive and more ready to retain their students.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

I will try to answer the two questions from the colleague from Vietnam in reverse order as it is easier. In Africa, French, English, Arabic and also Portuguese are in use. So it is not easy for someone who has been trained in English to go and teach in a Portuguese or Arabic school. What we notice is that regarding countries with similar languages of instruction such as in Kenya and Zimbabwe, then, the mobility of teachers is easier. They all teach in English and similarly South Sudan is now using English as the official language. Therefore it is easy for Kenyan teachers to go and teach in South Sudan. Rwanda has moved away from French and is using Swahili and English so it is easy for Kenyans to go and teach in Rwanda. There is nothing we can do about it because language is a barrier but I think you still can do a lot by sharing facilities for training. If you cannot have your own, you need to share with others. So certainly these would be issues that have to be considered. And in some cases we turn to post-education. Now to the question you have asked about if higher qualifications lead to better teachers. That is a very difficult question. The problem with education is because we all went to school we think we know everything about education. I have never come across any parent who doesn't give advice about what a teacher should be doing. So in a sense science as a subject may appear to be simple but in reality it is very very complicated. When you talk about it there are two components at play. One is if you are going to be a teacher you must have the knowledge or content of what you are going to teach. If you don't have it how are you going to teach? In one country a test was given in math to teachers of primary arithmetic which they had to teach and 50% failed. So you can just ask yourself the question how do they teach math? So the first step is to assess if you have the content. The second is the pedagogy. Do you know how to teach? Because content is one thing but can you actually teach it? I have seen some people in Kenya and if they drive a car and it has an engine problem, the person turns off the key and he can go and fix the car. But if you ask him what the problem was he may not actually be able to explain the problem. The problem is not taught or how to explain it but they know how to fix the problem. The problem in teaching is that in the past whenever we devoted attention to teachers we looked at what certificate they had. This is not the same as a manager in a Toyota factory who will ask if you have produced more units of Corolla. In education if

you have a higher salary all you have to do is have another certificate. I have seen a lot of useless certification. But in terms of effectiveness in the classroom, these certificates are not effective. So a policy you make needs to address these things. Is the teacher actually effective in producing the right profit for the investment you have made in their education by paying for the teachers' salary? Yes, higher qualifications are necessary, but they are not sufficient for being an effective teacher. You need knowledge of what you are going to teach and the process of doing so. Do we have this aligned in Africa? Of course not... I wouldn't be here if we did. But we have these things because there are challenges there and we are groping in the darkness trying to find solutions. So we know higher qualifications are not sufficient. When I worked at the World Bank we looked at South Africa and what we identified was that the education system of South Africa was really underfunded. Teachers often upgraded themselves but in looking at the subjects matriculated in the regions, we saw sociology, local languages and so on. But when you started looking at core areas....math do you have any? By way of upgrading as a policy maker you need to be very clear about what are the minimum qualities you want your teacher to have. I used to work in a university in Cuba, training teachers of math and science and what I learned in Cuba is that they have a very interesting and good system of education and health care. In order to be a teacher, whether you are going to teach elementary school or higher, you had to have very high marks in Spanish, math and in science because they didn't want teachers who were weak in these areas to be in their teaching system. So in short, content is absolutely important but also the process of teaching and learning is equally so. But be very careful to assess if you are looking at just one more certificate or if there is actual enhancement in what is happening in the classroom. You may not be getting return on your investment.

Riho Sakurai (Professor, Center for the Study of International Cooperation in Education (CICE), Hiroshima University)

I am sure there are more questions but our two experts will be available in the session at the end of the day. Therefore we can have a question and answer session at that time as well. This concludes the morning session, and the afternoon session will start at 1:30 and we would appreciate it, if you could come back about 10 minutes before that time. If you have additional questions, please come to the reception area and ask our staff members. Thank you very much.

[Panel Session]

Challenges of Teachers in Promoting Quality basic Education

Ramon Bacani

Director, Southeast Asian Ministers of Education Organization

Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH)

INTRODUCTION

The role of teachers in providing and promoting quality basic education cannot be overemphasized. Many education sector studies have concluded that good teaching practice or teaching quality is one of the two most important determinants of student outcomes. The other important determinant is effective school leadership which consists of instructional leadership and change management leadership. Thus, it is often said that the quality of a school cannot go beyond the quality of its teachers and leaders.

TEACHING PROCESS

There are many factors that contribute to good teaching. In the same vein there are many factors that impact on the personal and professional life of a teacher and consequently on his/her performance as a teacher.

It must be recognized that while national education systems in Southeast Asia are characterized by varying degrees of decentralization of educational management, teaching has always been and will likely remain to be a largely decentralized process. By this we mean that inside the classroom, the teacher has virtually full control of the situation, making decisions on the basis of circumstances prevailing in the classroom including student behavior and taking appropriate action.

A teacher's actual performance inside the classroom however is influenced by what has happened to the teacher before the class and what will happen to him/her after the class. Interventions to promote good teaching will therefore have to consider these different stages - before, during and after a teacher's actual job performance inside the classroom.

CHARACTERISTICS OF A GOOD TEACHER

In very simple terms, a good teacher must possess and demonstrate the following characteristics:

- technically competent
- physically, mentally and emotionally fit
- motivated and committed

In this regard, SEAMEO INNOTECH, a Regional Center for Educational Innovation and Technology belonging to the network of the Southeast Asia Ministers of Education Organization (SEAMEO) has undertaken two important projects in the past few years whose outputs would be helpful in appreciating what these three characteristics specifically mean. These characteristics can serve as an ideal which teachers may aspire to achieve.

Competency Standards for Southeast Asian Teachers

The Center took the lead in the development of a Competency Framework for Southeast Asian Teachers of the 21st Century, in collaboration with the Ministries of Education of the SEAMEO member-countries. These competencies are described in detail in Annex A. The Competency Framework identifies the general competencies and their corresponding specific tasks or subcompetencies. It is useful for designing professional development programs for teachers.

Passion for Teaching

In November 2011, SEAMEO INNOTECH conducted a Regional Education Forum with the theme “Rediscovering the Passion for Teaching”. This theme was suggested by the SEAMEO INNOTECH Governing Board in the light of observations that many teachers have lost the passion for teaching, most probably as a consequence of the varied challenges which teachers in Southeast Asia experience. The participants many of whom were outstanding teachers in their respective countries proposed a Success Profile of a Passionate Teacher consisting of Competencies, Personal Attributes and Experiences. Competencies are the set of Knowledge, Skills and Values required of a teacher to passionately and successfully carry out his/her tasks and responsibilities. Personal Attributes are the general characteristics and personal traits of a teacher which sets him/her apart from other professions. Experiences are those that a teacher must/should go through as part of his/her learning journey contributing to continuous professional enhancement.

The detailed Success Profile is presented in Annex B.

CHALLENGES OF TEACHERS

Having described the ideal characteristics of teachers which reflect teacher quality, we may now examine what are the challenges or obstacles that impede their ability to provide and promote quality basic education.

Basically there are three areas of challenges, namely:

- pre-service teacher preparation
- learning environment
- working conditions

Pre-service Teacher Preparation

In many countries in Southeast Asia, teacher education is not usually a ‘first choice’ course among secondary school graduates due to perceptions on the difficult working conditions and the low status of the teaching profession. It has not been able to attract the best talents among secondary school graduates.

The curricula of teacher education programs have been slow to respond to the rapidly changing environment of schools. As a consequence graduates of teacher education programs are inadequately prepared to handle actual classroom conditions. What they have learned in teacher education programs does not fully address the demands of actual practice.

At the secondary education level, subject area specialization is required of teachers. Unfortunately, for the science and mathematics subjects, only few teacher education students specialize in these subject areas since the high school graduates who are good in these subjects usually prefer courses other than teacher education. As a consequence, there are many science and mathematics teachers who did not specialize in these subject areas in their teacher education course and yet, out of necessity, they have to teach these subjects.

Learning Environment

In many developing countries, education systems are underfunded, thereby leading to inadequate provision of basic resources such as teachers, classrooms and instructional materials. Thus, many class sizes tend to be large particularly in urban areas. Compounded by the diversity of learners, teachers often face challenges in handling such classes such as being unable to monitor individual student performance and to provide differentiated instruction.

Working Conditions

Teacher salaries are generally low in many Southeast Asian countries especially when compared with those in other professions. Since teachers account for a very large proportion of the Civil Service, even modest salary increases would have a significant impact on the national budget. Opportunities for career advancement and professional development are also limited.

Working hours are in many cases long. In addition there are many demands on teachers both inside and outside the school, such as administrative duties in school and out-of-school work rendered for local communities and local governments.

RECOMMENDATIONS TO HELP TEACHERS PROMOTE QUALITY BASIC EDUCATION

Instructional Support System and Continuing Professional Development

A strong system of instructional support coupled with continuing professional development can directly impact on the performance of teachers. Instructional support at the school level should be the focus of the leadership responsibility of school heads. It may also be provided by fellow teachers and specialists operating at higher levels, such as at the town and city or provincial levels, forming communities of practice as a venue for professional support.

Staff development is a primary responsibility of school heads. School-based in-service training programs must be developed in response to individual professional development needs of teachers.

A system of providing constructive feedback to teachers regarding their actual performance should be institutionalized through formal performance evaluation mechanisms. To the extent possible, parents and other stakeholders should participate in providing feedback.

Policy Environment

Sustained increases in budgetary support for public education in line with UNESCO benchmarks would allow for increases in teacher compensation as well as improvements in learning conditions in schools through adequate provision of basic resources. Furthermore, financial support for continuing professional development of teachers can also be expanded.

Initiatives to promote career mobility of teachers within Ministries of Education can improve the image of the teaching profession, hopefully attracting better students into teacher education programs. Steps should also be taken to ensure that good teachers are retained and rewarded for their performance. An example is introducing a Master Teacher Scheme which allows for granting higher salaries to good and experienced teachers without their having to shift to the administrator track.

Recently, the Philippine government decided to pay science and mathematics teachers higher salaries compared to other teachers. This move is part of the effort to retain them and to attract more students to specialize in these subject, in teacher education programs. Earlier non-specialists among secondary school science and mathematics teachers were sent for training for two consecutive summers to enable them to acquire a certificate of specialization for the subject(s) they are currently teaching.

Inasmuch as Ministries of education exercise some degree of control or influence over teacher training institutions, periodic reviews of teacher education curricula should be conducted to ensure that these keep abreast of developments in learning environments in schools.

Recognition of Teachers

Initiatives have been taken by both the public and private sectors to give due recognition to the role teachers play

in our society. At the international level, UNESCO has declared October 5 of every year as World Teachers Day. At the national level, Ministries of Education have collaborated with the private sector to celebrate such an event. For instance, in the Philippines, a National Teachers Month has been officially declared by the President of the Philippines, starting in September and culminating on October 5 of every year. The celebration started six years ago as a private sector – led activity but has now become a joint public-private sector undertaking.

Nationwide searches for outstanding teachers have been conducted both by Ministries of Education and the private sector, involving both monetary and non-monetary rewards. Winners are featured in official awarding ceremonies as well as in the mass media.

Concluding Remarks

While the critical role of teachers is recognized, many challenges are experienced by teachers as they carry out their noble responsibility. Concrete actions are required to develop good teachers and to enable them to cope with the challenges associated with their work. These have to be initiated, not by government alone but also by the many education stakeholders so that they can contribute to and benefit from quality basic education.

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1. Shaping the Future: How Good Education Systems Can Become Great in the Decade Ahead-Report on the International Education Roundtable, July 7, 2009, Singapore
2. Report on the SEAMEO INNOTECH Third Regional Education Forum: Rediscovering the Passion for Teaching, November 2011
3. Competency Framework for Southeast Asian Teachers for the 21st Century, SEAMEO INNOTECH
4. National Competency-Based Teacher Standards, Department of Education, Philippines

Ramon Bacani is currently the Director of the Regional Center for Educational Innovation and Technology (INNOTECH), one of the specialized institutions of the network of the Southeast Asian Ministers of Education Organization (SEAMEO). Prior to assuming his present post, he served as an Undersecretary in the Philippine Department of Education, with responsibility in the areas of planning, field operations and literacy promotion. Dr. Bacani has undertaken formal academic studies and training in industrial management engineering, development economics, urban and regional studies, and educational planning and administration in prestigious universities in the Philippines and the United States and at the UNESCO International Institute for Educational Planning in Paris, France.

Addressing issues and challenges regarding teachers and Teaching: The UNESCO General Education Quality Analysis / Diagnosis Framework (GEQAF)

Edem Adubra

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Introduction

There is a clear similarity between the objectives of the Japan Education Forum and the Policy Dialogue forums organized by the Task Force. The focus of JEF 10 on teacher issues and the theme of the Panel perfectly reflect this commonality of purpose. Teachers/educators are indeed the major pillars in the teaching and learning process. The achievement of EFA goals is intrinsically linked to the provision of teachers in sufficient quantity and with adequate preparation and motivation to address the diverse needs of an increasing learning population.

This presentation aims to underscore the need to unpack the complex fabric of teaching and learning and the planning of this process. To this end, the paper will dwell on the two components of the UNESCO *General Education Quality Analysis/Diagnosis Framework (GEQAF)* that deal with the question. It will illustrate the pertinence of the questions raised with case studies drawn from work carried out by the Task Force network in the regions and countries.

The GEQAF recognizes progress made globally since the Dakar Forum (2000) in terms of access, but alerts on the ensuing quality imperative and how important it is to monitor it. The ultimate purpose of basic education for all has to be to ensure effective learning and skills development for further education, employment and sustainable livelihood.

I. Teachers in the quality and equity debate: Some evidence from research

Without an appropriate focus on teachers, access, quality and equity of education for all is not feasible.

- The quality of teachers/educators has been found to explain significant differences in learning outcomes (OECD, EI, etc.)
- Equitable deployment of qualified teachers/educators also has a significant bearing on the distribution of learning outcomes and thus equity.
- There are clear indications that provision of quality education tends to have a greater impact on the most vulnerable or deprived students and thus providing quality teachers/educators to all schools and educational institutions is one important way to address the problem of inequity.

Consequently, as new and more complex roles are ascribed to teachers/educators, coherent and adequate selection, preparation and continuous professional development strategies must be in place to endow those entrusted with teaching with the required knowledge, skills, attitudes and values, and retain them in the profession.

What does the GEQAF propose?

The GEQAF has 15 Analytical Tools designed to help start the task of improving quality and equity. The tool on Teachers/Educators is particularly linked to the analytical tools on the Teaching and Learning processes. It's not a prescription of a particular choice, or of a particular method to analyze the issue of teachers/ educators and education quality. The purpose of the Toolkit on Teachers is to serve as a guide for reflection.

Diagnosis and analysis questions

The paramount question is: *to what extent the teachers/educators sub-system has been a major factor in explaining the quality problems faced in the education system.* This question can be addressed by a thorough analysis

and reflection on the systems and mechanisms that are in place for attracting individuals to the teaching profession, for selection and preparation of teacher/educator candidates, their recruitment, deployment, retention and their effective management for the delivery of quality education. At each of these critical stages, we need to pose some fundamental questions to identify the factors affecting the ability of our teachers/educators to deliver quality education to our learners.

A. Entry into the teaching profession

1. Who is attracted to the teaching profession and why? Do we have data on the profile of those applying for teacher/educator training?
2. How well do our criteria for selection into training of teacher/educator (e.g. minimum qualification, attitudes and values, motivation) and selection modalities (e.g. exam, interview) reflect the type of teachers/educators we want to train?

B. Training of teachers/educators

1. What is the profile of the trainers of teachers/educators? How are they trained, recruited, remunerated? Does the financing of training institutions reflect the central role teacher/educator training plays for quality education?
2. How well does teacher/educator assessment reflect the competencies expected of new teachers/educators? Is practical training assessed? What are the modalities of assessment?
3. Has the efficiency of teacher/educator training programs been analyzed? Is there any analysis of the impact of trained teachers/educators on learners' achievements?
4. How has in-service and CPD program been effective in raising the quality standard of our teachers/educators? Do we have evidence of that?

C. Recruitment, deployment and retention of teachers

1. What mechanisms are in place to attract and retain the best qualified people to teaching? Have they been effective? What is the extent of teacher/educator attrition in our country? Why did these teachers/educators leave?
2. Are there mechanisms in place for the best teachers/educators to be recognized and rewarded for their teaching?
3. Are qualified teachers/educators deployed equitably throughout all educational levels, educational settings and in line with curriculum requirements? What are the mechanisms in place to ensure that teacher/educator deployment is equitable and the mechanisms are applied consistently?

D. Management of teachers/educators

1. What mechanisms are in place to support teachers/educators at all moments of their career? Do they foster a feeling of motivation and promote increased performance of teachers?
2. What forms of supervision and performance evaluation are in place and how effective have they been?
3. To what extent do teachers/educators participate in planning and decision-making at all levels of the educational system?

E. Priorities for action

1. What are the key areas and binding constraints to be addressed urgently to achieve major improvements in the quality of our teachers/educators current and future?
2. What are the knowledge gaps which need to be filled for an evidence-based policy and practice?
3. What are the required actions to deal with the priority constraints and the identified knowledge gaps? Who does what and when? What will be the coordination mechanism to effect the changes in a cohesive and systemic way?

II. Teaching: Some evidence from research

Teaching is the most immediate process for supporting learning and for enabling learners to acquire expected

competencies. What happens within the classroom is of crucial importance for the quality of education. Teaching and learning processes are not only crucial to education quality and to the effectiveness of learning experiences but also to equity of education quality and of learning.

- Considering the profile of the teacher alone is not sufficient to determine what is really happening in the classroom: teachers and teaching are two separate, though closely interrelated, issues.
- Individuals learn differently. They should be taught differently. For learners to reach their full potentials, teaching methods, approaches and assessment modalities must be well understood by those entrusted with teaching and those making decisions about education.
- Adaptability to context matters as different countries and students may need different teaching contents (both in terms of subject matter knowledge and of medium of instruction) and different levels of structure tailored to students' profile. It is therefore important to critically assess the relevance of both current and planned objectives (in terms of the content, structure, and context of teaching) to the diverse contexts.
- Countries which have been successful in improving their education system followed a number of general principles but also tailored their intervention to match the current situation of their education system

What kind of teaching can be provided is shaped/constrained by the learner and the learning environment, the teacher and the teaching culture.

Diagnosis and analysis questions

The overall objective of the Teaching Tool is to support the analysis of how teaching processes contribute to the quality and equity of general education and to effective learning. The paramount question is: ***Do our teaching processes facilitate or impede the attainment of quality education and effective learning experiences for all our learners?*** The probing of this paramount question is facilitated by posing some key questions regarding critical factors affecting and influencing teaching.

A. Understanding an effective teaching process

1. What is our operational understanding of effective or quality teaching? Who defines this understanding? What is the role of research and innovation in determining this definition? How does this understanding take into account the diversity of our education settings, learners and teachers as significant factors in our definition of quality/effective teaching?
2. How do we collect information on core teaching methods and repertoires used in our general education system? How are these repertoires selected? How effective are they in facilitating learning effectiveness and the acquisition of desired competencies? What is the evidence of their effectiveness?

