# College students engage in teacher education:

Improving the quality of teachers in developing countries through learning community methods

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## **Abstract**

This research paper focus on teacher education in developing countries. With this main theme, that make a brief review of Millennium Development Goals (MDGs), Post-MDG and policy of the Japanese government for international cooperation. Education will be the key issue in the Post-MDG framework so this paper focuses on improving the quality of teacher education in developing countries by college students. The authors have made an impact to their educational activities by themselves. This is the learning community method, which based on learning and teaching among college students and even include instructing to high school students. The contents of this paper share the idea of applying to their activities for improving quality of future teachers through education in developing countries. And also supplying teachers demand as college students teach each other in their higher education institutions and high school students. The case of this paper still does not have an enough experience to manage in other countries, however, the idea should be one of the key activities in UNAI through education. Education is a core function of college students and it deserves fostering educational quality including in teacher education for Post-MDG framework.

Keywords: ASPIRE Japan, teacher education, learning community, developing country, MDGs

## **Introduction**

The purpose of this study is to show the idea based on knowledge and experiences of ASPIRE Japan to prospect for Post-MDG framework. Authors belong ASPIRE association in Japan and their activities are both an actual practice and research by students themselves. ASPIRE means Action by Students to Promote Innovation and Reform through Education, which is one of the initiatives on the United Nations Academic Impact. MDGs carry on end poverty through finding solutions of global issues on international settings. This case study focuses on education because educational issues are appropriate for college students as taking advantage of their experiences and the title of this research competition is global engagement by universities to Post-MDG framework.

This research applies the idea of learning community, which is one the methods of ASPIRE Japan, for promoting teacher education in higher education institutions in developing countries. Basically undergraduate students study under faculty members in their university. ASPIRE Japan tries to learn each other in their university or in other university students, and even teaching high school students. Study student themselves is a key concept of learning community of ASPIRE Japan.

Each country has each issue or problem so the way of finding solution is different. However, research result of ASPIRE Japan is to fit many higher education institutions due to its part of the student learning activities and affect educational program directly. The aim of this research to show the result and the idea of ASPIE Japan.

## **Chapter1. Overview of MDGs**

Millennium has a meaning of a span of one thousand years. Just before the new millennium, September in 2000, the United Nations Millennium Declaration was adopted as a goal of the international community in the 21st century under the 189 attendance of representatives of the UN members. This declaration has focused on peace and safety, development and poverty, environment, human rights and good governance, and other needs of developing countries for making the clear direction of the United Nations in this term with consensus of all countries.

Millennium Development Goals, usually known as MDGs, which is obtained international development indicators that have been adopted by major summit and international conferences held in the 1990s and summarized as a framework that is common one1). MDGs are consisted on 8 goals with 21 targets and 60 indicators and these goals are below (Fig.1).

Figure 1 suggests that goals of MDGs and the United Nations public related information as Human Development Report annually. MDGs makes a huge impact for global issues and some indicators are achieved the purpose or on the good progress to deadlines in 2015. United Nations pointed out that MDGs are the most successful global anti-poverty push in history. Figure 2 shows the brief information on the progress of MDGs in each region.

Although Sub-Saharan Africa, Western Asia, and Oceania need to improve in the many goals, MDGs affects positive progress around the world. Looking at the goal 2, Achieve Universal Primary Education, made a huge step. Northern Africa and Eastern Asia have already achieved and other areas in the progress. Any others are no progress of deterioration without Oceania who has not sufficient data.



