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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

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

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

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).

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.

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

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.

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:

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

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.

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.

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.

II. CHALLENGES

DEPLOYEMENT, 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.

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.

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.

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

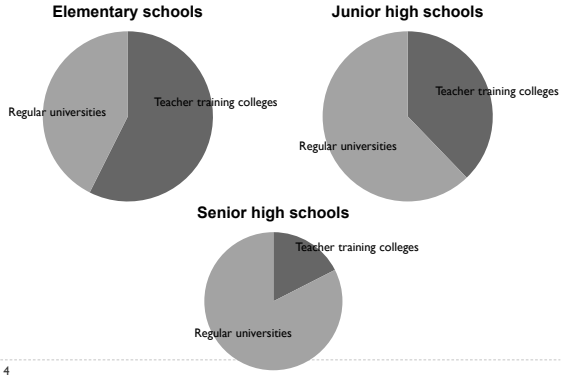
2

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.)

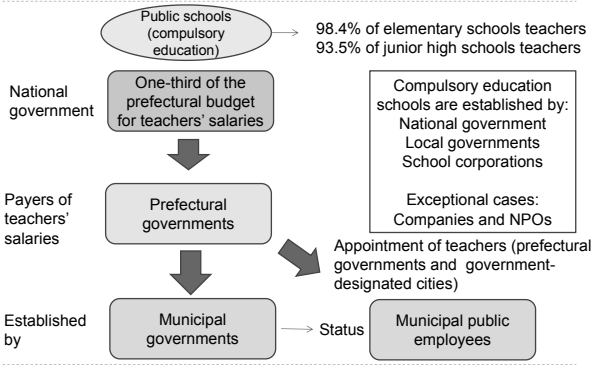
3

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



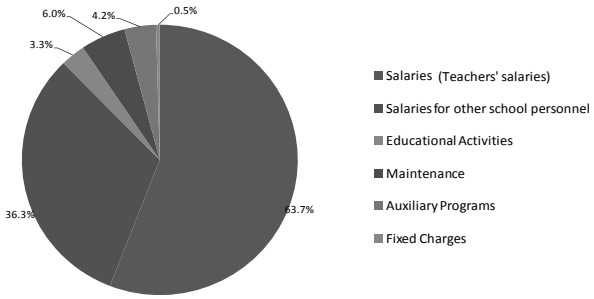
4

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)

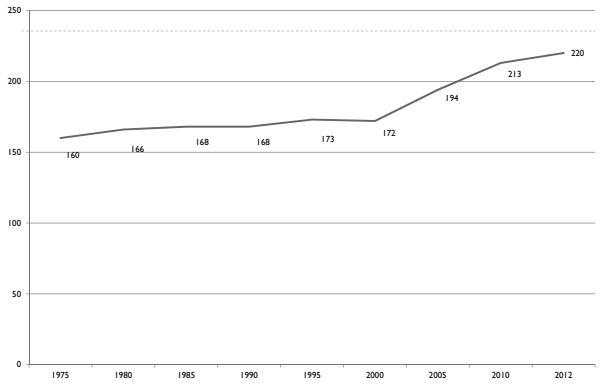
3. "Total amount system" at the discretion of local government through decentralization (2004)

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

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

8

Number of private elementary schools



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"Total amount system" for the compulsory education expenditure provided by the national government to be used at the discretion of the local governments

Fixed amount system	Total amount system
The amount paid by the national government and the fixed number of teaching personnel are determined in detail by job category.	**Usage is at the discretion of the prefectural governments, which decide the salaries and the number of teachers.**
Based on the levels of national schools	Standards set by the standard act and the act on securing teaching personnel
	Accountability of prefectural governments, information disclosure
	Standards set by the standard act and the act on securing teaching personnel

10

New job titles based on the revised School Education Law

Job titles of teaching personnel

- Principal
- Deputy principal
- Vice Principal(s)
- Chief teachers
- Teacher advisors

→ New jobs

Teachers, nurse-teachers, nutrition teachers, assistant teachers, part-time teachers, assistant nurse-teachers