B. Equity and effective teaching

1. How do we ensure that all learners in our general education system are exposed to effective teaching? Where is the evidence of equitable exposure to effective teaching? Where there is inequity, what are our available remedial measures? How do we track the differentiated impact of effective teaching for diverse learners? What dimensions of diversity do we use to track differentiated impact?

C. Monitoring and supporting teaching

1. What mechanisms do we have for identifying and documenting ineffective teaching? Once identified, what remedial actions do we employ? How regularized and/or institutionalized are these remedial measures? How effective are these measures in supporting effective teaching?
2. Who evaluates teaching? How are stakeholders who evaluate teaching selected? How do we use feedback from the assessment of teaching effectiveness? Where is the evidence of this use?
3. How are outcomes from national, regional and international assessments utilized in our evaluation of the teaching

process?

4. How do we support and incentivize effective teaching? How do we sustain effective teaching?

D. Conditions for teaching

1. How do we operationally define environments that support and/or induce effective teaching? What are the key features of these environments? What are the most impactful features? How do they manifest across the diverse contexts of our general education system?
2. To what extent and how are ICTs being integrated in teaching and learning to achieve desired learning outcomes? Do we know if the introduction of ICTs has improved teaching effectiveness as we operationally define it?

Priorities for action - Conclusion

1. What are the key areas and binding constraints to be addressed urgently to achieve major improvements in the quality of our teachers/educators current and future?
2. What are the knowledge gaps which need to be filled for an evidence-based policy and practice?
3. What are the required actions to deal with the priority constraints and the identified knowledge gaps? Who does what and when? What will be the coordination mechanism to effect the changes in a cohesive and systemic way?

In conclusion, the GEQAF posits that the diagnostics will facilitate the identification of areas of strength to build on and areas of weaknesses and gaps to address. The diagnostic and analysis of both strengths and challenges should lead to *the formulation of action plans focusing on the most critical challenges which, if addressed, can unlock great potential for improving the education system to deliver equity and quality.*

Edem Adubra, Head of the Secretariat, International Task Force on Teachers for EFA, Division for Teachers and Higher Education, UNESCO

Edem Adubra currently heads the Secretariat of the International Task Force on Teachers for EFA. He joined UNESCO in 2003 in the Division of Secondary, Technical and Vocational Education where he helped coordinate the Interagency Working Group on Secondary Education. In 2006, Dr. Adubra transferred to Windhoek and lead UNESCO education programme in Angola, Lesotho, Namibia, South Africa and Swaziland, coordinating the partnership in education between UNESCO and the Southern African Development Community (SADC). He was reappointed to Headquarters as the Chief of Section for Teacher Policy and Development. Prior to his career at UNESCO, Dr. Adubra spent over sixteen years as a teacher, a teacher trainer, and a high school principal in his native Togo. Dr. Adubra got his Bachelor of Arts from Université du Bénin (Lomé, Togo), his Masters in Linguistics from Lancaster University (UK), and a dual Doctoral degree in Educational Administration and Comparative and International Education from Pennsylvania State University (USA).

The Educational Situation in Guatemala: A Look at the Present to Map the Way Forward

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Guatemala is a country located in Central America with an ancient culture. It occupies an area of 108,430 sq. km and has an annual growth rate of 2.8 percent. Life expectancy is about 70 years. As reported by the National Statistics Institute, the country has 15 million inhabitants, of whom 70% are under 30. Forty percent of the population belongs to one of the three ethnic groups: the Garifuna, Maya or Xinka that make up this multiethnic, multicultural and multilingual country. According to the Human Development Report 2011, Guatemala is a country with *medium development*, ranked 131st out of 187 countries in the world (UNDP, 2011:144 and 147). According to information obtained by the Living Conditions Survey (INE, 2011), 53.7% of the population lives in poverty (13.3% in extreme poverty and 40.4% in non-extreme poverty). Its total gross domestic product (GDP) is US\$23.3 billion and its GDP per capita is US\$4560. As far as expenditure on education is concerned, we can say that after the signing of the Peace Treaty, it has been increasing; in 2006 it reached 2.6% and almost 3% in 2011. However despite this increase, investment in education remains one of the lowest in the region. According to the Constitution of the Republic of Guatemala, it is the duty of the State to provide free and compulsory education at least at pre-school, primary, and secondary levels. According to the Human Development Index 2011 for Guatemala, average schooling has increased to 4.1 years (the average for Latin America today is 7.8 years among adults).

Based on education statistics of the year 2009 reported by the country in the compliance report of the Millennium Development Goals (2010), while at the primary level enrollment, is close to 100% , pre-school education has a net enrollment rate of 56.63% and 39.36% at secondary level. This indicates that a lot still remains to be done to expand enrollment, especially for the two levels mentioned above. The table below shows the evolution of net enrollment rate by educational level from the year 1991: (calculated in percentages):

Level	Base year 1991	1995	2000	2005	2009	Evolution1991-2009
Pre-school	16.0	20.96	37.25	46.97	57.09	40.63
Primary	71.6	72.05	85.43	93.52	98.33	26.73
Secondary	17.6	20.8	24.69	33.23	39.36	21.76

Source: Data obtained from the Ministry of Education and MDG country report

As far as the internal efficiency of the education system is concerned, we can say that 1 in 2 children do not finish primary education, 1 out of 2 children are illiterate in terms of written language on completing primary education, and out of each 5 who complete secondary education, only one passes the mathematics exam. This is a wake-up call in terms of educational quality. However, the retention rate at the primary level has improved since it increased by 33.9 percentage points. The repetition rate at the primary level, although declined from 14.90% to 11.49% in the period 1991-2009, is still considerable. If we analyze this index by grade, it is noteworthy that it is higher in the first grade of each level. In the case of primary school in 2009, it was recorded that about a quarter (23.90%) of the children enrolled in first grade were repeaters, which means that for every 100 enrolled, 24 are repeaters. The table below summarizes the internal efficiency indicators:

Indicator	Pre-primary	Primary	Secondary
Rate of retention	92.18%	94.49%	91.78%
Rate of dropout	7.82%	5.51%	8.22%
Rate of repetition	0	11.49%	3.06%
Rate of promotion	100%	86.40%	68.37%

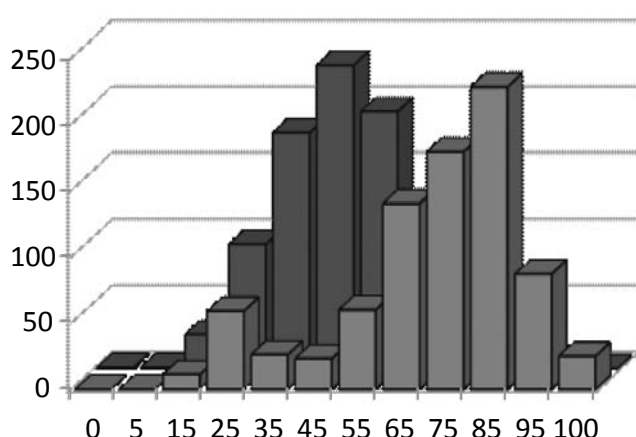
Source: Data obtained from Ministry of Education

Despite having achieved some improvements, results such as those obtained by the Second Regional Comparative and Explanatory Study of Educational Quality in Latin America (SERCE), still reflect major challenges in improving the quality of education in Guatemala. The results obtained show that Guatemala's performance is lower than the regional average within one standard deviation. For math, the only nation it outperformed was the Dominican Republic, and for Spanish language it was above the Dominican Republic and Panama. Some of the factors associated with the performance report highlighted by the Latin American Laboratory for Assessment of the Quality of Education (LLECE), are consistent with what is suggested by other studies in Guatemala regarding factors associated with academic performance: the socio-economic and cultural, urban-rural status and the use of mother tongue as part of the school environment. Special attention should be paid to training and teaching skills. In a recent study by the Ministry of Education sponsored by the CEC-SICA (FES project / Education 2011-2013), "Factors which affect the performance of children from the first cycle of primary level education in mathematics in public schools in Guatemala", it was found that the performance of primary level students in mathematics is linked with: teaching experience, education level (better preparation through more years of study and/or training, positively influences the performance of students), the teacher's mastery of the subject and his/her experience in handling materials. Expectations regarding student performance are also associated with increased student academic achievement.

The results obtained by SERCE as in other studies, are an important guide for the Ministry of Education regarding the actions that need to be taken in the following years to improve the quality of education, starting with improving the training of teachers. In Guatemala pre-school and primary teachers are trained at different levels ('Normal' Schools, i.e. teacher training colleges), which means training is not at university level. In this respect, specific remedial actions have already been implemented, as in the case of the Academic Program for Teacher Professionalization PADED-D-, organized by the University of San Carlos de Guatemala. The program is voluntary and a just over 12,000 teachers have participated, successfully completed the program and graduated from the state university. More cohorts of teachers are expected to be trained and it is the children who will benefit directly. With these actions, an effective response will be given to the demands and the policies, objectives and strategies formulated by the National Council of Education, which establish the need to professionalize teachers up to higher levels and raise the initial teacher's training program to the university level so that they can teach appropriately. It is worth mentioning that JICA, through the Project for Improvement of Teaching Mathematics GUATEMÁTICA Phase II, has supported mathematics courses taught in the PADED-D, applying the methodology proposed by the Project. The effectiveness of the program has been evaluated by more than one institution including the Ministry of Education. The study by the Project GUATEMÁTICA Phase II during its implementation in the areas of influence showed that the students' performance in mathematics at the primary level of professionalized teachers significantly influences the performance of the students. The results also reflect the improvement of teachers in teaching math classes (mastery and appropriate methodology).

To identify the improvement in the mastery of mathematical content by participating teachers, a comparison of pre- and post-test results in PADED-D math courses, was conducted in two cohorts. Below is an example of the results of the course "Mathematics and Learning" with the second cohort, conducted in the period from 18 February to 14 April 2012.

Results of the 2nd Cohort Pre and Post Test: Teachers (Mathematics and how it is learned)



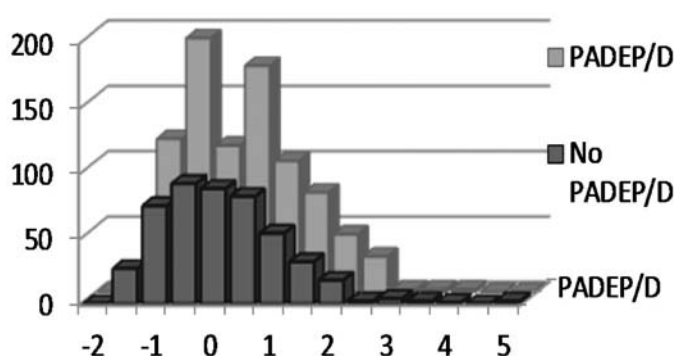
	<i>Pretest</i>	<i>Posttest</i>
Pretest N	838	838
Average	40.0	66.1
Posttest DE	13.6	20.6
gl	837	
p	< 0.01	

N=838
gl=837
P<0.01

Source: Final Report Project GUATEMÁTICA Phase II, 2012

The graph is striking as there is an improvement in the mastery of content by teachers after participating in the course. Further observations were made of the pilot group and the control group and a significant difference was found in classroom management (including methodological mastery, time management and classroom activities that require greater involvement of students). The results of the observations benefited the teachers attending the PADEP-D, since they demonstrate better classroom management than those who do not attend PADEP-D. Meanwhile, the performance of students whose teachers participated in the Professionalization Program was evaluated, with the following results:

Results of the evaluation of students 2012 (Global)



	<i>PD</i>	<i>NPD</i>
Average	0.06	-0.11
Standard Deviation	0.99	1.01
Observations	864	479
Mean Difference	0.17	
Degree of Freedom	1341	
t	1.96	
p	<0.01	

Source: Final Report of Project GUATEMÁTICA Phase II, 2012

This information not only demonstrated the achievement of project objectives, but was a useful input to the Ministry of Education, as evidenced that the PADEP-D can make improvements in the preparation of teachers, so it is worthwhile to continue encouraging it.

Another action that deserves to be mentioned is the transformation of initial training, which is expected to come into effect in 2013 by Government Agreement, in such a manner that the training of the primary teachers would be at university level. It is expected that the initiative which has required several years of discussion to reach a consensus on, will result in an improvement of the teachers who will graduate in the coming years.

At the secondary level we can say that enrollment has doubled in the past decade, but is still low compared regionally: gross enrollment is 66.65% and net enrollment is 40.25 %. At secondary level, the enrollment distribution pattern is different from the primary level: participation is low in the public sector in secondary education, with most students enrolled in private schools, which undoubtedly has a negative impact on poorer families. It is also interesting to

note the participation of the cooperative sector (in which the municipalities, parents and the Ministry of Education are involved). This method reports an enrollment ratio similar to the public sector. To expand secondary education services in rural areas, the Ministry of Education adopted some unconventional models, as the case of the television program and secondary education distance learning, which began in 1998, following the cooperation agreement between Mexico and Central America in the field of distance education classes with pre-recorded videos on television and with the help of a facilitator. In 2003, 429 distance-secondary institutions were participating, with a total of 26,000 students which reached 21% of youth served by the public sector. Other secondary forms of enrollment are NUFED (Family Educational Nuclei for Development) which is an ancillary system of education for students that do not attend schools. This program aims to provide young men and women in rural areas, primary school leavers, a general education based on their needs, problems and concerns. This training is equivalent to three years of lower secondary, based on self-management. The program uses the methodology of alternation and in some cases children are inmates at the center. This scheme covers 21 prefectures. Currently there are 5,433 women and 4,076 men serving, with a total of 9,509 in three grades.

The foregoing reflects the interest that has been taken in expanding enrollment, however if we work only on improving the coverage of education at the secondary level, but not on overcoming deficiencies in the quality of education received by students, it will advance very little. According to a performance test conducted by the Ministry of Education for the first grade of secondary education, in which the three types are compared (actually, four are compared, but two of them are of academic school education while the other two are of non-conventional methods, as described above), it was found that there were no significant differences in communication, language and mathematics, in terms of the results obtained by students (in terms of percentage of correct answers), but there was a better performance in the area of communication and language than in mathematics in all of the types. An important finding is that in mathematics, students in regular official establishments have better score than those of the other types.

Type of Education	Communication and Language	Mathematics
Regular (official)	24.72%	22.02%
Secondary by distance learning	24.24%	21.83%
NUFED	24.08%	20.08%
Cooperative	23.80%	18.23%

Source: Based on information from the Ministry of Education, DIGEDUCA, 2009

Meanwhile, national tests conducted by the MOE (2009) for students in 3rd year secondary education, show that fewer than 8% of the students obtained passing grades in the basic skills of reading, and 98% of students did not obtain the pass mark in Mathematics. According to the report of the Education General Director Investigation and Standard (DIGEDUCA), in terms of Reading Skills students have problems in demonstrating mastery of basic skills such as summarizing, understanding and analyzing texts. Mathematics: Students have difficulty in solving problems even when given clear and comprehensive information on the application of formulae and theorems.

Educational quality problems at this level suggest common factors at primary level, as is the case of the training of teachers who work at this level, although currently to be selected one must have a degree as a school teacher at the university level (though not necessarily at the undergraduate level), there are still teachers working at the secondary level who have entered the system before this selection criterion was introduced and do not have a college education.

Considering that "the quality of an education system's ceiling is the quality of its teachers" it must be of vital importance to prioritize teacher training as the first step to improve the quality of education. While training and equipping the teacher are important elements to raise the quality of teachers, there are other factors such as adequate compensation, proper selection and quality in the technical education of basic cycle in its various forms.

According to the strategy of transforming the middle school level (lower and upper secondary education), the Ministry of Education launched in 2007, a new national curriculum for this level and it has been redefined for the following purposes:

- To provide continuity from the second cycle of the primary school level.
- To maintain and continue the concept, focus and methodology that has been adopted for the primary level: student centered and well-organized curriculum.
- To provide specialization and strengthen specifically a level which should look for the refinement of cognitive strategies and the proper handling of the information related to various fields of human knowledge and creation.
- To strengthen a foundation for further studies of the diversified cycle.

The basic cycle is expected to provide opportunities so that the students can explore their subject preferences and talents, combine their skills and develop abilities; strengthen their physical performance, show their artistic and expressive inclination; increase their thinking and critical position in their real world surroundings and head towards the discovery of their personal and professional vocation. This linkage between levels is undoubtedly one of the biggest challenges; if achieved it will surely improve the performance of students considerably.

The National Education Council (consultative group of civil society organizations involved in the education sector) has produced educational policies that should be promoted in the coming years. For this, the Ministry of Education, through the Government Plan described in the Agenda for Change 2012-2016, includes five strategies that seek, among other things, coverage, to improve the quality of education. In this context, the strategic priority is "strengthening the capacity of teachers" which includes: renew initial teacher training, ensure professionalism and in-service teacher professional development and support teachers in the implementation of the National Curriculum.

In 2012, the Ministry of Education launched "a strategy for quality education" in which it talks about transformation of initial teacher training. This strategy emphasizes that the normal schools and private institutions no longer offer elementary teaching programs starting next school year (2013) onwards, those who aspire to work in primary schools in the country must complete a diversified two year course (Bachelor of Science and Arts) and later, at university level, be trained as primary school teachers, in one of the stipulated specialties.

The Ministry of Education will seek to establish a system of incentives, according to the provisions in "teachers' career in Guatemala", which will recognize teachers' prior studies, so that teachers' education at the university level is valued properly.

Secondary teacher training could be the next step toward improving the quality of education.

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Rina Rouanet de Núñez, Education Specialist (JICA GUATEMATICA Project Local Coordinator), Guatemala

She is currently an Education Specialist who began her career as a primary education teacher, and later held various important positions at Ministry of Education, such as Training Coordinator, Departmental Education Director. She has collaborated with donors including ACDI, UNDP, JICA, USAID, Red Cross, carrying out multiple consultancies, besides has designed and coordinated national impact projects. She has been invited to speak at numerous national and international conferences. Her experience goes from research, curriculum design, methodological innovations implementation, and material design for formal and non-formal education. She has been honorary member of several education commissions for instance Consulting Group of Human Development Report, and has worked as advisor of Deputy Ministry of Education. She was representative of Ministry of Education at Regional and Departmental Development Council; in addition, was Education Interagency Network Coordinator and cofounder. Ms. Rouanet holds a Bachelor's degree in Pedagogy & Educational Sciences and a Master's degree in Education Administration. She has studied Demography, Environment Sciences, Prevention & Risk Management, and Gender.

Issues Concerning Teachers in Teaching Subjects: Based on Teaching of Arithmetic in Palau and Japan

Tomoko Udagawa

Teacher, Sashiogi Elementary School, Saitama City

(Former Participant in JOCV Special Participation System for In-service Teachers)

1. Public schools in Palau

- The school year starts in August. There are four terms.
- There are 13 elementary schools (1st grade to 8th grade). Unification of schools is under way.
- Class size: Big schools (3): about 30 students
Small schools (10): fewer than 10 students
- Basically, homeroom teachers teach all subjects. At some schools, subject teachers teach upper-grade students.