#### **GOAL 1:ERADICATE EXTREME POVERTY & HUNGER**

- $\dot{}$  Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25 a day
- · Halve, between 1990 and 2015, the proportion of people who suffer from hunger



#### GOAL 2:ACHIEVE UNIVERSAL PRIMARY EDUCATION

• Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling



#### GOAL 3:PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

• Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015



#### **GOAL 4:REDUCE CHILD MORTALITY**

· Reduce by two thirds, between 1990 and 2015, the under-five mortality rate



#### **GOAL 5:IMPROVE MATERNAL HEALTH**

· Reduce by three quarters the maternal mortality ratio



# GOAL 6:COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

· Have halted by 2015 and begun to reverse the spread of HIV/AIDS



#### **GOAL 7:ENSURE ENVIRONMENTAL SUSTAINABILITY**

 $\cdot$  Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation



## **GOAL 8:DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT**

• In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Fig. 1 the main eight goals of MDGs (Ministry of Foreign Affairs in Japan, What about ODA, 2014)

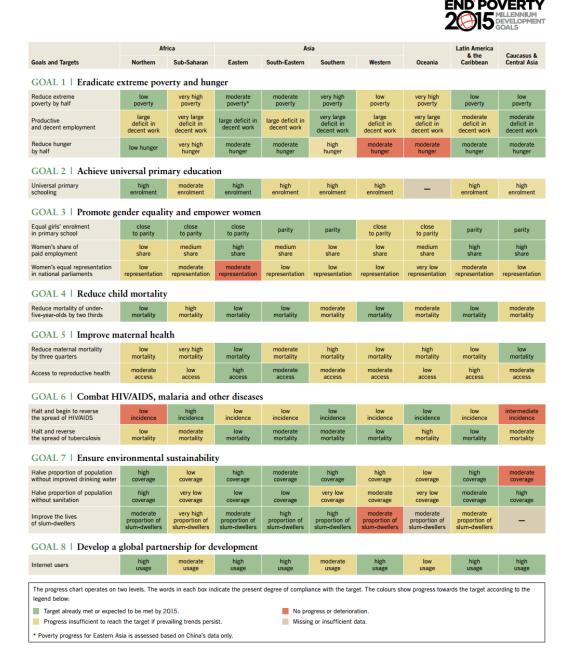


Fig. 2 MDGs 2013 Progress Chart (United Nations, MDGs 2013 Progress Chart, 2013)

#### Chapter 2. Prospect Post-MDG framework

The contribution of international society and activities related to MDGs has made remarkable progress, however, some regions or countries still suffer critical problems. Post-MDG framework basically base on the lessons and experiences of MDGs. That will focus on end poverty in order to develop the target with the mobilization and ambitious with some revising and checking goals for 2016. The characteristics of Post-MDG are that emphasize growth and employment as vital issues of creating the wealth, foster effective resource using in developing countries for a better development with strengthening governance, and promoting efforts of these ones and their ownership.

As mentioned above in this paper, MDGs are consist goals with indicators for clarifying achievement and progress, which is better way for public information to the world, however, these data sometimes cause difference issues. One of the specialist in the field of international cooperation, Prof. Fumihiko Saitoh in Ryukoku University, he mentioned that there is a risk that would turn away your eyes from various fundamental and complicated problems. Numerical targets like MDGs have a possibility to hide real issues. The resolution of poverty in developing countries needs to do both social development and economic growth. It is necessary to construct a complementary relationship between the two. Even so as to be capable of education has spread for children, if not have the enough opportunity of employment due to economic condition, parents worry for children going to school due to their willingness for education to decline in the context of poverty (Saitoh 2005). The Post-MDG framework should be more qualitative than quantitative to solve global issues in a substantial way.

United Nations showed marvelous achievement on goal 2, Achieve Universal Primary Education. However, school-going rate do not represent educational quality. It is important that not only children going to school but what and how children studying in their school. Educational quality must improve much more and to be an appropriate task as Post-MDG framework.

## Chapter 3. How the Japanese government tries to do in the post MDG framework

This chapter shows a brief review of challenging for Post MDG by Japanese government. As a contribution of them, Japan has conducted educational cooperation utilizing the experiences of rapid economic growth after World War II and modernization of the country through improving educational quality. The main purpose is that Japanese government tries to attain human security include in international indicators like EFA and MDGs even in Post-framework of MDG. They have funded 35 billion dollars in 2011-2015 for providing high quality educational circumstance to at least 7 million children as the core objective.