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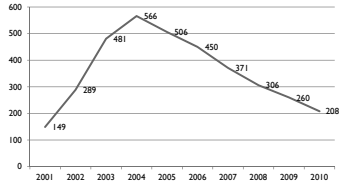
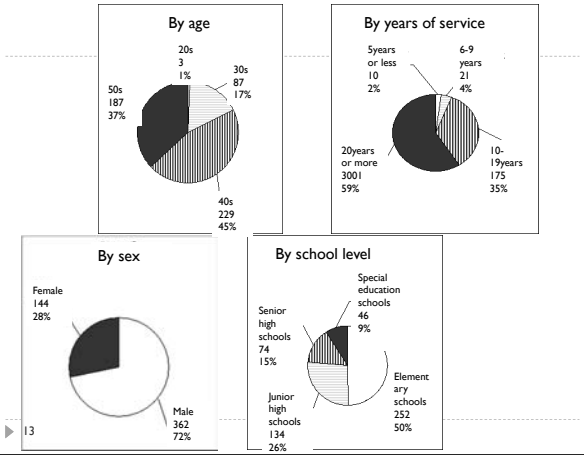
Identification of teachers with insufficient abilities



Definition of teachers with insufficient abilities

1. Incapable of teaching properly due to insufficient knowledge of the subjects and teaching skills (e.g. many errors in teaching content, unable to give proper answers to children's questions)
2. Incapable of teaching properly due to inappropriate teaching methods (e.g. merely keep writing the teaching content on the blackboard without answering children's questions)
3. Incapable of class management and student guidance as they cannot and do not understand children (e.g. do not listen to children, do not talk with children, do not try to communicate with children)

Breakdowns of teachers without sufficient abilities (FY2005)



13

Pre-service teacher training to address the issues at school

Rapid social changes

- Globalization
- Informatization
- Low birthrate Aging society

Ability to live in the 21st century

- Basic knowledge/ skills
- Ability to think, make decisions and express oneself
- Motivated to learn
- Ability to form a wide range of human relationships

Train teachers to support learning of new things by students.
An image of teachers who continue to learn must be created.

→ Comprehensive measures to improve teachers' quality and ability throughout their teaching careers

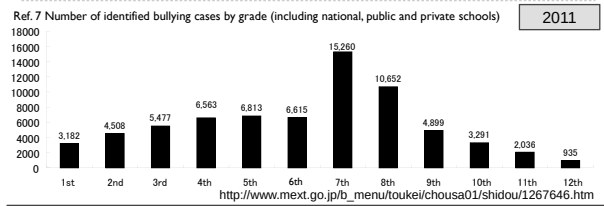
Issues to be addressed

- Bullying, violent behaviors, non-attendance
- Improvement of special needs education
- Foreign students' needs
- Effective use of ICT

14

Educational issues at compulsory education schools 1
Bullying at school

Ref. 7 Number of identified bullying cases by grade (including national, public and private schools) — 2011

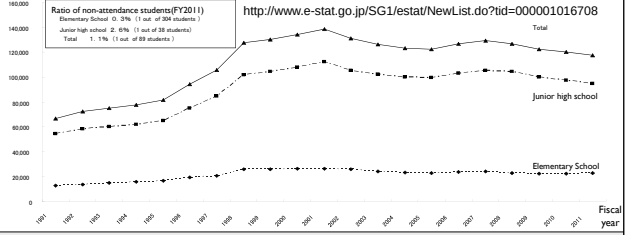


http://www.mext.go.jp/b_menu/toukei/chousa01/shidou/1267646.htm

Day-to-day efforts to stop bullying at school

1. Bullying cases are discussed among teachers at teachers' meetings, etc. to promote shared understanding. (89%)
2. The issue of bullying is discussed in moral education class and during class activities. (85%)
3. The school organizational system including the counseling system has been improved to address the issue of bullying. (67%)
4. Teachers actively communicate with school counselors, advisors and nurse-teachers to address the issue. (58%)
5. Teachers encourage the students to discuss the issue of bullying through the student council and to foster personal relationships and make friends. (58%)