2. Elementary school teachers in Palau (math)

- As there are no teacher training colleges or a certificate system as in Japan, very few teachers have specialized knowledge such as effective teaching methods or child psychology.
- They sometimes do not understand the content of the subjects they teach. Therefore they sometimes teach only perfunctorily.

For these reasons, many teachers in Palau face the following issues:

1. Teachers sometimes do not fully understand the content of the units and areas they teach.
2. Teachers' instructions are not sufficient for students to master the content of the lesson.
3. They do not know how to use teaching tools effectively.

Case 1: (Issue 1) Teachers sometimes do not fully understand the content of the units and areas they teach.

Palau

In teaching division, when the divisor is a single-digit number, children can use the multiplication tables to calculate, but if the divisor has two digits, children find it difficult to figure out the quotient. They have to round the divisor and the dividend and multiply and subtract in their heads. Therefore when the divisor has two digits, many children find the problem too difficult to solve.

When children calculate on paper and have to subtract by borrowing, they tend to get lost. Teachers themselves may not fully understand the essential points.

Many teachers in Palau do not know where children are likely to make mistakes. In the case of arithmetic, teachers tend to assume that children who make mistakes do not understand the entire unit, but this is not always the case.

What children who cannot divide do

$$\begin{array}{r} 14 \\ 26 \overline{) 356} \\ \underline{26} \\ 116 \\ \underline{100} \\ 16 \end{array}$$

Why they make mistakes

1. They cannot find the quotient.
2. They cannot subtract correctly.
3. They have not mastered the multiplication tables.
4. They cannot divide correctly.

In many cases children fail due to 1 to 3.

Traditional method

- After the lesson, teachers have children check their answers in the textbook. Children are told to mark the wrong answers. Teachers do not analyze why children make mistakes.

- When the whole class fail to answer correctly, teachers think that students have not learned division and repeat the same lesson the next day.

If these lessons are repeated

Children

- They lose interest in math.
- They hate math. → They lose their motivation.

Teachers

- They feel stressed as students are not learning.
- They lose confidence in their teaching. → They don't like teaching math.

To determine where children make mistakes

- When children make mistakes, check exactly what they fail to understand.
- Tell students not to erase their calculations.
- Support students by using actual examples/tools.
- ◎ In order to find students' mistakes early on, carefully monitor their activities in class. (Are they following? Have they stopped thinking?)

Children

- They understand math better and learn the content.
- They become confident as they learn. They become more motivated.

Teachers

- They feel reassured as students are learning.
- They become confident in their ability to teach. → They become willing to devise teaching materials and methods.

Japan

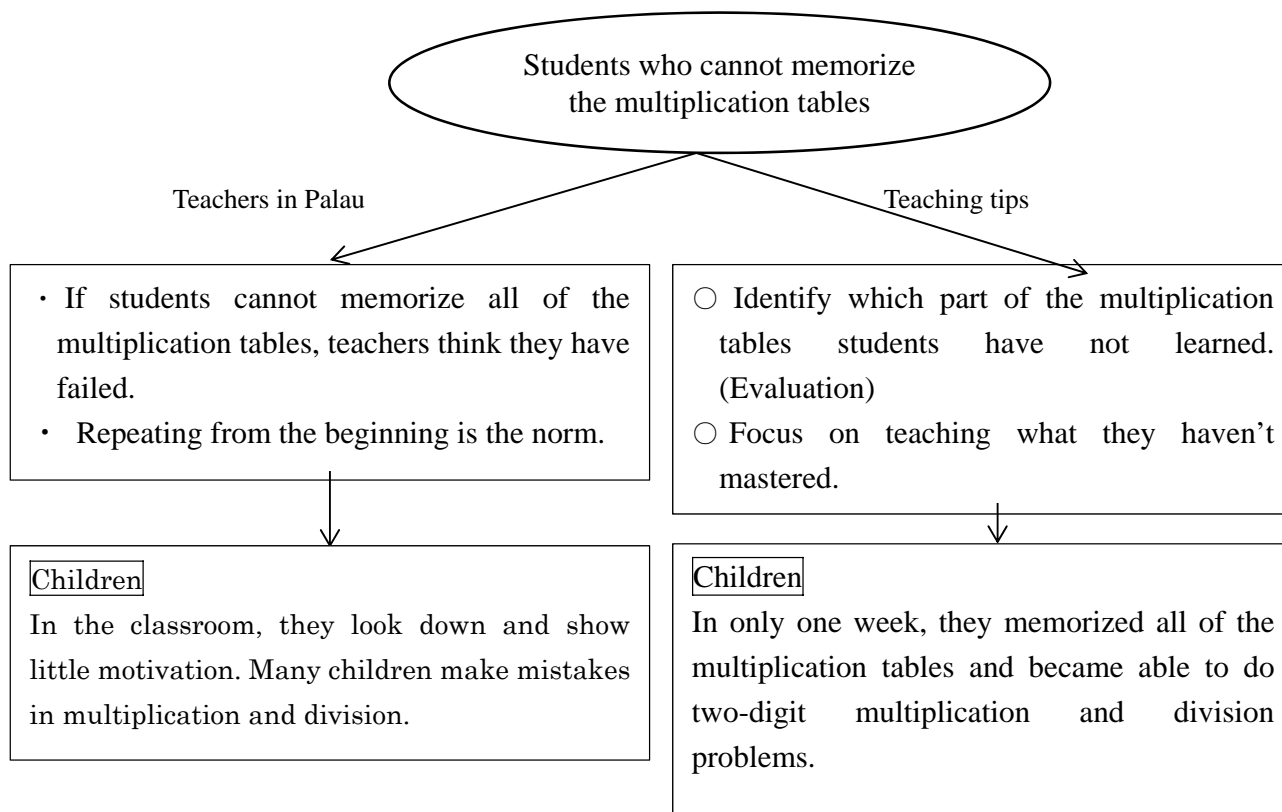
In Japan, many teachers know where students tend to make mistakes and what the important teaching points of each unit are, but teachers with little experience may not be able to identify exactly where students fail to understand. The same applies to teachers in Palau. When teachers cannot teach a subject with confidence, studying teaching material is a heavy burden for them. When teachers have to teach a different grade, it is a good opportunity for them to understand the sequence of the subjects, but if they have to prepare for all subjects and study the learning content, this can also be a great burden for teachers, particularly for those with little experience. This is also an issue with regard to primary school teachers in Japan.

As the recent revision of the course of study shuffled the learning content across grades and introduced “repeated spirals” of learning, not only teachers with little experience but also veteran teachers find it difficult to remember what is taught in which grade, or what their students have already learned. Every time the course of study is revised, classroom teachers must work hard to understand what is taught in the grade they teach and to make sure the content they teach is

linked to what the students have already learned and what they will learn.

Case 2: (Issue 2) Teachers' instructions are not sufficient for students to master the content of the lesson.

It is important and effective to repeat teaching the content that you want children to learn, such as arithmetic, but if students do not understand the content and repeat the same mistakes, repeating the same lesson may work negatively as students lose their motivation. Some teachers in Palau do not know effective methods for teaching these students.



Japan

Through various opportunities, teachers learn teaching tips that help students' understanding, but teachers cannot take enough time to provide individualized instruction and to make sure the students who are falling behind can fully understand the learning content. For example, in arithmetic, children fail to understand for different reasons. Students often need individualized instruction. Some understand with supplementary explanation. Others need a step-by-step explanation of how to solve the problem. Using figures and semi-concrete examples may be effective. Reviewing the content that they have already studied may help, too. Teachers have to pay attention to how each child is reacting in order to provide appropriate instruction.

Although teachers recognize the importance of individualized instruction, they cannot always take time to help students fully understand the content.

3. Comparison between Palau and Japan in terms of the issues of teachers in teaching subjects

I was dispatched to the Palau Ministry of Education as a member of the Japan Overseas Cooperation Volunteers (JOCVs), and when I visited schools to observe classes, I found that many teachers in Palau have the same problems I have described. I also found Japanese teachers face many problems similar to those of the teachers in Palau.

I was in Palau for one year and nine months. During that time JOCVs provided advice to the teachers there on teaching methods and the use of teaching tools, which brought about changes in how they taught in the classroom. I

also recognized that the support given by former JOCVs had taken effect and that many teachers in Palau had gained confidence in teaching.

At Japanese schools, too, we often get ideas from experienced teachers. For those with little experience, the time spent exchanging information and getting advice is extremely important. Teachers are, however, often burdened not only with classroom teaching but also with providing guidance and dealing with other duties at school and cannot concentrate on teaching.

Through my experience, I learned that both Palau and Japan lack sufficient human resources.

In Palau, the Ministry of Education does not have enough staff members who play a key role in conducting teacher training. Some small schools with only one class do not have experienced teachers to train younger teachers.

In Japan, many senior teachers are in their 50s. Those who have worked at the forefront of education for many years will retire in several years. To fill the gap, elementary schools, particularly in urban areas, are significantly increasing the number of teachers they recruit. Training these newly employed teachers is a major issue. Annual in-service teacher training conducted by national and local governments is effective, but teachers can definitely improve their skills through school-based training. More than ever, teacher training in Japan must recognize the importance of experienced teachers' roles in helping develop young teachers' skills.

Comparing the two countries, I realized that classroom teachers face similar problems. Probably, the same applies to every country in the world.

Tomoko Udagawa, Teacher, Sashiogi Elementary School, Saitama City (Former Participant in JOCV Special Participation System for In-service Teachers)

Tomoko Udagawa teaches at Saitama Municipal Sashiogi Elementary School. After graduating from university in 2002, she taught at public elementary schools in the city of Saitama for six years. She joined the Saitama City Mathematics Circle and developed her math teaching skills. In 2008, she was dispatched to the Republic of Palau's Ministry of Education under the Japan Overseas Cooperation Volunteers' special program for in-service teachers. In cooperation with local mathematics specialists in Palau, she visited public primary schools and gave advice and conducted workshops for teachers to help them improve their math teaching methods. She also created textbooks on developing number concepts, mainly for lower primary education. In 2009, she participated in wide-area training for Micronesia, the Marshall Islands and Palau. In 2010, she resumed teaching in Saitama at Sashiogi Elementary School.

[Open Floor Discussions and Question and Answer with Speakers]

Riho Sakurai (Professor, Center for the Study of International Cooperation in Education (CICE), Hiroshima University)

Thank you. At this time we will have the panelists as well as the two keynote speakers come to the stage please. This session again will be facilitated by Dr. Ramon Bacani and this will be not a discussion amongst the speakers but we will take questions from the floor to pick up for discussion. So we ask for your input please.

Ramon Bacani (Director, SEAMEO INNOTECH)

Thank you very much. Good afternoon once again. In order to make the most of this discussion forum we need to set some ground rules. First, we will be accepting questions from the floor. We would like to ask if you have a question please raise your hand, and someone will approach you and give you a microphone. Please give your name and the organization you represent and also kindly make your questions brief and straight to the point. Please indicate as to who among the panel members you are directing your questions. Also, let me add that even if the question is directed to only one of the six panelists, once that panelist has given a response if there is an additional response or reaction from any of the other panelists I would ask that they please feel free to do so. May I now open the floor to questions?

Question 1

Hikaru Kusakabe (Former JICA Expert)

I used to work for JICA in Africa until last year and I would like to ask Dr. Bacani about the giving of recognition to high performing teachers. I understand that this would provide motivation, but on the other hand at the local level it would be quite advantageous to find out model cases by recognizing such teachers. When you have limited resources in remote areas, such excellent performing teachers would really make sense. After you identify such cases, how do you actually try to share such high performing teachers with others? Could in-service training reflect such examples or what are the optimum approaches you can give us so that such teachers can be integrated to further the teaching profession in the Philippines and Southeast Asia?

Ramon Bacani (Director, SEAMEO INNOTECH)

The examples I gave referred to teachers recognized at the national level when I mentioned the cases in Brunei and Singapore but it doesn't need to be limited only to the national level. Certainly at the community level it requires collaboration of the local communities working with the school to give such recognition to such outstanding teachers in the community. Also let me add that even in simple activities like parent teacher conferences at the school level I think that parents can provide feedback to the teachers as to how they are performing especially if they are performing well. It is a small type of recognition but goes a long way to show appreciation for the work being done by teachers. I am sure this question can be answered by other panelists from other cases that they might have.

Edem Adubra (Head of the Secretariat, International Task Force on Teachers for EFA, UNESCO)

An interesting question and let me refer to a specific case. UNESCO has an international prize to reward outstanding practices through a private foundation in the UAE. It is called the UNESCO-Hamdan Prize. There are also prizes at the provincial level and then at the regional level in the UAE. So the next move they made was to approach UNESCO and offer \$90,000 every two years for outstanding performance in teaching and practice internationally. And your point of showcasing these examples is also part of the package. When we organize events, we invite these people

to present. At the local level even the simple point of putting on the notice board a teacher of the month or teacher of the year shows the parent who those teachers are. That is a motivation for the teacher who is asked to present as a result of their classroom teaching.

Ramon Bacani (Director, SEAMEO INNOTECH)

Based on the Philippine experience, in the past whenever some recognition was to be given to teachers, the Ministry of Education would usually ask teachers to organize activities to honor themselves. So some years back, a private university and a corporate foundation initiated a move by the private sector as a way for people other than those in the teaching profession to acknowledge the contribution of teachers to society. This small private sector-led activity has now become a nationwide activity and resulted in the issuance of a Presidential Proclamation declaring a National Teachers Month every year culminating on October 5 which is World Teachers Day.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

One of the problems I faced as Minister of Education was the challenge of promoting good teachers. And the problem in the case of Zimbabwe is that because we are following simple rules the only way to promote good teachers is to kick them out of the classroom and put them into an administrative position. And you lost a good teacher and you got a good manager in return. But the skills for the two positions are different. And thus I am asking this question to Professor Kubota who was talking about having a manager or even a head as someone who had not gone through the education for teaching professions so it would be interesting to hear more about that. When I tried to do it, the Ministry of Finance absolutely said no and they claimed that I was going to create chaos in terms of the way people were being promoted. So I think this forum provides a good opportunity to discuss this question. How do you promote a good teacher and is there an aspect of rewarding that can still keep them in the classroom?

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

Right. As you have pointed out, the Principal, Deputy Principal, and Vice Principal can be filled by people who do not have teacher certificates or academic qualifications. If that happened for example, there are 100 Principals who come without such qualifications and the number has been steady and this system is in place. The Principals originate from the general population and well this is possible with the assumption that this would not be the majority case to have people without certificates becoming Principals. But as you say great teachers don't necessarily become great managers and vice versa and great teachers should remain in classrooms and exhibit their skills. Why we have this system without qualifications for principals is that when it comes to school management we understand great teachers don't become great managers, and management of schools is completely separated from the teaching skills, so that is the major concept we have here. Human resources can be managed as can the quality of education so these are the tasks of managers and those with management caliber don't have to be teachers per se. In fact, the 100 principals used to be members of the private sector and this number is sustained but not increasing with more principals coming from classrooms. There were negative adverse reactions for example about usually having a principal in the early 50s as they have to be aware of the characteristics of different schools with long experiences of teaching so this is the human resource that is best for being a principal. Knowing all about human resources for human management forms the ideal principal and those who do not have such experience in the schools can come from outside. In other words, it was good to stimulate new human resources even though many teachers gave negative feedback so the teacher and teacher advisor positions were also created on a different salary scale. So there are different brackets from teachers to advisors and that is the ladder within the realm of teaching. It is like the management ladder in order to be promoted you have to be an

administrator but for those who enjoy being a teacher and being engaged in caring about children it is now possible for them to be promoted too.

Question 2

Shinichi Ishihara (Associate Professor, Graduate School for International Development and Cooperation, Hiroshima University)

My question is about in-school training for Ms. Udagawa and Professor Kubota. Ms. Udagawa, when speaking about in-school training, you identified the problem with a shortage of veteran teachers in schools. I was wondering if there are any examples where the school is fighting to resolve these issues that you identified. Professor Kubota, in your presentation you talked about the lesson study system that Japan can introduce to the rest of the world but there is also a trend that this lesson study system is declining. This lesson study system takes a bottom up approach and I was wondering if there are any measures to reinvigorate this lesson study system. The next question is to Ms. Rina Rouanet de Núñez. In Guatemala you provide professional development training for in-service training and each person. I would like to know if a teacher who went through professional development goes back to the school to retrain or is there any example of a continuous development case or redevelopment.

Tomoko Udagawa (Teacher, Sashiogi Elementary School in Saitama City, and Former Participant in JOCV Special Participation System for In-Service Teachers)

In-service training as Professor Kubota said is an annual training. In Saitama for the first year training there is a target of how many teachers go through it and also while that happens the veteran teachers in the school offer an opportunity to get ideas every day from the colleague sitting next to you. They listen to you and discuss teaching materials and specific student issues and these things serve as the biggest training as we can learn on a routine basis every day which is the basis of on the job training. Depending on the school there is some periodical training that occurs every year. In the case of our school we have arithmetic training with others.

Rina Rouanet de Núñez (Education Specialist, JICA GUATEMATICA Project Local Coordinator, Guatemala)

In Guatemala, it may be the same as in other Latin American countries. Training courses are not very prosperous because they are organized by the Ministry of Education to provide a continuous improvement, but they are not systematic and if you look at cost effectiveness it is not very successful. The Ministry is trying to systemize it at the university level as a training course. It will be a training program but at the same time it is provided by the university itself, so the benefit of the training courses is that it is based on actual teacher experiences. There are instances where actual teachers will organize an open class in front of colleagues. This is a voluntary program but if other teachers, for instance one teacher goes to university to learn teaching skills, it would be considered as a voluntary effort to share that with colleagues. But the Education Ministry does not think it should be a voluntary effort so the Ministry of Education is now thinking that this teacher should now be a role model and share experiences with other colleagues.

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

I think this is related to what Ms. Rouanet de Núñez just said in that school training itself to revitalize is not the main point. What is more important is within the school the teachers work as a team and the management level or school principal should make an effort for them to work as a team and set objectives. And the Plan-Do-Check-Act (PDCA) concept should be adopted. I think everyone should make efforts to work together using the PDCA concept as a group. Maybe a teacher can achieve something or invent other activities but for lots of activities in the school rather

than a single teacher, a team effort should be made to make the event successful and within the team you can share your ideas and brainstorm. And in the end this could lead to in-school training. Until now when new teachers are introduced on the first day there is new teacher training and a retired teacher will follow up with the newly adopted teacher but going forward we will need new ideas. Even now there is a large number of newly graduated teachers and this overflow of new teachers coming into the school is going forward. In Japan during the pre-service training stage one should emphasize the importance of teamwork and in the university simulated teaching experiences should be provided so they can share and provide feedback already at the school stage.