As a basic principle of Japanese government, it respects the ownership of developing countries, supports sustainable development with strategy, and focuses on the people who have a disadvantage in cultural or physical to touch with educational opportunity with high quality. And then, promoting understanding cultural diversity and mutual understanding through education for uniting the society and prevent conflict to contribute the world peace. Priority area consists 5 parts.

(1) Education for All: Improve comprehensive learning environment and support reinforcement of FTI (Fact Track Initiative)

A school and the government and community move into action all in one body to improve of learning environment or provide high quality learning environment. Specifically, by training to teachers, studying research class, distributing a textbook, it aims at high quality education.

(2) Education for the knowledge base society: The maintenance of the vocational training base and construction of the higher education network

It strengthens ties of education and the labor. With the cooperation of the Japanese university, promote to construction of the higher education network between areas or area interval. Also extend the acceptance of the foreign student and promote the exchange between universities, then bring up a talented person by prompting internship for study abroad students.

(3) Education for peace and security: educational support for a nation which is in conflict or received a disaster.

Through the support at the restoration stage, provide the educational environment where can get information or support for all children and youth. Also support empowerment promotion for people to protect oneself from a menace through disaster prevention education or landmine evade education including vocational training, basic skill training to lead to a comeback to normal life and living improvement.

(4) Action for support effect improvement

It does support based on each country education sector plan in the field of vision of the middle period by reflecting knowledge or the experience that got to a policy or a system and participate in the making of concrete measure on the site. Place education in the whole development; promote the

cooperation between in the area in the field of education and areas aiming at effective support by connecting Health or water, hygiene sectors.

### (5) Monitoring and evaluation

Developing future plans through finding improvement on monitoring and evaluating the progress and results in each level, project, national, and global.

(1) to (3) points out the meaning of improving the quality of teacher in developing countries. Japan has an advantage of teacher education in international cooperation fields because the Japan International Cooperation Agency (JICA) has contributed to these areas long time. And (2), education for knowledge base society, is closely related to this research idea. So the concept of this paper is not just only author's selfishness but even relevant to national international cooperation policy.

#### Chapter 4. Ideas of this case study; Learning Community Methods

School education is a major research topic all over the world. One of the ways of improving educational quality should be teacher education because teachers affect the quality of students directly and indirectly. The EFA Global Monitoring Report suggests the context of teachers in developing countries. For example, teachers who are trained in national standard curriculum, that percentage is quite low especially in preschool level. And some countries like Eritrea which have gender inequity issue with the number of women teachers.

Despite many plans are also to have been carried out by the MDGs, teacher training institutions and relevant functions in many developing countries are not able to raise teacher quality. Common issues of teacher quality are that he/she does not class well, only writing on blackboard, unmotivated to the lecture, authoritarian approach and eagerness to do a side business (EFA Global Monitoring Report Team, 2013). That is why this case study focuses on teacher education for improving educational quality.

As the college students, it is difficult that train present teachers because they are older than traditional college students and already has their approach or manner of educational activities. So the idea of this paper mainly for future teachers, college students in the developing countries. Base a recent situation in these countries, this case study provide one of the ways for solving these problems. The research focuses on college students, who have a possibility to be a teacher in the future. As mentioned above sentence, teacher education or training system and teachers themselves have quality issues for now. It is difficult that finding solutions for these problems as college students. However, these students have a chance to use their idea for improving the quality of future teachers.

Each developing countries have each educational system so this research is to mention using

Japanese higher education one as an example. After the basic studies at freshmen and second year, senior students take lectures to first year or sophomore students and even high school students. The preparation for class, giving a lecture, and reflecting on class foster the students' experiences and confidence for teaching.