Educational issues at compulsory education schools 2
Non-attendance



http://www.e-stat.go.jp/SG1/estat/NewList.do?tid=000001016708

Measures that helped non-attendance students to return to school

1. Make telephone calls and/or visit students' homes to invite them to come to school (50%)
2. Visit students' homes, offer advice and assist with their schoolwork and lifestyle, etc. (48%)
3. School counselors and other experts give them guidance (40%)
4. Improve the students' family relationships and living style with their parents' cooperation (39%)
5. Let students stay in the school nurse's office or other special locations and provide instruction there. (38%)
6. Share non-attendance issues with all teachers through workshops and case-study meetings (35%)
7. Establish rapport between teachers and non-attendance students and improve their relationships with teachers (32%)

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)

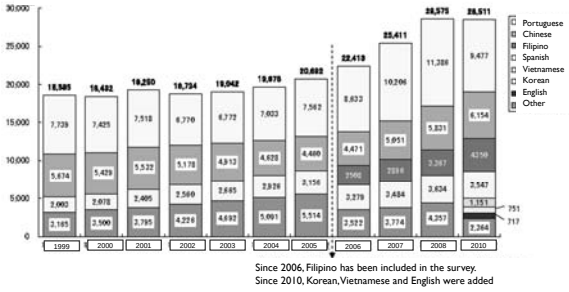
	Estimated rate (95% confidence interval)
A: Have major learning problems	4.5% (4.2%~4.7%)
B: Unable to concentrate or hyperactive	3.1% (2.9%~3.3%)
C: Extremely obsessive and lacking in communication skills	1.1% (1.0%~1.3%)

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)



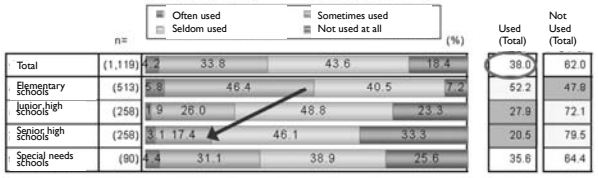
Since 2006, Filipino has been included in the survey.
Since 2010, Korean, Vietnamese and English were added

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-chosa/ict_chosa_data.pdf

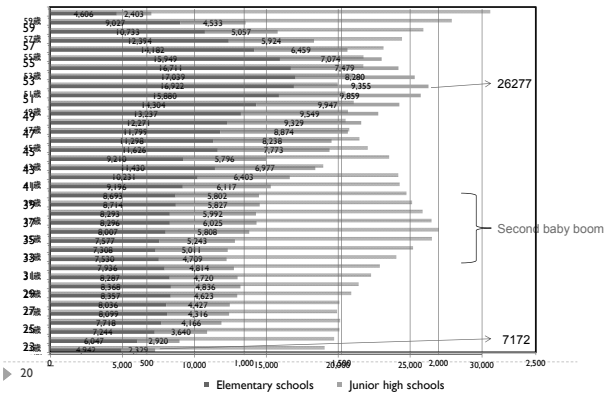


How ICT is used in classrooms:

1. To show websites, including images, related to topics dealt with in the classroom (elementary schools: 76%, junior high schools: 51%)
2. To have children do research on topics dealt with in the classroom, using the Internet (elementary schools: 79%, junior high schools: 44%)
3. 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)



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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	603	41	14.7	565	68	8.3
Iwate Pref.	539	24	22.5	488	36	13.6	526	40	13.2
Nagasaki Pref.	579	38	15.2	529	25	21.2	530	45	11.8
Okinawa Pref.	1,446	108	13.4	1,080	41	26.3	1,924	87	22.1
Fukushima Pref.	824	63	13.1	932	35	26.6	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	661	72	9.2	500	60	8.3
:									
Kawasaki City	724	235	3.1	518	106	4.6	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	1,967	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	59,060	6,810	8.7	34,731	4,289	8.1

http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo11/shiryo/__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 1980–1991	6th period 1993–2000	7th period 2001–2005
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 needs 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

22

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.