Question 3

Masayuki Inoue (Japan Educational Exchanges and Services)

I am the chair of international assistance and I have a comment and a question. Before coming here, I was working in the Embassy of Bangladesh which has a population of 160 million and that number is increasing. So developing and retaining good teachers is a very hard challenge. JOCV members there are teachers and when they go to the country as JOCVs they already have experience as a teacher and we send them to the secluded areas in Bangladesh and they are very courageous and do an excellent job. About 25 years ago, there was the Jomtien Conference held in Thailand where Education for All was adopted as after the cold war resources had become available and as it was discussed we (The World Bank, UNESCO, UNICEF, Asia Development Bank) were drawing a rosy picture back then. But now 25 years after that I am not sure how many of those goals have been achieved. So I have a question for Dr. Mutumbuka. As Education Minister you were in a great position to allocate and consider the budget for education. When we talk about education resources, the salaries of teachers account for the biggest chunk. You must have worked very hard to secure that. But aside from that you have to think about the security, utilities, health care and there are a lot of important budgetary problems. Against this backdrop how did you gain the bulk for education? I think it is necessary to have the support from the Prime Minister or Finance Minister. I don't think it was easy but what was the situation like for you and especially in regards to Education for All by UNESCO.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

That is a very difficult question so I will offer just some remarks on this. First of all, as my view today is looking back on what has happened, let me step back and talk about Zimbabwe first. The foundation of Zimbabwe lies in the struggle for independence and when we became free in 1980, education was a key policy for the government. One of the things that I did was to make sure that education was owned by everyone in the country. The importance of education for economic development and social cohesion means that it should be owned by everyone. The Prime Minister at that time through the Minister of Education down to the provincials and from there down to the school level and even individual households agreed. That is an important issue because when the policies are owned by everyone there is an alignment in regards to the importance of education. It then became fairly easy to secure the resources needed to implement education protocols. I can give you some statistics, but if you ask the World Bank, Zimbabwe has one of the best education systems in Africa. It was because of the resources that went into education. For the nine years I was Minister, education always received the highest share of the budget. This has not been maintained and the current Minister of Education always complains that he does not have enough resources which is true. To give you an example we used to spend 22 % on education and training and 6.5 to 7 % of GDP went into education so obviously the results could be translated. Also there was a tremendous enthusiasm to teach and go into education to work for the reforms. Coming back from an official dinner someone said to me that the people said they saw the lights in the Ministry of Education on at 9pm, while the official day ends at 5pm. So they didn't believe that people were still working. You

had not only enthusiasm and energy but also a combination of policies that were aligned, owned nationally and had the resources going to education. One time I remember when we were not given enough and refused to debate other items of the budget. So the whole debate on the issues of policy needs to be collectively owned. Unfortunately and I may also add to that when I was Minister of Education there was no Education for All. If you know it or not, in primary education we were the first African country to break the bottleneck between primary and secondary. Every child who left primary went to one of 177 secondary schools in the county, and when I left that number was over 1,500. The investment was phenomenal from the government. And I remember the World Bank saying you are spending too much money on education. Our response was it is our money and we can decide where we put the priorities. This is an important issue because when the IMF and the World Bank impose an education system it can cause problems. Kenya had a very good education system. When structural adjustment was imposed and they were told how much they could spend it was impossible to employ enough teachers. So there you need ownership, policy alignment and of course resources. But the money is to be put where its mouth is. EFA is also looking at the situation and when I was in the World Bank there was an education sector which I belonged to, and we used to discuss a lot about EFA. Unfortunately, one of the mistakes the World Bank made in Thailand and Dakar when EFA was declared was that the focus was on access only with less effort on quality. You can even see now that the World Bank has back tracked and the current education policy of the World Bank does not talk about EFA and it talks about learning for all. There is a recognition that merely getting children to school without them learning is a double whammy. You raise expectations and you end up with people who are frustrated with all sorts of problems that you create. So my short answer is that we really need to start focusing on the issue of quality and I always contrast what has happened in Africa with the little I know about what has happened in East Asia. At least we used to study Singapore and South Korea where the difference that I see between East Asia and Africa is that in East Asia expansion was always accompanied by quality. When we were expanding the education system of Zimbabwe we never lost sight of quality and did what Singapore did. I am sorry to say that because of the economic problems and wrong policies of the government we now have a really deep crisis in education. To give you some data, last year the nine congressional expenditures allotted to teachers for all their operations was less than the travel packet for the travel budgets of Ministers. So it has practically collapsed. Basically history shows us that you can get out there in front but if you do not maintain it you can also fall to the ground.

Edem Adubra (Head of the Secretariat, International Task Force on Teachers for EFA, UNESCO)

I will try to be short but I can say that it is well-established that a lot of countries are going to miss the 2015 benchmarks on all the goals. There are countries that simply are not going to achieve these goals and one dimension is the quality in African countries of the education provided. It is not relevant to the context. Most of the education systems have been inherited as colonized education so even when they go through school and graduate it is like wastage. To improve efficiency, what happens in classroom needs to be addressed and that is why the emphasis has been put internationally on teachers and which is why we have developed the tools I talked about today. If you need more teachers they need to be qualified and they have to be monitored. They need to have educators in the system who can support them. The countries need to address education holistically and looking at even one sub level and saying that it is not important in terms of recognition will result in goals that will not be achieved. But policy decisions and international resources need to streamline their own resources.

Ramon Bacani (Director, SEAMEO INNOTECH)

I would like to comment briefly on the Philippine experience during the time of EFA with the Ministry of Education. Within the Philippines we did try to promote EFA in line with what Dr. Mutumbuka said, we tried to have a

grand alliance. Education is too important to leave to the government alone much less the Minister of Education. There was really difficult to get the other sectors to buy into this concept. But I think we have had some success. Additionally quality is still a major issue in Philippine Education and there are now initiatives within the present government to address this quality issue.

Question 4

Chiyoko Shinohara

I do not represent an organization but I would like to ask a question to all the panelists. I live in Saitama prefecture. Ms. Udagawa, based on the slides shown you asked very fundamental questions about Palau and have shared your experience. You seem to be quite young and you have had quite a foreign experience which is commendable. As you know, the student enrollment rate in Japan is 100% but what is the enrollment in Palau and is there an economic factor which determines one being enrolled and able to graduate from elementary school? Is it all free of charge? What is the enrollment and graduation rate? The MDGs and also in our discussions today we have highlighted quality of education so training is extremely important. In Japan and locally you mentioned about division and arithmetic and it is very important that students learn the tendency of where they make mistakes. So in Palau when it comes to the course of study is it established as a course of study or should we give some guidance on learning progress? Aside from administrative training, should classroom training be geared to the state of students and in class training? Finally, I have a basic question related to the Guatemala report on literacy and the fact that the report shows a difference between the genders. Could you please elaborate on this?

Tomoko Udagawa (Teacher in Saitama City and Former Participant in JOCV Special Participation System for In-Service Teachers)

Well, as for the literacy rate I haven't looked at the average statistics, but there are only 20,000 people and most can read and write. As there are different languages being spoken, the children in Palau may have a housekeeper and their care is in charge of a Filipino. They hear Tagalog so it is kind of a mixed linguistic environment. Spoken and written language may be different and sometimes children don't know how to write correctly. The local people have different ways of writing properly. The literacy rate may be high but quality may have some problems. The Ministry of Education does not have statistics. A child of six years of age should be enrolled, but some are not because of economic reasons and not able to graduate. The overwhelming issue is the repetition rate and academic performance being delayed so just quitting becomes more of a problem. School lunch is provided in the amount of 50% by the government and the other 50% by the families. For teacher training there is a curriculum involved and very profound support by the US as US textbooks are used to align with the US curriculum. And this needs to be adjusted locally and I have been engaged in the process of adaptation. As far as pre-school in Palau there is much discrepancy between the US. Textbooks are not being used properly and in fact only 40% are used, so I doubt if the curriculum is appropriate. There is no training in the classroom but through JICA such measures as lesson study are being recommended as programs to provide exchange between teachers. It is recommended but not well implemented.

Rina Rouanet de Núñez (Education Specialist, JICA GUATEMATICA Project Local Coordinator, Guatemala)

I would like to address the literacy rate in Guatemala and the gender gap. In the 1990s I shared the experience of being on one project that aimed to enroll female students into the schools because female student enrollment was lower than male students. In Guatemala, there is almost no gap between males and females and both go to school and are enrolled. However, culturally in the rural areas it is more conspicuous and the education for females are neglected

especially for aboriginal people who believe that the boys should have prioritized access to schooling based upon their male gender. The background for this project is to promote equal access to students. The support from Japan and JICA was really helpful and the Ministry of Education implemented the equity of gender with equal access. One of the difficulties was the overall closed environment due to the aboriginal culture, which considers the father with full authority and makes it difficult to talk to the mothers. The enrollment is another issue because it takes a lot of time and this maintains the disparity. More policies are being implemented. The school atmosphere is very friendly and it is a fun place to learn and this is very important in terms of education. The enrollment rate has enhanced the quality of teachers and thus the students learn their abilities and develop the strength to live happily and compatibly in the world. And among the youth it becomes possible to freely express their views and develop their strong competencies and continue this foundation of education. The abilities students obtain through education and the way they acquire them is a common challenge for all countries, as well as the cost involved.

Question 5

Nguyen Chi Thanh (Visiting Professor, CICE, Hiroshima University)

I am Vietnamese and I would like to make one comment and ask one question. My comment is directed to Ms. Udagawa as I found it very interesting when you talked about division and the mistakes small children make and the difficulty for teachers to find the mistakes. And I am very interested in your idea about using experienced teachers for teacher training in the school. But another problem with some experienced teachers is they know that maybe they will not have difficulty to explain why this kind of mistake occurs so I would like to handle that with a training at a school as it is also very important pedagogy to develop knowledge and sometimes experienced teachers cannot see this and explain it. So this kind of mistake for me is not enough. We need to question the mathematics taught and what kind of mathematics are important. I have a question for Dr. Bacani because I am wondering about the competencies of teachers at the junior high school level and whether these are the competencies for primary school or junior high school. I think teachers at the primary school need specific competencies which are different from those at the junior high school. How did your organization come up to defining these competencies?

Ramon Bacani (Director, SEAMEO INNOTECH)

To answer your question about the competency standards there is no distinction made between primary and secondary in the process of formulating these standards.

Question 6

Etsuko Chida (Kanegasaki International Friendship Association)

I am from Iwate and I have a question for Rina Rouanet de Núñez. In Guatemala there are increasing numbers of natural disasters and I think it is difficult to increase investment in education. At present what is the investment in education under the constitution of free education? As one out of two children are enrolled and at the time of graduation they cannot read properly in a multilingual situation, I feel sorry for these children and think that education is going to have to cope with a difficult situation. To improve the current situation one year before enrolling the government should provide opportunities to learn Spanish or within the community Spanish speakers can assist in this. I think it is possible.

Rina Rouanet de Núñez (Education Specialist, JICA GUATEMATICA Project Local Coordinator, Guatemala)

Is it possible to teach Spanish lessons to students? That is already being done but it could destroy the traditions or culture students have been exposed to at home. As a result of the peace treaty, one has to respect the different languages

and cultures within the country, however, the multi-culturalism is considered a richness but can also be an obstacle. The government has to address this problem as we cope with our multilingual situation. Whatever the ethnic background or whatever the language they speak, a high level of education has to be provided. It has been difficult, for example, the textbook has to be translated into the Mayan language. The importance of learning Spanish has to be taught at the same time as the mother tongue. The second language is Spanish so there is a discussion on first and second languages and also we have to place importance on promoting high level of education efforts while maintaining traditions and cultures of different ethnic groups. In the aboriginal community it is difficult to find a teacher in the local areas because they want to go to urban areas where it is easier to move around. In recent years, the Ministry of Education is considering the options in assigning teachers. If the teacher is living in a certain community the teacher has higher respect in that community because the teacher can speak the local language so it would probably work. Maybe it is easier to teach the children in Spanish but it will negate the multi-language stance of the government so we are watching closely to see if everything is in compliance with the peace treaty. Of education investment 96% goes to salaries and the remaining 4% goes to improving quality. So the investment into education and its composition for use is limited so the budget is not ideal. With 96% going to teacher salaries it is not used for updating textbooks or innovating measures and only 4% is used for such purposes. We put emphasis on equity in enrollment and providing education but with 21 different ethnic groups in our country the education is insufficient. The number of students is increasing faster than schools are built and one school is used for three groups of people: in the morning, primary; in the afternoon, junior high school; and at night, another group of junior high school students.

Question 7

Toshio Murata (JICA)

I thank you very much for your insightful comments. When we organize a project with a certain country the program is limited by the education budget in that country so it is difficult to execute but also there is opposition from teachers. For example in classrooms teaching lesson study is an issue. Almost all the time the teachers' union will oppose the idea because it increases the burden on the teacher. I think this may be the case not only on our project but for other projects as well. So if you have any good strategies on how to improve the relationship between Education Ministries and teacher unions, please let us know.

Edem Adubra (Head of the Secretariat, International Task Force on Teachers for EFA, UNESCO)

This is an important issue and what we have when involving teachers in any decision of a reform nature that relates to their status or working conditions is a teacher union. Educational international trade unions all over the world have now moved from being the one promoting decision makers and the approach is to engage in social dialogue and what they are doing is the Global Partnership for Education and Education International (EI) is playing a role in that. They have packages to serve as capacity building institutions for their member unions so that the unions at the country levels are not only claiming rights but assuming responsibility. If we want the teachers considered as professionals they would like to be involved in setting a code of conduct just like in medicine and you may ask about specific examples where this has happened. In Norway, for example, the teachers' union has played a tremendous role. In Africa, for example, when the African Union developed a new map for teacher education in Africa, it involved UNESCO, UNICEF and EI. So by developing the framework together the education practitioners are taking part and have a say. In Benin when they are doing a diagnostic analysis they involved the teacher representative in all stages. However, that didn't prevent the teachers from going on strike for several months. So the solution again would be that there is to say wait we need to dialogue and to see that if you claim a 20% increase of salary, then you must have a clear picture of GDP and the

income this generates and know what income the government can sustain. So the trade is placing social dialogue in the center of teacher training dialogue.

Rina Rouanet de Núñez (Education Specialist, JICA GUATEMATICA Project Local Coordinator, Guatemala)

I do not know about your case but in Brazil, Mexico, Argentina and in Central America, the company unions are very powerful and traditionally they have been very influential. The Ministry and unions are always opposite of each other and in the case of teachers there are some historical aspects for this hostility. However, teachers and the Ministry have the same issues so a mediator was used to share the insight of both parties and for the children's sake it was successful.

[Concluding Discussions]

Riho Sakurai (Professor, Center for the Study of International Cooperation in Education (CICE), Hiroshima University)

Thank you very much. We would like to now start our final session. This is our concluding session but as this forum is an opportunity for open exchange of opinions it is not our aim to come to a conclusion in this session. We have the keynote speakers as well as our panelists and we would like to give 3 minutes to each of the speakers to talk about the major points you thought were important that came out of today's forum.

Tomoko Udagawa (Teacher, Sashiogi Elementary School in Saitama City and Former Participant in JOCV Special Participation System for In-Service Teachers)

There is one thing while I was listening to your presentations. That is the status of teachers tends to be very low in all countries and I wonder why students don't choose to be a teacher. I choose to be a teacher and the reason was because while you are working you are impressed every day and learn something new every day. Not only that, the children are able to do something they were not able to do yesterday and when they come to that understanding the moment of discovery is so encouraging and so moving that they almost break into tears. In physical education class something that one student couldn't do before and suddenly they could do it one day and so everyone cheers. And that is something I love about teaching. What I also love about the profession is that I am learning instead of just teaching. Being a teacher, you continually learn while being a teacher. So I enjoy being a teacher and I am trying to convey that message to my students and I really hope that even one or two of my students feel that the profession of teaching seems to be enjoyable and fun. I am very honored and pleased that I was able to speak with you today.

Rina Rouanet de Núñez (Education Specialist, JICA GUATEMATICA Project Local Coordinator, Guatemala)

The theme is education and you may choose to become a teacher as a profession or you may become a teacher because you need a financial income. In this forum there was a lot of discussion and we talked a lot about what a good teacher is and what they can provide for the learning of the students. We are in a very critical situation and we need to enhance and generate outcomes toward a high quality teaching. In Latin American countries there is still an old-fashioned way of training teachers which is insufficient. Unless the quality of teachers improve the enrollment rate will not increase. A teacher has to have sufficient knowledge of the content matter and quality is quite abstract so you have to turn it into something more concrete. According to my experience in Guatemala they should be trained to become teachers in accredited universities because there they can receive an adequate level of training but this is not the case in my country and in certifying teachers. However we need more time to increase quality and we need more experienced teachers so they can convey that to the younger generation of teachers.

Ramon Bacani (Director, SEAMEO INNOTECH)

By way of sharing an insight I would like to make a proposition that teaching is both a science as well as an art. And we know there are a lot of initiatives directed at teaching as a science. Many of the things we discussed today really deal with how to improve teaching as a science: pedagogical skills, ICT teaching, learning process and so we know many of the policy interventions that are being used by governments. But when we talk about the art of teaching we do not know as much. The science of teaching is directed at the minds of teachers but for the art of teaching we should look at the heart of teachers and I think this is where less is known. What we need to do is to learn how to continuously motivate and inspire teachers to stay committed and dedicated to the profession. And if we are unable to do this, since teaching

is often a lifetime career for most teachers, they will probably suffer from burnout and emotional and mental stress and not be able to discover their passion for teaching. We need not just governments but communities to recognize this in our society. In the Philippines we have a national campaign called “My Teacher, My Hero” because we recognize that teachers can really make a difference in the life of students who are entrusted to them. And when we ask successful professionals who influenced them, they often remember teachers who have made a significant influence in their lives. So that is the slogan we have been using in the Philippines even in the mass media. During the National Teachers Month some private sector companies give a discount to teachers who present their ID when buying something or going to a movie house. Acknowledging the effort of teachers has to really look at ways to motivate and inspire our teachers, otherwise, they will not be able to meet our expectations. Teaching is a demanding profession.

Shinji Kubota (Professor, Division of Education, Faculty of Human Sciences, University of Tsukuba)

In the last question there was the issue of unions and how they oppose lesson study. I have no concrete evidence about this but let's think about what you are saying. It reminded me of another question about the student evaluation this morning. The Teachers Union in Japan is also opposed to the evaluation of schools. The reason they are opposed is very common and which may be the very same as lesson study. For the development of students or to enhance the quality of a school, if a teacher makes an effort for these schools they know they are making a difference. Teachers do not feel they are doing anything with school evaluation or lesson study. Schools have their own studies on voluntary conduct during working hours and if they are going to contribute to the development of students then they are willing to do whatever is necessary so you need to have them feel that it is rewarding. That is my opinion or impression. In order to enhance the quality of teachers you need financial resources and that has been emphasized over and over and I cannot comment on that anymore. And I did talk about the experience of Japan and the various issues which may be resolved step by step to enhance the quality of teachers which may improve the enrollment rate of teachers. And if these other countries increase their level of education then their countries will be facing the same problems that we are facing in Japan such as collaboration with local communities and the mental health of teachers. Those problems occur as a result of EFA. When everyone is receiving education then these new problems emerge. There is a saying in Japan that if the wheels you see in front of you are caught in a rut, then you should not follow the same path. So the challenge that the Japanese teacher faces in Japan is something that can be an indicator for you in the future.

Dzingai Mutumbuka (Chair, Association for the Development of Education in Africa)

In Africa we often talk about a safari as a journey. So if education is a journey we are taking, on a safari when we go to the game park to see some exotic plants, what you need is a good guide. So if education is a safari the teachers are our guides. And if this journey is going to succeed we need the best guides possible. And whatever I gave you to undertake, whether it is long or short, whether it is rugged terrain or smooth terrain, you need the best guides possible. So my first take is that whatever level of development a country is at it needs to format and implement the best possible policies on getting the maximum amount from its teachers. The second thing that I want to take from today's experience is that this forum is really excellent for an exchange and sharing of experiences between the North and the South, the East and the West. Well done to the organizers. Well done to the people who thought of this idea. Please keep it up. Keep it up. Keep it up.

Edem Adubra (Head of the Secretariat, International Task Force on Teachers for EFA, UNESCO)

Thank you very much. What Professor Sakurai has not told you is she has asked me not to give my own impression but has tasked me to give a wrap-up of what it is happened today. In French culture that is what remains when

everything else is forgotten. I have forgotten the wealth of contributions that you have made but I have five sub-themes from everything that has happened today:

1. Teacher preparation and continuing professional development matters whether it is in Japan or the regional areas presented here. It is fundamental. We talked about content knowledge and pedagogical skills and know-how. We also talked about the debate on academic qualifications. If the training teacher goes to a certain level of education is it good for his/her future profession? We are not unanimous about which academic level to set because the reality of Japan is not the same and we cannot expect all primary teachers in Lesotho can have an MA degree. Pre-service has to account for practical in school training where the teacher is not just learning theory but is teaching and has experienced what happens in schools to be prepared to start the journey. Who is to provide the in-service training? Who will provide self-learning opportunities for the teacher to upgrade his/her own knowledge?
2. The second major area is teacher motivation and working conditions. There is a low status of the profession and in addition there are other burdens and peer pressure and requirements of new subjects and new development in the same subject. There is also teacher performance assessment. Who shall assess the teacher and motivate them to do better? We all agree that the teacher himself or herself should be a part of that process. There is a special role for school leadership and management. I use both because management was used as in plain infrastructure management but also there is leadership of structural leaders such as school principals that should be provided. It should not be limited to teachers and principals alone, but one principal has to wear all those hats. Recognition of good teaching. How to reward good practice? Examples were given and also evidence produced. When good teaching practice is recognized it should thus be used or disseminated.
3. The third major point was values in education and it was said again and again that values are not limiting knowledge and skills. School environment also matters. Learning languages in education, gender inequality, and immigrant population coming to our educational system, we need to take care of these students. And we need to have respect to the teacher.
4. The fourth element consists of monitoring and evaluation reforms related to the teaching profession. In Japan we saw the aging population and we do need to monitor the age of our teaching population when we prepare all of us are going to retire. So there is a need for monitoring and documenting results. Professional development schemes are said to have an impact on the quality of teaching. Monitoring is important. What works and what does not work have to be identified in order for policy measures to be taken. Regarding accountability, because teaching and teacher training represent a high cost, a lot of people look at the profession. We need to account for that. Teachers need to be a part of that and need to be accountable for that they are expected to deliver.
5. The final point is the international population in education. This may not look like a point to identify but the composition of the panel was well done and even though while we are talking about two different cases, Japan today and African countries, the first thing the professor said is that there are similarities in the issues and what Japan has gone through years ago also resonated in the keynote speech. Avoidance of the same mistakes, learning good lessons to adopt, because although the situation is different, there are things that can be taken like those principles that could help. The second element is to help find a global framework like EFA which works. The international community agreed on benchmarks and the answer is not all countries are moving at the same pace but monitoring those frameworks allows countries to know where they are and how they can better plan to bridge the gaps.

I have forgotten everything else that has been said today and I thank you for the opportunity of being a part of this and look forward to the continuation of the dialogue and the next JEF.

Riho Sakurai (Professor, Center for the Study of International Cooperation in Education (CICE), Hiroshima University)

The theme of JEF X was collaboration toward self-reliant educational development and within that issues concerning teachers toward expanding good quality basic teacher education. Quality and teachers were highlighted and I believe this theme we have shared today is really relevant not only to Japan but also to other countries. Also very relevant to this theme is the work of Phillip Jackson who said the action of teaching has two meanings. One is the transmission of knowledge based on a mimic mode and the second is a transformative mode which generates changes in the attitude and lifestyle of the learners. Today the quality of education was highlighted and what it means is that it is time for us to make this transformation from mimicry to the transformative mode. Looking toward 2015 Japan's educational collaboration should continue further and to this end it is extremely important that we put emphasis on the enhancement of education. We should all collaborate together in resolving these issues. Last but not the least this forum is not meant to come up with a single conclusion but to provide a thought provoking venue on education and what should be done in the future. I hope we have been able to accomplish this goal and I would like to thank all of the participants.

Appendix

Presented by

Keynote Speech “Teachers: the Bridge to Future for Education in Africa”

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Keynote Speech “Issues concerning Japanese Teachers at Compulsory Education Level”

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Panel Session

“Issues concerning Teachers, Affecting the Learning Achievement of Students in Primary Education”

“Challenges Faced by Teachers of Lower Secondary Education”

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Association for the Development of Education in Africa

JAPAN EDUCATIONAL FORUM X

“Teachers: the Bridge to Future for Education in Africa”

Dzingai MUTUMBUKA
Chair
Association for the Development of Education in Africa (ADEA)

THURSDAY, FEBRUARY 07, 2013



Association for the Development of Education in Africa

FROM CHEMISTRY TO EDUCATION


- Training in Chemistry
- Teaching in Ireland/ Zambia
- Schools under trees, the birth of the Zimbabwe Integrated National Teacher Education Course (ZINTEC) / the Zimbabwe Science (ZIMSCI)
- Other training programs



Association for the Development of Education in Africa

TEACHERS: THE BRIDGE TO THE FUTURE FOR AFRICAN EDUCATION

- Education as an instrument for social advancement
- Education is capital and labor intensive. Teachers payroll constitutes the largest share of any education budget
- On average, 80% of current expenditure is devoted to teacher salaries yet, little policy attention
- Use of technology to replace the teacher
- The Miracle of Wenchi




Association for the Development of Education in Africa

I. DEMAND AND SUPPLY OF TEACHERS IN AFRICA

DEMAND/ SUPPLY SIDE :

1. **Number of Teachers Needed:** Globally 1.7 million new teaching posts to achieve Universal Primary Education (UPE) of which 993,000 for Africa.
Due to attrition, Sub-Saharan Africa (SSA) will need 1.8 million
- Great variability among countries with greatest need in 24 countries of Central and West Africa (Eritrea 24%, Central African Republic 16%, Chad 16%)
- Needs for Early Childhood Care and Education (ECCE) excluded from above (At 17% SSA lowest region with the next, South Asia at 48%)
- Moreover, secondary teacher requirements not factored
- In order to achieve UPE in 2015, it is estimated that 2.4 million new teachers will be needed, (given the Teacher-Student Ratio (TSR), teacher attrition and repetitions).




Association for the Development of Education in Africa

I. DEMAND AND SUPPLY OF TEACHERS IN AFRICA

DEMAND/ SUPPLY SIDE :

2. **Teacher Training :** Overall, the teacher training institutions' capacity to “produce” teachers is weak, but varies greatly from country to country. Kenya and Zimbabwe produce surpluses of teachers that exceed their demand. Whereas in Mali the 13 Teachers' Training Institutes produce annually 1500 teachers instead of the 2000 needed (a deficit of 500) teachers.
 - Competition for candidates with prestigious occupations, law, medicine, engineering etc.
 - Many governments lack the resources to higher newly trained teachers.
 - Moreover no funding is set aside for in-service training.




Association for the Development of Education in Africa

I. DEMAND AND SUPPLY OF TEACHERS IN AFRICA

FACTORS IMPACTING DEMAND FOR TEACHERS :

1. **Population Growth:** The primary school-age population is slated to increase by 1.7% per year on average.
2. **Repetition Policies:** Repetition rates, on average, were 6% annually in 2006
3. **Teacher-Student Ratio (TSR):** Influences the numbers of teachers to be hired. On average 1:53 but varies from country to country




Association for the Development of Education in Africa

I. DEMAND AND SUPPLY OF TEACHERS IN AFRICA

FACTORS IMPACTING THE DEMAND OF TEACHERS:

4. **Teacher Attrition Rate:** The flow of teachers leaving the system every year for various reasons (retirement, etc.); a low rate of 2% in Eritrea and a high rate of 9% in Zambia
5. **Conflict, Violence and Crisis:** 22 armed conflicts recorded in Africa in 2007. Post-electoral conflict displaced 1800 teachers in Kenya. 80000 teachers and students were displaced in Eastern Democratic Republic of Congo (DRC) last November.




Association for the Development of Education in Africa

II. CHALLENGES

TEACHER QUALIFICATIONS:


1. **Teacher Qualification:** In Africa, trained teachers are not necessarily knowledgeable or professionally skilled to be considered qualified. Several African countries have had to resort to less qualified or even unqualified teachers to face the rising access demand at all levels. This underscores the importance of pre-service teacher training. Three groups of countries report 3 different situations:

 Association for the Development of Education in Africa

II. CHALLENGES

TEACHER QUALIFICATIONS:


- Côte d'Ivoire, Djibouti, Mauritania, Mauritius, Morocco report that all their primary school teachers are qualified.
- 16 countries out of a 34 for which data were available in 2009-2010 report an average of 75-99% of qualified teachers
- 6 countries (Benin, Chad, Equatorial Guinea, Ethiopia, Guinea Bissau and Sao Tomé and Principe report an average of 50% of trained primary school teachers

 Association for the Development of Education in Africa

II. CHALLENGES

TEACHERS SALARIES:


2. **Teacher Salary:** There is a high variability in average teacher salary levels from country to country in Africa. Whereas in 2006, the average level of primary school teacher salary in Africa represented about four times the GDP per capita (3.5), this figure was about 4.5 in 2010, one point increased.

 Association for the Development of Education in Africa

II. CHALLENGES

SHORTAGE OF MATH/ SCIENCE TEACHERS:


3. **Science Teachers:** A key challenge is the undersupply of science, mathematics and technology teachers in the whole continent. This jeopardizes Africa ability to produce a critical mass of scientists. A plethora of initiatives have been launched and are currently being implemented in this respect; they include but are not limited to ADEA's engagement with the Project on Strengthening of Mathematics and Science in Secondary Education (SMASE), Working Group (WG) on Science and Mathematics (SM), Next Einstein Initiatives in Cape Town (South Africa), African Union (AU), African Development Bank (AfDB) and United Nations Economic Commission for Africa (UNECA) Initiative on Science in Africa.

 Association for the Development of Education in Africa

II. CHALLENGES

TEACHER STATUS:

4. **Teacher Status:** Does status make the teacher? ADEA's contractual teacher initiative known as the Bamako initiative (2004) and the Bamako + 5 (2009) focused on the contractual teacher issue. The status of the various categories of teachers: civil servants, contract, voluntary, community and others was scrutinized in-depth during two conferences that brought together all the major stakeholders. Key recommendations were made by the participants.

 Association for the Development of Education in Africa

II. CHALLENGES

DEPLOYMENT, SERVICE CONDITIONS, AND MOTIVATION:

5. **Deployment :** Coherence to teacher deployment should be throughout the territory to combat the rural/urban and rich/poor areas disparity. Inadequate distribution can jeopardize the generalization of UPE and negatively impact on educational quality. For example, in Burkina Faso, some schools with 400 pupils have 8 teachers, while others have only 4. Similarly, among schools with 10 teachers, enrolments can vary from 210 to 877.
6. **Conditions, Terms of Service and Motivation:** Conditions and terms of service have direct impact on whether the profession can attract and retain the best talent. Currently teaching is viewed in unfavorable terms and fails to attract and retain the best and brightest.

 Association for the Development of Education in Africa

III. WAY FORWARD AND SUGGESTIONS

ONGOING INITIATIVES:

- UNESCO Teacher Training Initiative for Sub-Saharan Africa (TTISA) launched in 2005 aims at improving the quality and supply of teachers
- African Union Pan African Conference on Teacher Education and Development (PACTED) launched in 2011 aims at also improving the conditions of service and supply of primary school teachers
- The Commonwealth Secretariat Teacher Education in Sub-Saharan Africa (TESSA) launched in 2006 aims also at improving the supply and quantity of teachers in Africa
- International Task Force on Teachers for EFA: This initiative is hosted by UNESCO Headquarters in Paris and strives to improve the supply of teachers to meet the EFA goals by 2015.

 Association for the Development of Education in Africa

IV. WAY FORWARD

SOME SUGGESTIONS:

- Develop comprehensive teacher policies for all African countries and design national operational plans that are cost and budgeted for their effective and sustained implementation at the national, provincial and local levels;
- Mobilize partners at both international and national levels including all the key stakeholders (e.g., government, civil society, communities, teachers unions, etc.) for its implementation;
- Develop and implement a teacher supply acceleration plan for EFA in 2015 that highlights the key priorities and strategies and the ways and means to achieve them.

 Association for the Development of Education in Africa

JAPAN EDUCATIONAL FORUM X

THANK YOU

Issues concerning Japanese Teachers at Compulsory Education Schools

Keynote Speech, JEFX
Shinji Kubota, Faculty of Human Sciences, University of Tsukuba
February 7, 2013

1

Issues concerning Japanese Teachers at Compulsory Education Schools

- ▶ Pre-school teacher training to address the issues at school
- ▶ Issues related to recruiting teachers
- ▶ Issues concerning diversified duties of teachers in relation to in-service teacher training
- ▶ Desired quality of compulsory school teachers to address the educational issues of the 21st century

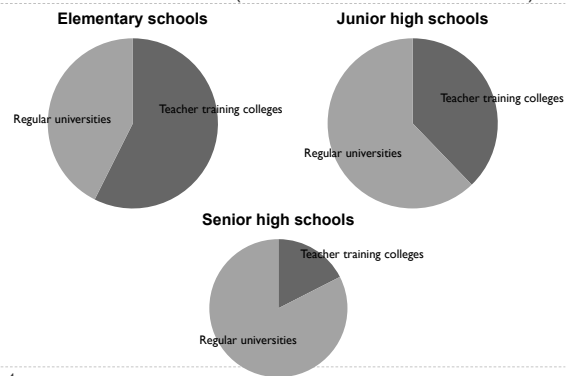
▶ 2

Outline of the institutional systems concerning Japanese teachers at compulsory education schools

1. Teacher training is conducted at the universities accredited to conduct such training. (Elementary school teacher training is mainly conducted at teacher training faculties and departments, and secondary school teacher training at regular universities as well as at teacher training faculties and departments.)
2. Most compulsory education schools are established by municipalities (A total of 98.4% of elementary school teachers and 93.5% of junior high school teachers work at municipal schools).
3. Prefectural governments pay the salaries of teachers at compulsory education public schools. The national government supports one-third of these salaries (based on the Act on Standards for Class Formation and Fixed Number of School Personnel).
4. Prefectural governments and government-ordinance-designated cities have appointive power. (They are in charge of the job classification plan, wide-area personnel system and conducting training.)
5. Public education personnel are different from other public employees: probationary term of one year (six months for other public employees), obligatory training (a right for other public employees), unique salary and allowance system (special advantages, salary adjustment for teachers, etc.), and obligations arising from their status (restrictions on political acts, etc.)

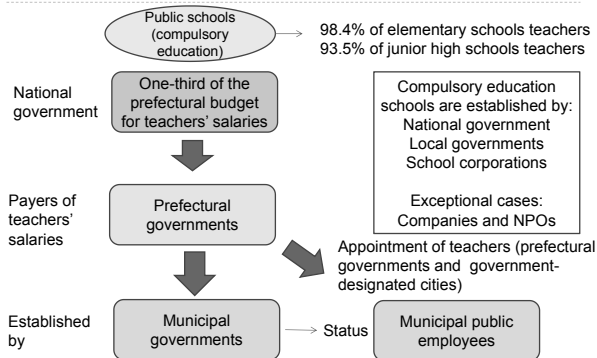
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Graduates of teacher training colleges and of regular universities (FY2000 Statistics on Teachers)



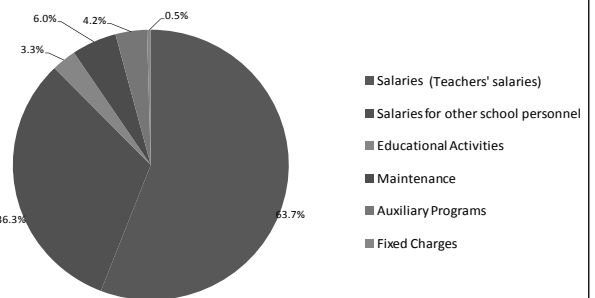
▶ 4

Establishment of compulsory education schools and the payers of teachers' salaries



▶ 5

Personnel expenditure ratio of the educational expenditure (consumptive expenditure) (FY2010 Survey on Local Educational Expenditure)



▶ 6

General public employees and educational public employees

	General public employees	Educational public employees
Probationary term	Six months	One year
Training	Right	Obligation
Overtime payment	Overtime payment	Salary adjustment for teachers (fixed rate)
Restrictions on political acts	Local Public Service Act	National Public Service Act

Other differences include restrictions on working for profit-making enterprises, severity of disciplinary action, etc.