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

1. To support improving academic achievements and motivation for learning (to eliminate educational disparities)
2. To support special needs education by offering resource rooms for children in order to promote inclusive education
3. To teach Japanese to foreign students
4. To increase the number of subject specialists at elementary schools
5. To support school-community collaboration
6. To improve school management to address bullying and other issues
7. 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

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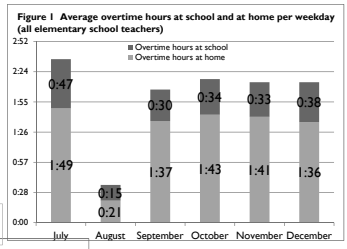
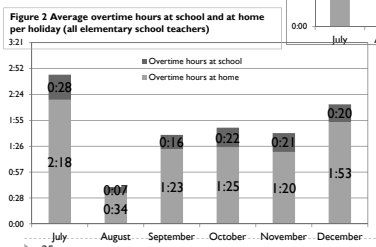
Increased workload





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

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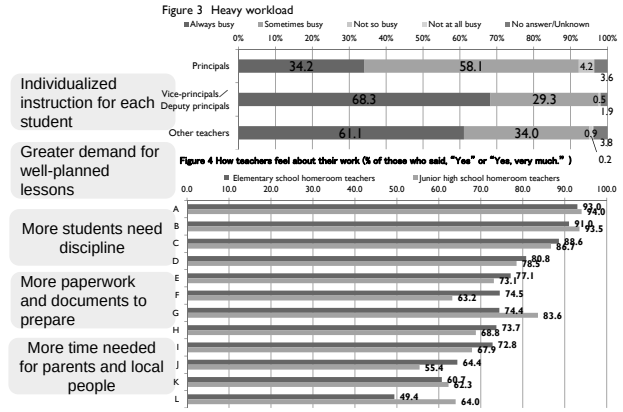


Individualized instruction for each student

Greater demand for well-planned lessons

More students need discipline

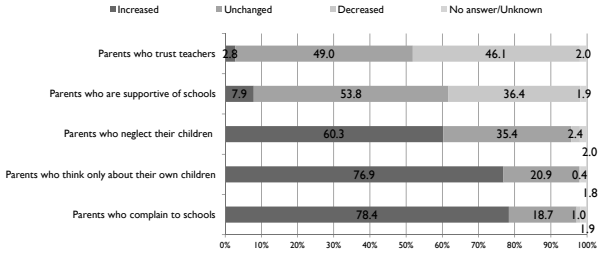
More paperwork and documents to prepare

More time needed for parents and local people

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://ci.nii.ac.jp/els/110006981073.pdf?id=ART0008893563&type=pdf&lang=jp&host=cinii&order_no=&ppv_type=0&lang_sw=&no=1353482231&cp=

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, requotation. Matsuda, op. cit.

27

Unreasonable demands of parents

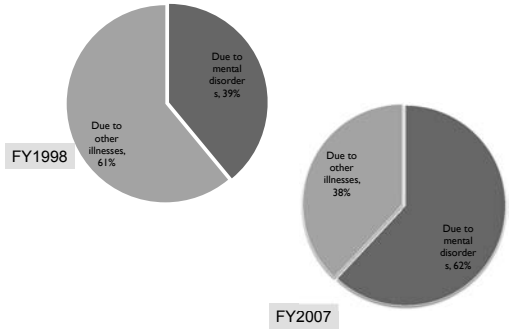
- "I cannot stand the noisy cicadas at the school. Do something."
- "I don't like those parents. I don't want my child to be in the same class with their child."
- "It's compulsory education. I won't pay for school lunch."

Schools are garbage cans, teachers are punching bags

- Masatoshi Onoda, *Parents are not Monsters*, Gakuji Shuppan, 2008.

28

Public school teachers on sick leave



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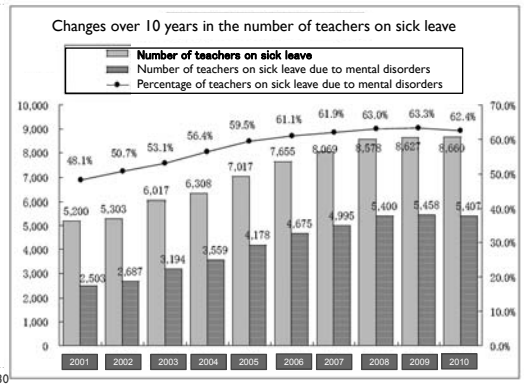
Changes over 10 years in the number of teachers on sick leave