▶ 7

Recent institutional reforms related to teachers

1. More flexible certificate system, upgraded in-service training system, certificate renewal system

- a. Special certificate system (1988), special part-time teacher system (1988), principals from private sector (2000)
- b. Teaching profession graduate school system (2008)
- c. Certificate renewal system (2009)

2. More competitive compulsory education schools

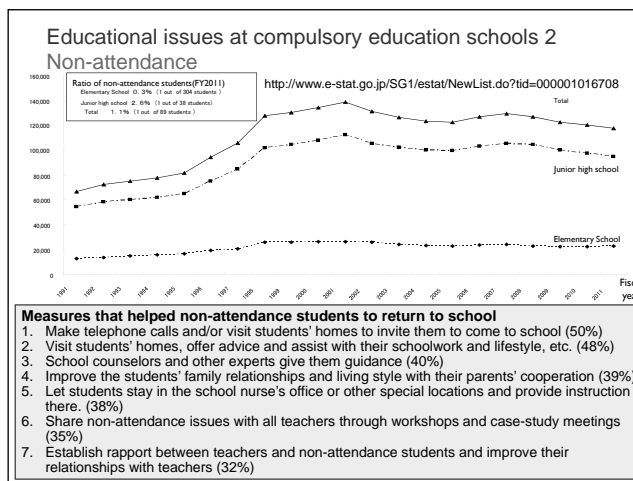
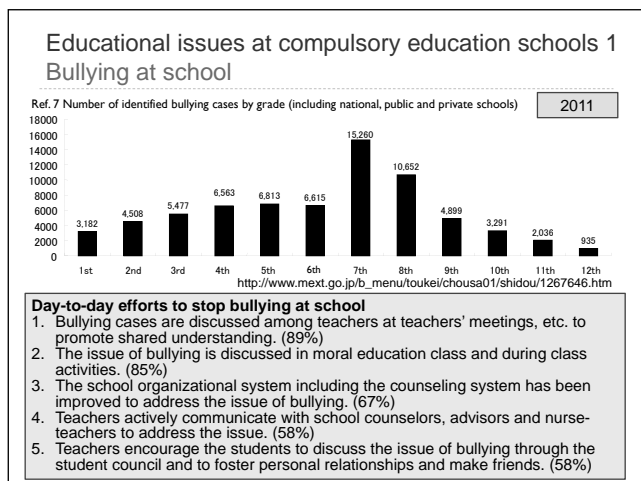
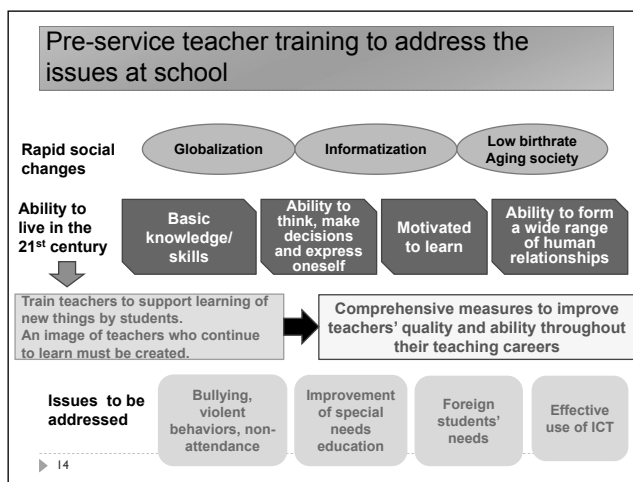
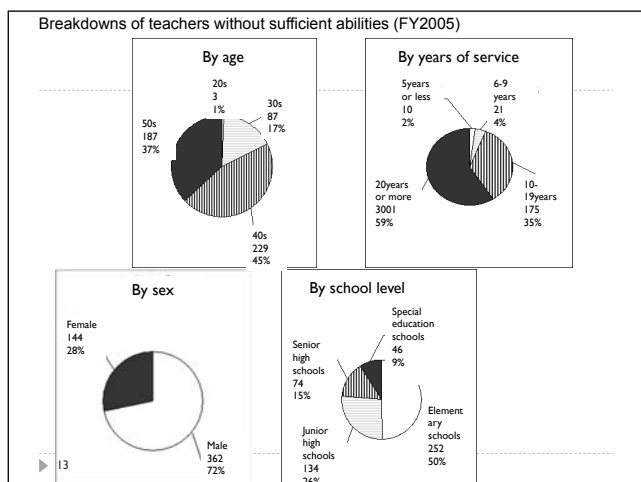
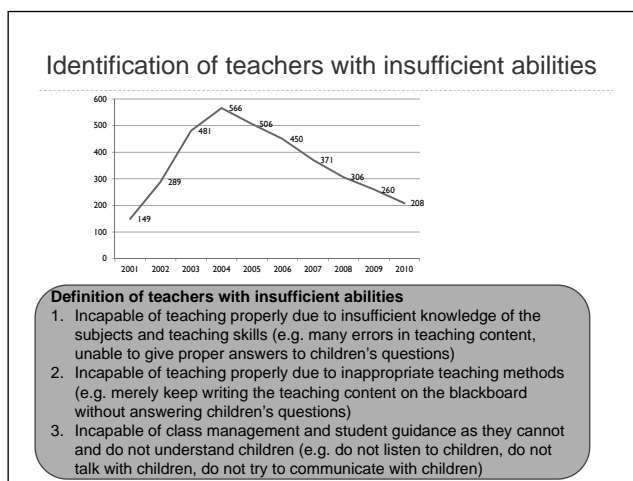
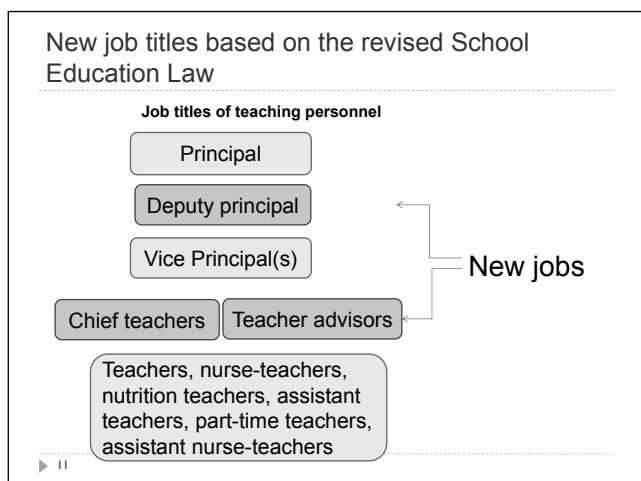
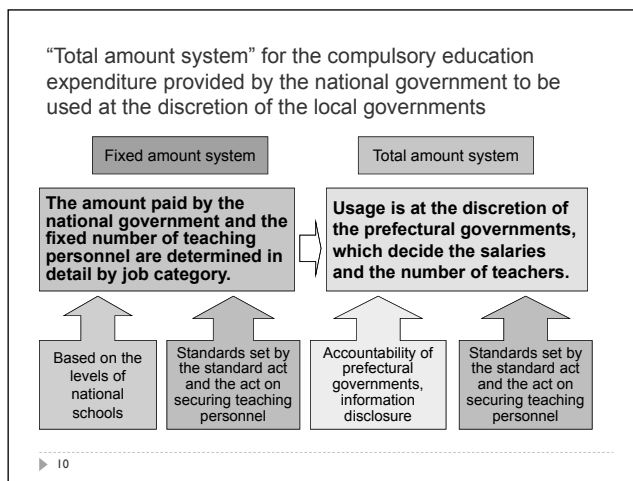
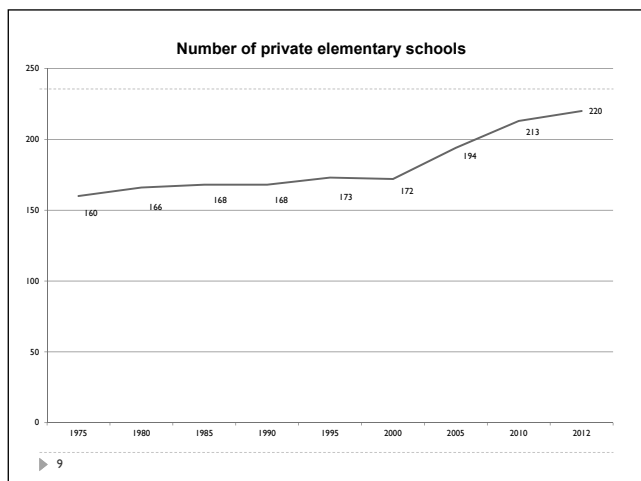
- a. Promotion of establishing private schools based on the Standards for Establishing Elementary and Junior High Schools (2002)
- b. Special measures to permit schools established by companies (2004)

3. "Total amount system" at the discretion of local government through decentralization (2004)

4. Pyramid organization by introducing new job titles (2007)

5. Teacher evaluation system and identification of teachers with insufficient abilities (started in 2000)

▶ 8



Educational issues at compulsory education schools 3 Special needs education

Students who are in regular classes but may have developmental disorders and need special care

Table1: Ratio of students who are not intellectually challenged but have major learning and/or behavioral problems (based on homeroom teacher's responses)

	Estimated rate (95% confidence interval)
Have major learning or behavioral problems	6.5% (6.2%~6.8%)
Have major learning problems	4.5% (4.2%~4.7%)
Have major behavioral problems	3.6% (3.4%~3.9%)
Have major learning and behavioral problems	1.6% (1.5%~1.7%)

※ "Have major learning problems" means that students have great difficulty with more than one of the following activities: listening, speaking, reading, writing, arithmetic and reasoning. "Have major behavioral problems" means that students demonstrate more than one of the following problems: inability to concentrate, hyperactive, or obsessive and lacking in communication skills.

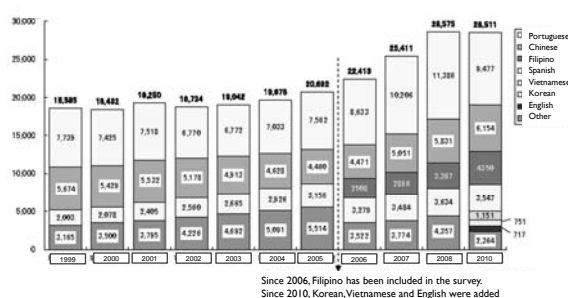
Table2: Ratio of students who are not intellectually challenged but have major learning and/or behavioral problems (based on homeroom teacher's responses)

	Estimated rate (95% confidence interval)
A: Have major learning problems	4.5% (4.2%~4.7%)
B: Unable to concentrate or hyperactive	3.1% (2.9%~3.3%)
C: Extremely obsessive and lacking in communication skills	1.1% (1.0%~1.3%)

http://www.mext.go.jp/a_menu/shotou/tokubetu/material/_icsFiles/afieldfile/2012/12/05/1328849_01.pdf

Educational issues at compulsory education schools 4 Addressing the needs of foreign students

Number of foreign students who need to take Japanese language lessons (by mother language)



http://www.mext.go.jp/b_menu/houdou/23/08/_icsFiles/afieldfile/2011/12/12/1309275_1.pdf

Educational issues at compulsory education schools 5 Use of ICT

http://www2.japet.or.jp/ict-chosha/ict_chosha_data.pdf

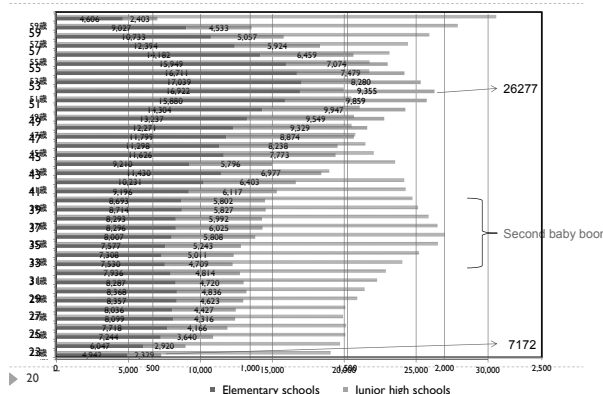
	n	Use of ICT (%)				Used (Total)	Not Used (Total)
		Often used	Sometimes used	Seldom used	Not used at all		
Total	(1,119)	4.2	33.8	43.6	18.4	38.0	62.0
Elementary schools	(513)	5.8	46.4	40.5	7.2	52.2	47.8
Junior high schools	(258)	1.9	26.0	48.8	23.3	27.9	72.1
Senior high schools	(258)	3.1	17.4	46.1	33.3	20.5	79.5
Special needs schools	(80)	4.4	31.1	38.9	25.6	35.6	64.4

How ICT is used in classrooms:

- To show websites, including images, related to topics dealt with in the classroom (elementary schools: 76%, junior high schools: 51%)
- To have children do research on topics dealt with in the classroom, using the Internet (elementary schools: 79%, junior high schools: 44%)
- To use digital/ICT teaching materials based on authorized textbooks on the topics dealt with in the classroom (elementary schools: 63%, junior high schools: 45%)

Issues related to recruiting teachers

Number of teachers by age (as of March 2011)



Number of applicants, number of employed people, competition rate in FY2010

Pref./City	Elementary schools			Junior high schools			Senior high schools		
	Number of applicants	Number of employed people	Competition rate	Number of applicants	Number of employed people	Competition rate	Number of applicants	Number of employed people	Competition rate
Aomori Pref.	579	23	25.2	803	41	14.7	565	68	8.3
Iwate Pref.	539	24	22.5	486	36	13.6	528	40	13.2
Nagasaki Pref.	579	38	15.2	529	25	21.2	530	45	11.8
Okawa Pref.	1,448	108	13.4	1,080	41	26.3	1,824	87	22.1
Fukushima Pref.	824	63	13.1	832	35	23.8	1,220	94	13.0
: Akita Pref.	150	15	10.0	355	10	35.5	408	29	14.1
: Niigata Pref.	543	79	6.9	861	72	9.2	500	60	8.3
: Kawasaki City	724	235	3.1	518	106	4.8	40	15	4.6
Osaka City	993	323	3.1	977	234	4.2	169	11	15.4
Aichi City	2,251	748	3.0	2,413	400	6.0	1,987	278	7.1
Hiroshima Pref. & City	936	313	3.0	1,023	166	6.2	795	116	6.9
Chiba Pref. & City	2,021	718	2.8	3,553	399	5.7	220	5.7	
Total	54,418	12,302	4.4	58,060	6,810	8.7	34,731	4,289	8.1

http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo11/shiroyi/_icsFiles/afieldfile/2010/09/29/1297700_03.pdf

Improvement in the fixed number of teaching personnel at public compulsory education schools

	1st period 1959-1963	2nd period 1964-1968	3rd period 1969-1973	4th period 1974-1978	5th period 1979-1983	6th period 1984-1988	7th period 1989-1993
content	Establishment of standards for class formation and the fixed number of teaching personnel	Maximum class size to be 45, fixed number of teachers at special education schools	Elimination of classes that combine students from four or more grades	Elimination of classes that combine students from three or more grades, introduction of fixed number of vice-principals and nutrition teachers	Maximum class size to be 40	Fixed number of personnel for improving teaching methods	Small classes, two or more vice-principals and nurse-teachers at a school
Increased number	34,000	61,683	28,532	24,378	79,380	30,400	26,900
Natural increase or decrease	△18,000	△77,960	△11,801	38,610	△57,932	△78,600	△26,900
Net increase/decrease	16,000	△16,277	16,731	62,988	21,448	△48,200	0

http://www.mext.go.jp/b_menu/houdou/22/08/_icsFiles/afieldfile/2010/08/27/1297049_03.pdf

New plan to improve the fixed number of school personnel to address the issues of children (2013-2017)

- To solve various problems at school
- To achieve high quality education at a world-class level in order to give attentive care to children
- To promote small classes and to continue improving the fixed number of school personnel to address individual educational issues

Since FY2006, the national government has not implemented any planned improvement in the fixed number of personnel. This is one reason why the number of temporary teachers increased (from 13.2% to 16% in the last five years). By formulating the improvement plan, the national government can prevent an increase in temporary personnel.

- To promote an optimum class size of 35 or less: 19,800 people
- To increase the number of teachers in order to address individual educational issues: 8,000 people

- To support improving academic achievements and motivation for learning (to eliminate educational disparities)
- To support special needs education by offering resource rooms for children in order to promote inclusive education
- To teach Japanese to foreign students
- To increase the number of subject specialists at elementary schools
- To support school-community collaboration
- To improve school management to address bullying and other issues
- To support improvement in the quality of teachers (send teachers to teaching profession graduate schools, etc.)

PTR after implementing the new plan

	Current	New plan
Elementary	17.7	16.4
Junior high	14.1	13.0

OECD average:

Elementary	16.0
Junior high	13.5

http://www.mext.go.jp/a_menu/shotou/hensei/003/_icsFiles/afieldfile/2012/09/21/1326013_01.pdf

Issues concerning diversified duties of teachers

- Increased workload
- Teachers' mental health

▶ 24

Increased workload

Figure 2 Average overtime hours at school and at home per holiday (all elementary school teachers)

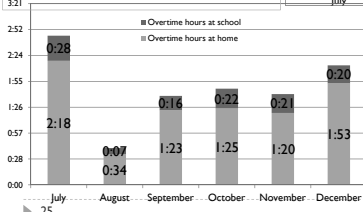
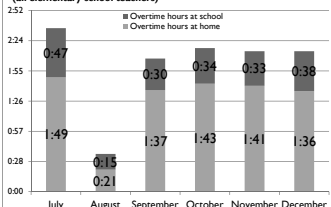


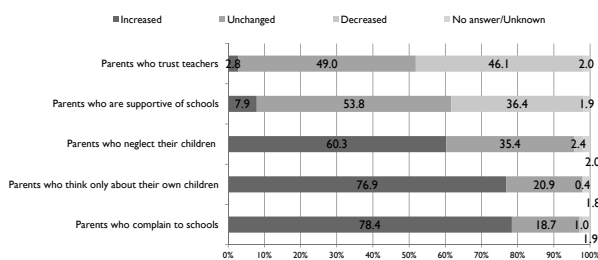
Figure 1 Average overtime hours at school and at home per weekday (all elementary school teachers)



Observations on teachers' heavy workloads and their characteristics
Yasuko Nitani
Kokyoiku System Kenkyu 11:1-36, May 31, 2012.
<http://hdl.handle.net/2115/49362>

More complaints against schools

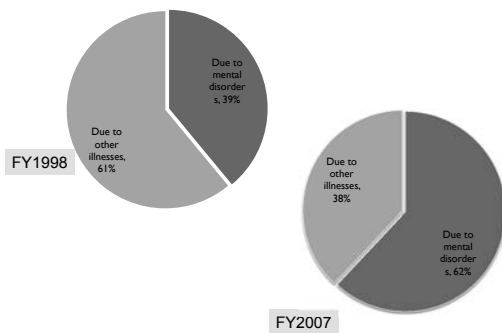
Figure 5 Changes in parents (elementary school teachers)



Benesse Educational Research & Development Center, Report on the Fourth Basic Survey of Educational Guidance, 2007, quotation.
Matsuda, op. cit.

27

Public school teachers on sick leave



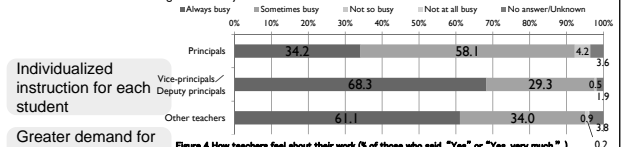
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Desired quality of compulsory school teachers to address the educational issues of the 21st century

- Improvement in the quality of teachers through pre-service training, employment and in-service training
- Teachers (schools) who are trusted by parents and local people
- Teachers who can flexibly adapt to collaboration at integrated elementary-junior high schools

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Figure 3 Heavy workload

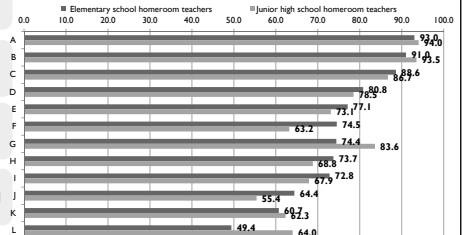


Individualized instruction for each student
Greater demand for well-planned lessons

More students need discipline
More paperwork and documents to prepare

More time needed for parents and local people

Figure 4 How teachers feel about their work (% of those who said, "Yes" or "Yes, very much.")



Tomoko Matsuda, Bulletin of Kyoto Koka Women's University, Junior College, Vol. 46, "Responding to parents at public compulsory education schools of today: an analysis of parents' demands, protests and complaints," p.170, 2008.
http://cd.nii.ac.jp/leis/110006981073.pdf?id=ART000893563&type=pdf&lang=jp&host=cini&order_no=8&ppv_type=0&lang_sw=&no=1353482231&cp=

Unreasonable demands of parents

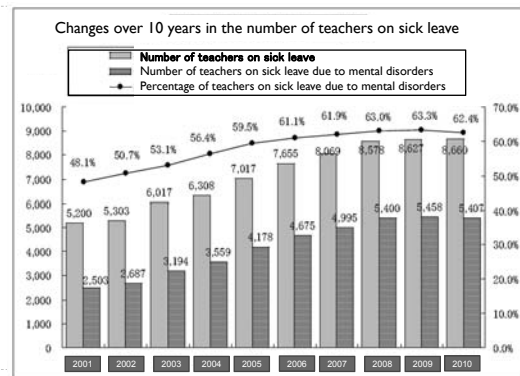
- "I cannot stand the noisy cicadas at the school. Do something."
- "I don't like those parents. I don't want my child to be in the same class with their child."
- "It's compulsory education. I won't pay for school lunch."

Schools are garbage cans, teachers are punching bags

Masatoshi Onoda, Parents are not Monsters, Gakujii Shuppan, 2008.

28

Changes over 10 years in the number of teachers on sick leave



30

Report on the Comprehensive Measures to Improve Teachers' Quality and Ability throughout their Teaching Careers

- More complex and diverse issues of school education
 - Diversified issues that teachers must deal with including student guidance; improvement of special needs education; support for foreign students; and the effective use of ICT
 - Need to establish closer collaboration with parents and local people
 - Need to strengthen teachers' ability to provide practical guidance and to communicate.
- Changing environment surrounding schools
 - Diminishing trust in teachers (scandals, incapable teachers, etc.)
 - Relatively lower social status of teachers as more people have higher education
 - Weaker collegiality among teachers (the culture of giving mutual advice among colleagues is dying out)

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Direction of reforms to create an image of teachers who continue to learn

Reforms of pre-service teacher training

- Upgrade pre-service teacher training to the master's level to develop highly-trained professionals

Reforms of teacher's certificates

- Creating "general," "basic" and "specialized" certificates (tentative names)

General certificate (tentative name): A standard teacher's certificate that guarantees the holder's ability to practice teaching that supports children's inquisitiveness and learning new things, communication skills and other abilities; basically issued to those who have completed one or two-year master's programs in addition to a four-year university education.

Basic certificate (tentative name): A teacher's certificate that guarantees the holder's basic knowledge and skills of teaching; basically issued to those who have a bachelor's degree.

Specialized certificate (tentative name): A certificate that guarantees the holder's high level of expertise in a specialized area such as school management, student guidance, or the subject the holder teaches.

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Proposed measures to upgrade teacher's certificates, collaborating with boards of education, schools and universities

In order to upgrade teacher's certificates to the master's level, step-by-step measures will be implemented to improve the quality and quantity of master's programs and to promote collaboration between boards of education and universities. Major policies will be included in the Basic Plan for the Promotion of Education.

Pre-service training Undergraduate level <ul style="list-style-type: none"> ◆ Improve curricula by introducing more practicum at schools; improve practical skills to address bullying and other disciplinary issues ◆ Stricter accreditation of teacher training courses to guarantee high-quality education Master's level <ul style="list-style-type: none"> ◆ Establish "teaching profession graduate schools" in all prefectures (currently 26 universities in 20 prefectures, 815 students) ◆ Improve educational research on bullying and other disciplinary cases and accumulate expertise ◆ Correct the excessive segmentation of the University Establishment Standards ◆ Review advanced certificates (Make some practical subjects compulsory) ◆ Promote practical research on education such as "learning sciences" ◆ Promote flexible and diverse collaborations among universities 	Employment <ul style="list-style-type: none"> ◆ Improve selection procedures by considering the evaluation of learning at universities, etc. 	For newly-employed teachers <ul style="list-style-type: none"> ◆ Upgrade induction training through collaboration with boards of education and universities ◆ Create a system to support new teachers for more than one year
Collaboration among boards of education, schools and universities		
Employment of diverse human resources <ul style="list-style-type: none"> ◆ Study a system to employ diverse human resources, including experts on science, English and other fields of expertise 	In-service teachers and school administrators <ul style="list-style-type: none"> ◆ Establish programs and credit systems for in-service training through collaboration with boards of education and universities 	School administrators <ul style="list-style-type: none"> ◆ Establish a capacity-building system to develop administrators' management skills

http://www.mext.go.jp/component/b_menu/shingi/toushin/_icsFiles/afieldfile/2012/08/30/1325094_1.pdf

34



CHALLENGES OF TEACHERS IN PROMOTING QUALITY BASIC EDUCATION

Ramon C. Bacani
Center Director
SEAMEO INNOTECH

JAPAN EDUCATION FORUM X
Tokyo, Japan
February 7, 2013



KEY DETERMINANTS OF STUDENT ACHIEVEMENT

- Good teaching practice
- Effective school leadership



- Teaching – very decentralized process
- Teacher – virtually full control of situation inside the classroom; alone by himself/herself, making decisions and taking action



CHARACTERISTICS of A GOOD TEACHER

- Technically competent
- Physically, mentally and emotionally fit
- Motivated and committed



COMPETENCY STANDARDS FOR SOUTHEAST ASIAN TEACHERS OF THE 21ST CENTURY

- Preparing appropriate lesson plans in line with the school vision and mission
- Creating a conducive learning environment
- Developing and utilizing teaching and learning resources
- Developing higher order thinking skills (HOTS)
- Facilitating learning



COMPETENCY STANDARDS FOR SOUTHEAST ASIAN TEACHERS OF THE 21ST CENTURY

- Facilitating the development of learners' life and career skills
- Assessing and evaluating learner performance
- Engaging in professional development
- Networking with stakeholders especially with parents
- Managing students' welfare and other tasks



Success profile of a passionate teacher

- **Competencies** – set of knowledge, skills, values required of a teacher to passionately and successfully carry out his/her tasks and responsibilities
- **Personal Attributes** – general characteristics and personal traits of a teacher which set her/him apart from the other professions
- **Experiences** – these are the necessary experiences that a teacher must/should go through as part of his/her learning journey contributing to continuous professional enhancement



Success profile of a passionate teacher

COMPETENCIES		
Skills	Knowledge	Values
<ul style="list-style-type: none"> • Innovative & creative teaching strategies • Assessment Strategies • Classroom management • Differentiated instruction 	<ul style="list-style-type: none"> • Mastery of subject matter • Information technology integration in the teaching-learning process • Contextual and creative teaching and learning • Global and current development perspectives 	<ul style="list-style-type: none"> • Integrity • Selflessness • Value people • Compassionate • Strong sense of mission • Respect • Love



Success profile of a passionate teacher

PERSONAL ATTRIBUTES

- Reflective in practice
- Self mastery
- Role model
- Self confidence
- Resourceful
- Lifelong learner
- Inspiring
- Good sense of humor
- Caring

EXPERIENCES

- Managing students with diverse abilities
- Mentoring peers / co-teachers on specific areas
- Recognized by peers, students, supervisors and stakeholders about good performance
- Active participation in continuous professional learning activities



AREAS OF CHALLENGES OF TEACHERS

- Pre-service teacher preparation
- Learning environment
- Working conditions



AREAS OF CHALLENGES OF TEACHERS

- Pre-service teacher preparation
 - teacher education not usually a 'first choice' course
 - student input to teacher education programs
 - quality of teacher education programs
 - low enrolment in science and mathematics specializations



AREAS OF CHALLENGES OF TEACHERS

- Learning environment
 - large class sizes
 - diversity of learners
 - lack of basic resources



AREAS OF CHALLENGES OF TEACHERS

- Working conditions
 - low salaries
 - limited career mobility
 - non-teaching duties
 - limited professional development opportunities



HELPING TEACHERS PROMOTE QUALITY BASIC EDUCATION

- Instructional Support System
- Continuing Professional Development
- Policy Environment
- Recognition of Good Teaching



Thank You!

Annex A:		COMPETENCY FRAMEWORK FOR SOUTHEAST ASIAN TEACHERS OF THE 21 ST CENTURY						
General Areas of Responsibility/ Competency		Specific Tasks/ Competencies						
1. Preparing appropriate lesson plans in line with the school vision and mission	1.1 Assess existing learning needs	1.2 Formulate specific learning objectives incorporating knowledge, skills, attitudes and values, if applicable	1.3 Prepare lesson plan based on syllabus and time frame	1.4 Consider diversity of learners in preparing lesson plans	1.5 Select the right methodologies according to subjects and learners' level	1.6 Determine appropriate learning resources available for teaching and learning		
	2.1 Foster a safe, clean and orderly learning environment	2.2 Promote a caring and learning-friendly environment	2.3 Motivate active learning	2.4 Foster an understanding to maintain a high standard of learning performance	2.5 Respect diversity of learners	2.6 Maintain a collaborative learning environment		
3. Developing and utilizing teaching and learning resources	3.1 Acquire knowledge and skills in the use of teaching and learning resources	3.2 Develop teaching and learning resources appropriate for the lesson	3.3 Utilize appropriate teaching and learning resources for the lesson	3.4 Integrate use of ICT in teaching and learning	3.5 Monitor and evaluate the use of teaching and learning resources			
4. Developing higher order thinking skills (HOTS)	4.1 Equip oneself with HOTS concepts and strategies	4.2 Develop HOTS in learners	4.2.1 Develop creativity	4.2.2 Develop critical thinking skills	4.2.3 Develop logical reasoning skills	4.2.4 Develop problem solving & decision-making skills		
5. Facilitating learning	5.1 Acquire mastery of subject matter	5.2 Employ strategies that cater to students' learning styles and to elicit active learning	5.3 Communicate at learners' level	5.4 Promote students' participation and collaboration	5.5 Apply questioning and reacting skills	5.6 Integrate HOTS in the lesson		
6. Enhancing ethical and moral values	6.1 Internalize teachers' professional code of ethics as specified in one's country	6.2 Uphold and model teachers' professional code of ethics	6.3 Educate learners and co-teachers with ethics and moral values					
7. Facilitating the development of learners' life and career skills	7.1 Equip oneself with knowledge, skills, attitudes and values of the 21 st century	7.2 Facilitate development of students' Learning to Know knowledge, skills, attitudes and values	7.3 Facilitate development of students' Learning to Do knowledge, skills, attitudes and values	7.4 Facilitate development of students' Learning to Be knowledge, skills, attitudes and values (e.g. emotional intelligence)	7.5 Facilitate development of students' Learning to Live Together knowledge, skills, attitudes and values	7.6 Assess students' knowledge, skills, values and attitudes on the 4 pillars of education		

8. Assessing and evaluating learner performance	8.1 Acquire knowledge and skills on testing, assessment and evaluation (e.g., authentic & portfolio assessment)	8.2 Develop formative and summative assessment tools	8.3 Assess students' learning using different and appropriate assessment tools	8.4 Utilize assessment results			
9. Engaging in professional development	9.1 Conduct development needs analysis	9.2 Prepare one's professional development plan	9.3 Engage in professional development	9.4 Reflect on the relevance of professional development undertaken	9.5 Apply, share and disseminate new knowledge and skills gained from professional development activities, study visits and exchange programs	9.6 Mentor/coach novice/student teachers	9.7 Assess the impact of professional development activities
10. Networking with stakeholders especially with parents	10.1 Enhance public relation skills	10.2 Develop partnership with parents and other stakeholders	10.3 Share the responsibility of educating students with the community	10.4 Participate actively in socio-civic events of the community			
11. Managing students' welfare and other tasks	11.1 Provide guidance and counseling support	11.2 Develop counseling and disciplinary skills	11.3 Organize and advocate social and extracurricular activities	11.4 Attend to learners' emergency cases	11.5 Perform administrative work		



Version: 18 September 2009
SEAMEO INNOTECH, Manila
Philippines

COMPETENCIES			PERSONAL ATTRIBUTES	EXPERIENCES
SKILLS	KNOWLEDGE	VALUES		
<ul style="list-style-type: none">▪ Ability to make connections between concepts to develop students’ effective schema to weave new knowledge in a meaningful way▪ Ability to design innovative and creative in teaching strategies to cater to the learning needs of students▪ Ability to apply a range of assessment strategies to help students know how they have learned and what would help them improve to be able to equip them with confidence to self-regulate learning▪ Has excellent classroom management skills to enable students to learn in a conducive and encouraging environment to support effective learning▪ Ability to use differentiated instruction to engage the students in a meaningful learning	<ul style="list-style-type: none">▪ Mastery of the subject matter▪ Global development perspectives and keeps abreast with the changing landscape of education in the 21st century▪ Information technology integration in the teaching-learning processes▪ Identify students’ learning styles and preferences▪ Contextual teaching and learning▪ Creative teaching-learning▪ Appropriate teaching learning strategies	<ul style="list-style-type: none">▪ Self worth▪ Integrity▪ Selflessness▪ Value people▪ Citizenship▪ Strong sense of mission▪ Respect▪ Love▪ Caring▪ Fairness▪ Compassionate▪ Honesty	<ul style="list-style-type: none">▪ Reflective in practice▪ Self-mastery▪ Resourceful▪ Self-confidence▪ Role model▪ Lifelong learner▪ Listener▪ Analytical and critical thinker▪ Inspiring▪ Good sense of humour▪ Caring▪ Inquisitive▪ Adaptable	<ul style="list-style-type: none">▪ Opportunity to manage students with diverse abilities to develop a repertoire of pedagogies for engagement and motivation to learn▪ Mentoring peers/co-teachers on specific areas in the teaching-learning processes for better performance▪ Has been recognized and positively affirmed by peers, students, supervisors and stakeholders about good performance

COMPETENCIES			PERSONAL ATTRIBUTES	EXPERIENCES
SKILLS	KNOWLEDGE	VALUES		
<ul style="list-style-type: none"> ▪ Possesses excellent instructional competence ▪ Ability to relate/communicate effectively with people ▪ Ability to influence peers, students, parents and other school stakeholders ▪ Ability to work with others and in teams 				<ul style="list-style-type: none"> ▪ Awards from Schools/Ministry/ President/ King recognizing best performance ▪ Active participation in continuous professional learning events and activities

Source: SEAMEO INNOTECH Third Regional Education Forum, Manila, Philippines

ADDRESSING ISSUES AND CHALLENGES REGARDING TEACHERS AND TEACHING: The UNESCO General Education Quality Analysis/Diagnosis Framework (GEQAF)

10th Japan Education Forum: 7 February, 2013

Edem Adubra

Head of the Secretariat

International Task Force on Teachers for EFA

Introduction

- The achievement of EFA goals is intrinsically linked to the provision of teachers in sufficient quantity and with adequate preparation and motivation to address the diverse needs of an increasing learning population.
- This presentation aims to underscore the need to unpack the complex fabric of teaching and learning and the planning of this process.
- The lens used is of the 2 components of the UNESCO *General Education Quality Analysis/ Diagnosis Framework (GEQAF)*: The analytical tool on teachers and the analytical tool on teaching

The General Education Quality Analysis/Diagnosis & Monitoring Framework (GEQAF): Objectives and description

- The GEQAF recognizes progress made globally since the Dakar Forum (2000) in terms of access, but alerts on the ensuing quality imperative and how important it is to monitor it.
- The GEQAF aims to strengthen the capacity of countries using the tool to analyze/diagnose and monitor the quality of their general education systems in a systemic manner.
- The systemic nature of the GEQAF ensures that indicators for a particular sub-system are not developed in isolation
- The GEQAF is organized in a modular form (Development Relevance, Desired Outcomes, Key Processes, Key Resources and Supporting Mechanisms) and as a set of 15 Analytical Tools covering all important aspects of the education system
- Each Analytical Tool consists of a set of key questions to be addressed in a particular area of the education system

UNESCO General Education System Quality Analysis/Diagnosis Framework (GEQAF)



I. Teachers in the quality and equity debate: Some evidence from research

- Without an appropriate focus on teachers, access, quality and equity of education for all is not feasible.
- The quality of teachers/educators has been found to explain significant differences in learning outcomes (GMR, OECD, EI, etc.)
- Equitable deployment of qualified teachers/educators also has a significant bearing on the distribution of learning outcomes and thus equity.
- Clear indications that provision of quality education tends to have a greater impact on the most vulnerable or deprived students. Providing quality teachers/educators to all schools and educational institutions is one important way to address the problem of inequity.

Diagnosis and analysis questions

- The paramount question: *to what extent the teachers/educators sub-system has been a major factor in explaining the quality problems faced in the education system?*
- Some fundamental questions and key areas covered:
 - ◆ Entry into the teaching profession
 - ◆ Training of teachers
 - ◆ Recruitment, deployment and retention of teachers
 - ◆ Management of teachers

Diagnosis and analysis questions

A. Entry into the teaching profession

1. Who is attracted to the teaching profession and why? Do we have data on the profile of those applying for teacher/educator training?
2. How well do our criteria for selection into training of teacher/educator (e.g. minimum qualification, attitudes and values, motivation) and selection modalities (e.g. exam, interview) reflect the type of teachers/educators we want to train?

B. Training of teachers /educators

1. What is the profile of the trainers of teachers/educators? How are they trained, recruited, remunerated? Does the financing of training institutions reflect the central role teacher/educator training plays for quality education?
2. How well does teacher/educator assessment reflect the competencies expected of new teachers/educators? Is practical training assessed? What are the modalities of assessment?
3. Has the efficiency of teacher/educator training programs been analyzed? Is there any analysis of the impact of trained teachers/educators on learners' achievements?
4. How has in-service and CPD program been effective in raising the quality standard of our teachers/educators? Do we have evidence of that?

Diagnosis and analysis questions

C. Recruitment, deployment and retention of teachers

1. What mechanisms are in place to attract and retain the best qualified people to teaching? Have they been effective? What is the extent of teacher/educator attrition in our country? Why did these teachers/educators leave?
2. Are there mechanisms in place for the best teachers/educators to be recognized and rewarded for their teaching?
3. Are qualified teachers/educators deployed equitably throughout all educational levels, educational settings and in line with curriculum requirements? What are the mechanisms in place to ensure that teacher/educator deployment is equitable and are these mechanisms applied consistently?

D. Management of teachers/educators

1. What mechanisms are in place to support teachers/educators at all moments of their career? Do they foster a feeling of motivation and promote increased performance of teachers?
2. What forms of supervision and performance evaluation are in place and how effective have they been?
3. To what extent do teachers/educators participate in planning and decision-making at all levels of the educational system?