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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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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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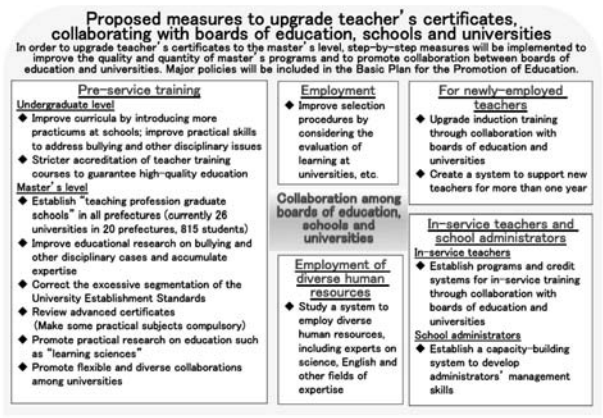

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CHALLENGES OF TEACHERS IN PROMOTING QUALITY BASIC EDUCATION

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 commited

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
• Innovative & creative teaching strategies • Assessment Strategies • Classroom management • Differentiated instruction	• Mastery of subject matter • Information technology integration in the teaching-learning process • Contextual and creative teaching and learning • Global and current development prospectives	• Integrity • Selflessness • Value people • Compassionate • Strong sense of mission • Respect • Love

Success profile of a passionate teacher

PERSONAL ATTRIBUTES	EXPERIENCES
• Reflective in practice • Self mastery • Role model • Self confidence • Resourceful • Lifelong learner • Inspiring • Good sense of humor • Caring	• 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

Annex A: **COMPETENCY FRAMEWORK FOR SOUTHEAST ASIAN TEACHERS OF THE 21ST 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	**1.7** Construct appropriate assessment measures	**1.8** Utilize results of learner assessment and teacher's reflection in developing lesson plans
2. Creating a conducive learning environment	**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*	**4.3** Strengthen HOTS in learners	**4.4** Assess HOTS of learners
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	**5.7** Contextualize teaching to local situations	**5.8** Manage classroom activities
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 21st 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

Annex B: **SUCCESS PROFILE OF A PASSIONATE/EFFECTIVE TEACHER IN SOUTHEAST ASIA**

COMPETENCIES			PERSONAL ATTRIBUTES	EXPERIENCES
SKILLS	**KNOWLEDGE**	**VALUES**		
▪ 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	▪ 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	▪ Self worth ▪ Integrity ▪ Selflessness ▪ Value people ▪ Citizenship ▪ Strong sense of mission ▪ Respect ▪ Love ▪ Caring ▪ Fairness ▪ Compassionate ▪ Honesty	▪ 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	▪ 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**		
▪ 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				▪ 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

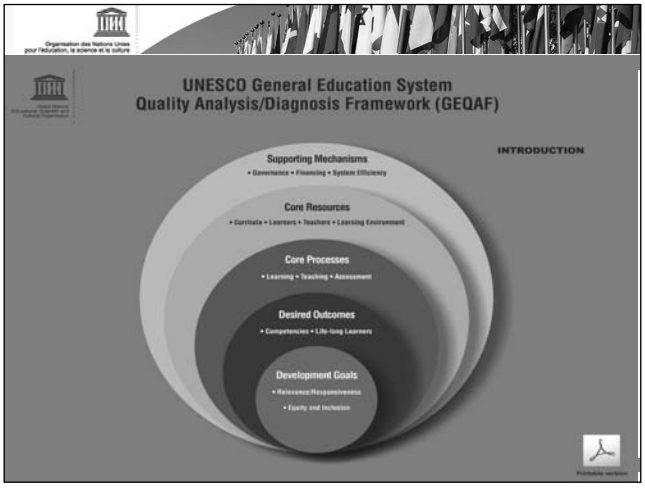
International Task Force on Teachers for EFA

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



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*.

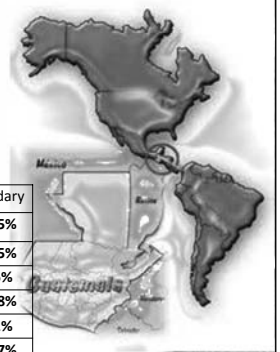
Thank you!