II. Teaching: Some evidence from research

- Teaching = the most immediate process for supporting learning and for enabling learners to acquire expected competencies. What happens within the classroom is of crucial importance for the quality of education.
- Considering the profile of the teacher alone is not sufficient to determine what is really happening in the classroom.
- Adaptability to context matters as different countries and students may need different teaching contents (both in terms of subject matter knowledge and of medium of instruction) and different levels of structure tailored to students' profile.
- Countries which have been successful in improving their education system followed a number of general principles but also tailored their intervention to match the current situation of their education system
- What kind of teaching can be provided is shaped/constrained by the learner and the learning environment, the teacher and the teaching culture.

Diagnosis and analysis questions

- Overall objective of the Teaching Tool : to support the analysis of how teaching processes contribute to the quality and equity of general education and to effective learning.
- The paramount question is: Do our teaching processes facilitate or impede the attainment of quality education and effective learning experiences for all our learners?
- Some key questions regarding critical factors affecting and influencing teaching and key areas it covers
 - Understanding an effective teaching process
 - Equity and effectiveness of teaching
 - Monitoring and supporting teaching
 - Conditions for teaching

Diagnosis and analysis questions

A. Understanding an effective teaching process

1. What is our operational understanding of effective or quality teaching? Who defines this understanding? How does this understanding take into account the diversity of our education settings, learners and teachers as significant factors in our definition of quality/effective teaching?
2. How do we collect information on core teaching methods and repertoires used in our general education system? How effective are they in facilitating learning effectiveness and the acquisition of desired competencies? What is the evidence of their effectiveness?

B. Equity and effective teaching

1. How do we ensure that all learners in our general education system are exposed to effective teaching? Where is the evidence of equitable exposure to effective teaching? Where there is inequity, what are our available remedial measures?
2. How do we track the differentiated impact of effective teaching for diverse learners? What dimensions of diversity do we use to track differentiated impact?

Diagnosis and analysis questions (cont'd)

C. Monitoring and supporting teaching

1. What mechanisms do we have for identifying and documenting ineffective teaching? Once identified, what remedial actions do we employ? How institutionalized are these remedial measures? How effective are these measures in supporting effective teaching?
2. Who evaluates teaching? How are stakeholders who evaluate teaching selected? How do we use feedback from the assessment of teaching effectiveness?
3. How are outcomes from national, regional and international assessments utilized in our evaluation of the teaching process?
4. How do we support and incentivize effective teaching? How do we sustain effective teaching?

D. Conditions for teaching

1. How do we operationally define environments that support and/or induce effective teaching? What are the key features of these environments? What are the most impactful features? How do they manifest across the diverse contexts of our general education system?
2. To what extent and how are ICTs being integrated in teaching and learning to achieve desired learning outcomes? Do we know if the introduction of ICTs has improved teaching effectiveness as we operationally define it?

Priorities for action

For both Teachers and Teaching:

1. What are the key areas and binding constraints to be addressed urgently to achieve major improvements in the quality of our teachers/educators current and future?
2. What are the knowledge gaps which need to be filled for an evidence-based policy and practice?
3. What are the required actions to deal with the priority constraints and the identified knowledge gaps? Who does what and when? What will be the coordination mechanism to effect the changes in a cohesive and systemic way?

Conclusion

In conclusion, the GEQAF posits that:

- the diagnostics will facilitate the identification of areas of strength to build on and areas of weaknesses and gaps to address.
- The diagnostic and analysis of both strengths and challenges should lead to *the formulation of action plans focusing on the most critical challenges which, if addressed, can unlock great potential for improving the education system to deliver equity and quality.*

Thank you!

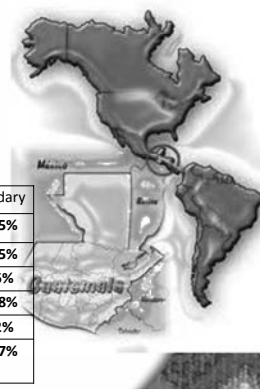
Japan Education Forum X

February 7, 2013
Rina Rouanet de Núñez
Guatemala

General Remarks and Indicators

Situated in Central America
Landmass Area: 108,430 Sq KM
Population: 15 million
Annual population growth rate: 2.8 %
Total GDP USD \$23.3 billion and per capita GDP is USD \$4560
Investment in Education: 2.2% of GDP
Educational Indicators:

Indicator/Level	Pre-school	Primary	Secondary
Gross Enrollment Rate	72.05%	118.63%	66.65%
Net Enrollment rate	57.09%	98.68%	40.25%
Repetition rate	0	11.49%	3.06%
Retention Rate	92.18%	94.49%	91.78%
Dropout Rate	7.82%	5.51%	8.22%
Progression Rate	100%	86.40%	68.37%

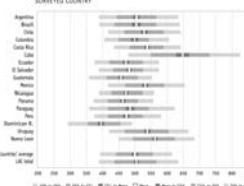


Current State of Learning (Primary Level)



Results in SERCE (Mathematics)

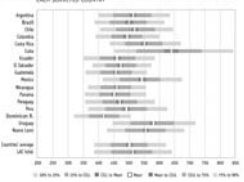
GRAPH 3 - MEAN AND VARIABILITY OF THIRD GRADE MATHEMATICS SCORES IN EACH SURVEYED COUNTRY



PERCENTAGE OF THIRD GRADE STUDENTS BY PERFORMANCE LEVEL IN MATHEMATICS IN EACH SURVEYED COUNTRY

Country	Below 1	Below 2	Below 3	Below 4	Below 5
Argentina	18.48	36.77	21.12	15.17	10.47
Brazil	10.10	30.10	20.76	14.02	11.07
Chile	9.10	27.80	22.80	16.37	14.00
Colombia	8.97	28.80	23.10	16.87	8.87
Costa Rica	8.80	26.44	27.20	22.20	13.48
Cuba	1.00	12.10	13.80	74.20	1.90
Ecuador	16.36	43.48	38.12	7.81	4.13
El Salvador	18.31	45.00	31.80	4.89	3.84
Guatemala	17.26	35.00	24.07	14.68	7.08
Honduras	9.15	28.80	22.70	16.71	15.84
Mexico	10.10	47.40	26.80	7.48	1.87
Nicaragua	18.88	48.88	25.15	6.40	2.75
Paraguay	15.47	37.88	24.80	11.50	8.35
Peru	15.24	45.42	25.88	8.81	4.77
Dominican Rep.	41.28	43.27	14.85	2.84	3.12
Uruguay	5.78	25.80	30.03	19.28	18.98
Nuevo León	8.20	18.45	35.88	24.43	15.13
Mean	10.84	30.48	26.86	14.86	11.82

GRAPH 4 - MEAN AND VARIABILITY OF SIXTH GRADE MATHEMATICS SCORES IN EACH SURVEYED COUNTRY

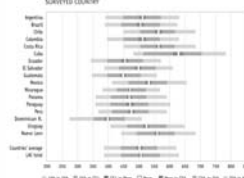


PERCENTAGE OF SIXTH GRADE STUDENTS BY MATHEMATICS PERFORMANCE LEVEL IN EACH SURVEYED COUNTRY

Country	Below 1	Below 2	Below 3	Below 4	Below 5
Argentina	1.15	11.88	27.88	38.25	17.54
Brazil	1.48	18.80	44.20	31.45	8.80
Chile	1.48	8.80	47.80	37.80	11.80
Colombia	1.10	13.10	47.80	37.80	11.80
Costa Rica	0.28	4.15	32.71	43.70	18.85
Cuba	0.18	4.15	17.81	25.11	51.13
Ecuador	4.24	16.88	45.15	31.41	4.14
El Salvador	1.10	15.10	51.11	23.81	3.45
Guatemala	1.10	15.10	51.11	23.81	3.45
Honduras	0.11	6.18	32.41	38.10	19.80
Nicaragua	1.15	18.88	50.88	19.41	1.15
Panamá	3.33	17.10	48.10	17.84	2.33
Paraguay	3.45	17.10	48.10	17.84	2.33
Peru	2.41	18.88	50.88	19.41	1.15
Dominican Rep.	5.88	41.79	45.42	8.85	0.24
Uruguay	0.17	5.10	27.10	45.41	22.11
Nuevo León	0.24	6.10	28.10	45.41	21.10
Mean	1.48	15.10	40.88	32.85	11.44

Results in SERCE (Reading)

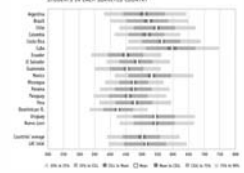
GRAPH 3 - MEAN AND VARIABILITY OF THIRD GRADE READING SCORES IN EACH SURVEYED COUNTRY



PERCENTAGE OF THIRD GRADE STUDENTS BY READING PERFORMANCE LEVEL IN EACH SURVEYED COUNTRY

Country	Below 1	Below 2	Below 3	Below 4	Below 5
Argentina	8.88	27.88	28.71	21.81	8.87
Brazil	8.10	25.10	28.84	21.84	7.17
Chile	1.80	6.87	34.48	34.27	17.79
Colombia	4.86	20.81	41.79	27.16	8.54
Costa Rica	1.48	10.45	34.20	25.71	18.20
Cuba	1.10	4.88	21.81	27.41	44.27
Ecuador	14.80	37.47	34.20	11.81	2.10
El Salvador	1.10	15.10	41.10	25.11	4.45
Guatemala	14.37	45.18	32.34	8.11	1.81
Honduras	1.80	14.80	27.10	27.10	28.80
Mexico	8.88	27.88	41.88	18.88	1.75
Nicaragua	11.11	27.84	35.20	12.15	3.81
Panamá	11.47	27.88	31.87	21.87	5.48
Paraguay	11.47	27.88	31.87	21.87	5.48
Peru	8.24	30.18	35.71	15.13	3.85
Dominican Rep.	14.18	44.71	38.34	2.88	0.18
Uruguay	4.89	18.88	35.10	24.34	11.18
Nuevo León	1.10	12.71	34.87	32.47	18.18
Mean	6.71	26.81	37.94	21.88	8.45

GRAPH 4 - MEAN AND VARIABILITY OF SIXTH GRADE READING SCORES IN EACH SURVEYED COUNTRY



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Panamá	3.33	17.10	48.10	17.84	2.33
Paraguay	3.45	17.10	48.10	17.84	2.33
Peru	2.41	18.88	50.88	19.41	1.15
Dominican Rep.	5.88	41.79	45.42	8.85	0.24
Uruguay	0.17	5.10	27.10	45.41	22.11
Nuevo León	0.24	6.10	28.10	45.41	21.10
Mean	0.49	10.81	34.88	32.85	11.44

Main Causes of Low Performance

- Poverty level: (Urban-rural status)
- Cultural situation: Attending classes in a language that is not their mother tongue.
- Resources: Infrastructure, availability of textbooks, school supplies, equipment, etc.
- Training of teachers: Years of schooling and educational level (Teacher training college vs. University), Continuous professional development.
- Experience of teachers: Classroom management, mastery of content.

The causes listed above are not in hierarchical order in terms of prevalence

Some Implemented Measures

- Increase in hiring bilingual teachers to meet the needs of Mayan-speaking communities.
- There are alliances between mayors and voluntary workers to improve school infrastructure. Additionally, language and mathematics texts are distributed. In the case of mathematics, primary texts are designed by the GUATEMÁTICA Project of JICA.
- Curriculum Revision at all levels of education.
- From the year 2009 the Academic Program for Teachers' Professionalization-PADEP-D began.
- Revision of the teacher education degree course starts this year, to bring it up to university level.

State of Primary Education



The Main Weakness of Teachers at the Primary Level

- Inadequate academic training (a few years of schooling for their training and poor quality of the courses they receive).
- Little command over the content of the classes they teach.
- Lack of suitable teaching methodology for the content they teach.
- Some teachers living in bilingual communities are not proficient in the language of community.

The Professionalization of Teachers in Guatemala

The PADEP-D: (Teacher Professionalization Academic Program)

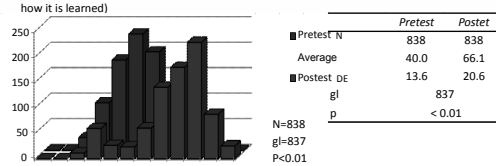
This is an in-service university training program for teaching staff, officially recognized by the Ministry of Education, which aims to raise academic standards and improve their job performance at different levels and types of education within the formal and informal school systems.

- The program aims to develop autonomous processes of teaching and shared reflection on the rationale of pedagogical practice.
- Building competencies of teachers, which can contribute to improving performance and benefit the development of the country.
- Contribute to improving the quality and relevance of education with an intercultural approach.

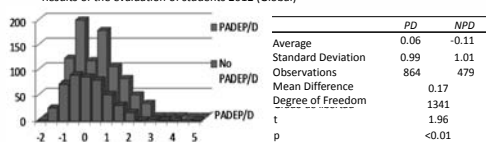
This program began in 2009, has produced more than 12,000 teachers in two cohorts and is currently on-going.

Some Results of the Effectiveness of PADEP-D

Results of the 2nd Cohort Pre and Post Test: Teachers (Mathematics and how it is learned)



Results of the evaluation of students 2012 (Global)



Current State of Secondary Education



State of Learning in Secondary Education

- Poor performance: According to national test results, only 8% of students achieved passing grades in basic reading skills. 98% of students did not achieve the passing grade in Mathematics.
- The types of provision do not guarantee that students have access to a quality education.

State of Teaching in Secondary Education

The problems are similar to those at primary level.

- Lack of infrastructure and support resources in the classroom.
- Deficiency in academic training of teachers.
- Lack of specialized teachers (mainly in rural areas).
- Lack of experience of teachers (a few years of experience, little awareness of methodology).

Challenges for Teacher Education

Teacher training and retraining at all levels are imperatives which can no longer be delayed, for improving education in Guatemala, therefore the Ministry of Education intends to:

- Continue to implement the PADEP-D to professionalize teaching staff currently in service.
- Transform teacher education into a higher level (i.e. university) qualification.
- Comply with the provisions of the collective agreement among the teachers' union, the University of San Carlos and Ministry of Education regarding the teaching profession in Guatemala, besides proposing a better training, to create an incentive-based system based on academic training and performance.

Thank you very much
Domo Arigato

Issues concerning Teachers in Teaching Subjects :Based on Teaching of Arithmetic in Palau and Japan

Tomoko Udagawa, Saitama Municipal Sashiogi Elementary School
(Former participant in the JOCVs' special program for in-service teachers)

Contents

1. Republic of Palau
2. Public Schools
3. Elementary school teachers in Palau
4. Case studies
5. Comparison of issues in the two countries



Republic of Palau



Population: 20,000

Area: about the size of Yakushima Island

Industry: tourism

Public schools

- The school year starts in August. There are four terms.
- Elementary schools: 13 (unification of schools is under way)
- High school: 1



Public schools

- Class size

Big schools: about 30 students

Small schools: fewer than 10 students



Elementary school teachers

No teacher training college, no teacher certificate system



Few teachers have specialized knowledge such as effective teaching methods or child psychology.



The only college in Palau:
Palau Community College

Elementary school teachers

Issues:

- They do not fully understand the content of the lesson.
- Their instructions are not sufficient for students to master the content of the lesson.
- They do not know how to use teaching tools effectively.



Case 1

Teachers do not fully understand the content of the lesson.



- They do not fully understand the essential points they have to teach.
- They do not fully understand where children make mistakes. They think children who make mistakes do not understand the entire unit.



Case 1

What students who cannot divide do

$$\begin{array}{r} 14 \\ 26 \overline{) 356} \\ \underline{26} \\ 116 \\ \underline{100} \\ 16 \end{array}$$

Why they make mistakes

1. They cannot find the quotient.
2. They cannot subtract correctly.
3. They have not mastered the multiplication tables.
4. They cannot divide correctly.

9

Case 1

What students who cannot divide do

$$\begin{array}{r} 14 \\ 26 \overline{) 356} \\ \underline{26} \\ 116 \\ \underline{100} \\ 16 \end{array}$$

Why they make mistakes

1. They cannot find the quotient.
2. They cannot subtract correctly.
3. They have not mastered the multiplication table.
4. They cannot divide correctly.

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Case 1

- Understand where students fail and what the teaching points are

Young teachers

- May not understand exactly where students tend to fail
- Must study teaching materials for all subjects, as they teach a different grade every year. This is a heavy burden.

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Case 1

Revision of the course of study

- Even experienced teachers find it hard to understand the teaching content.

↓
Their past experience causes confusion.



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Case 2

Teachers do not have enough knowhow to enable students to fully understand the content.



- They repeat inadequate instructions without accommodating the students' needs. Students are not learning and in some cases lose their motivation.

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Case 2

If students cannot memorize all of the multiplication tables

Teachers think the students do not know the tables at all.

↓
They make children repeat memorizing the tables from the beginning.

↓
Children lose their motivation. They hate math.

$$\begin{array}{l} 9 \times 1 = 9 \\ 9 \times 2 = 18 \\ 9 \times 3 = 27 \\ 9 \times 4 = 36 \\ 9 \times 5 = 45 \\ 9 \times 6 = 56? \\ 9 \times 7 = 63 \\ 9 \times 8 = 76? \\ 9 \times 9 = 81 \end{array}$$

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Case 2

Teaching tips:

Identify which part of the multiplication tables students have not learned. Evaluate and encourage them.

↓
Focus on what they haven't mastered.

↓
Children feel they can do it. They become able to do two-digit multiplication and division problems.

$$\begin{array}{l} 9 \times 1 = 9 \\ 9 \times 2 = 18 \\ 9 \times 3 = 27 \\ 9 \times 4 = 36 \\ 9 \times 5 = 45 \\ 9 \times 6 = 54 \\ 9 \times 7 = 63 \\ 9 \times 8 = 72 \\ 9 \times 9 = 81 \end{array}$$

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Case 2

- Teachers know teaching tips but cannot take enough time to provide individualized instruction.



In arithmetic, children fail to understand for different reasons, so they often need individualized instruction.

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Case 2

Where exactly do students fail to understand?
What do teachers have to do when providing individualized instruction?

Only give supplementary explanation?

Explain the meaning of the expression step by step?

Use figures and semi-concrete examples?

Review the content already covered?



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Comparison of the two countries

They share similar problems.



Advice given by JOCVs



- Improvement of teaching skills
- Confidence in teaching

They are using teaching tools made with the help of former JOCVs.

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Comparison of the two countries

They share similar problems.



Getting advice from and exchanging information with experienced teachers



Improvement of teaching skills

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Comparison of the two countries

Lack of human resources



Not enough staff members at the Ministry of Education



Cannot promote teacher training

Not enough veteran teachers



Difficult to train young teachers within schools

Workshop for teachers of lower grades

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Comparison of the two countries

Lack of human resources



Veteran teachers will retire.



Must deal with generational change

- Annual training
- School-based training

Important!

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