Japan Education Forum X

February 7, 2013
Rina Rouanet de Núñez
Guatemala

General Remarks and Indicadors

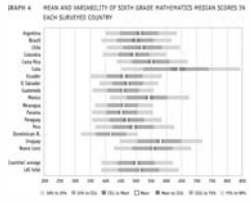
Situated in Central America
Landmass Area: 108,430 Sq KM
Population: 15 million
Annual population growth rate: 2.8 %
Total GDP USD $23.3 billion and per capita GDP is USD $4560
Investment in Education: 2.2% of GDP
Educational Indicators:

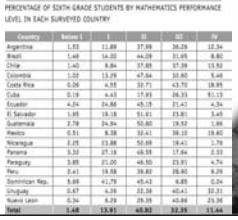


Indicator/Level	Pre-school	Primary	Secondary
Gross Enrollment Rate	**72.05%**	**118.63%**	**66.65%**
Net Enrollment rate	**57.09%**	**98.68%**	**40.25%**
Repetition rate	**0**	**11.49%**	**3.06%**
Retention Rate	**92.18%**	**94.49%**	**91.78%**
Dropout Rate	**7.82%**	**5.51%**	**8.22%**
Progression Rate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

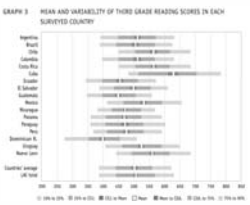
Current State of Learning (Primary Level)

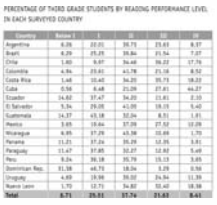
Results in SERCE (Mathematics)

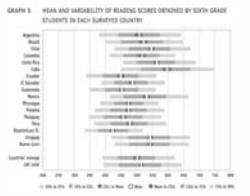




Results in SERCE (Reading)







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 biligual 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 Proffesionalization Academic Program)

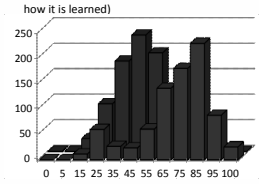
This is an in-service university training program for teaching staff, officially recognized by the Ministry of Education, which aims to raise academic standards and improve their job performance at different levels and types of education within the formal and informal school systems.

- 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

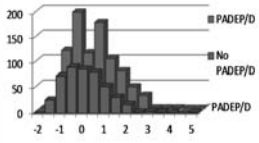
Results of the 2nd Cohort Pre and Post Test: Teachers (Mathematics and how it is learned)



	Pretest	*Postet*
Pretest N	838	838
Average	40.0	66.1
Postest DE	13.6	20.6
gl	837	
p	< 0.01	

N=838
gl=837
P<0.01

Results of the evaluation of students 2012 (Global)



	PD	*NPD*
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 Project GUATEMÁTICA Phase II, 2012.

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 eduacation 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

Elementary school

High school

Public schools

・Class size

Big schools: about 30 students

Small schools: fewer than 10 students

Combined grades

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.

Wrong!

Case 1

What students who cannot divide do

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

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.

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Case 1

What students who cannot divide do

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

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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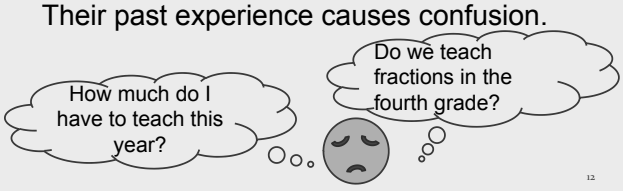
Case 1

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.

$9\times1=9$
$9\times2=18$
$9\times3=27$
$9\times4=36$
$9\times5=45$
$9\times6=56?$
$9\times7=63$
$9\times8=76?$
$9\times9=81$

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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.

$9\times1=9$
$9\times2=18$
$9\times3=27$
$9\times4=36$
$9\times5=45$
$9\times6=54$
$9\times7=63$
$9\times8=72$
$9\times9=81$

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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.

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

Advice given by JOCVs

↓

・Improvement of teaching skills
・Confidence in teaching

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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

Workshop for teachers of lower grades

Not enough staff members at the Ministry of Education

↓

Cannot promote teacher training

Not enough veteran teachers

↓

Difficult to train young teachers within schools

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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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