And if they have a margin in their learning, these students lecture for international students who are in a different country, culture, and mother language through the internet. Share the information or

educational material to those people that could affect quality of student learning to the student lecturer because these experiences inspire students. Although some developing countries still have problems on the internet, the rates of network connection will improve clearly in the future (Fig.3).

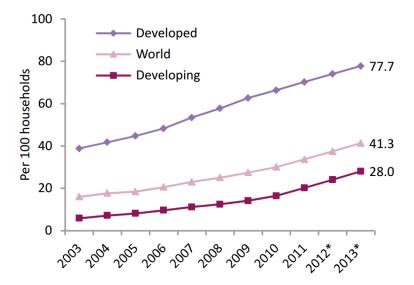


Fig.3 Households with Internet access, world and by level of development, 2003-2013\* (International Telecommunication Union, "Measuring the Information Society", 2013).

Note: \* Estimate.

Using the internet connection for doing a lecture to other culture students, that promote educational quality in developing countries including teacher education. As college students, ICT tools are key factor of international educational cooperation and that should be utilized even in Post-MDG framework because these technologies has the possibility to beyond cost issues.

## Chapter 5. The base idea of this case study; Learning Pyramid

This research paper tries to share the learning methods of ASPRIE Japan for improving the quality of teacher education in higher education institutions in the developing countries as a good practice. One of their learning activities and ideas refers to Learning Pyramid. Below are the definition and image of it (fig.4).

The learning pyramid is an image that maps a range of teaching methods and learning activities onto a triangular image in proportion to their effectiveness in promoting student retention of the material taught.

(Magennis and Farrell, 2005, pp.47) (http://www.aishe.org/readings/2005-1/magennis.pdf)

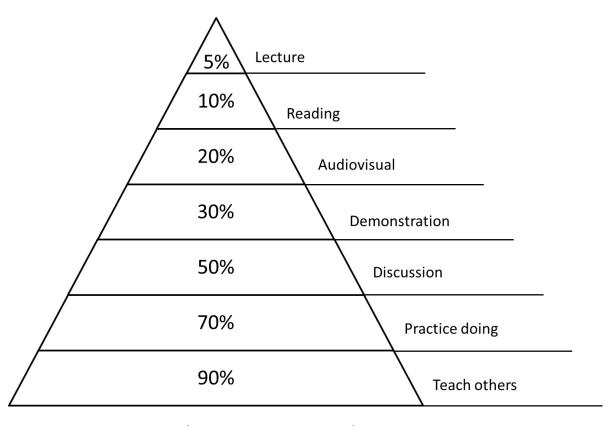


Fig.4 The Learning Pyramid (Magennis and Farrell, 2005)

The Learning Pyramid consists on Reading, Audiovisual, Demonstration, Discussion, Practice doing and Teach others. These percentages indicate how extent to stay study contents after these learning methods. For example, one student teaches others, and then, he/she understands and acquires 90% of learning content. This concept is used in higher education institutions in Ireland and confirmed the impact of "deep learning" in their experiments (Magennis and Farrell, 2005).

The thinking of Learning Pyramid leads colleges and universities to the active learning, which is students making more active in their educational setting. When Students motivate to learn by themselves, their learning is to be effective in improving communication skills and even specialized knowledge on the subject. Explaining and showing one's opinion to others in an appropriate manner, those are crucial for student's learning and even in their teaching skills. However, this concept is one of the ways of thinking the learning and has questions or discussion points. One of the opponents, Valerie Strauss, an education reporter at the Washington Post, she criticizes to the learning pyramid in her article (Strauss, 2013).

Despite ASPIRE Japan has not mutual understanding in the percentage of Learning Pyramid, they fully accept the importance of "Teach others" in their learning for improving personal skills and teaching one in their experiences. And also it has a possibility to resolve issues in developing countries, a shortage of number of teachers, quality matters of education including teacher education.

## **Chapter6. The limitation of this study**

This ideas and case study rely on the activities of ASPIRE Japan so these are not fit perfectly to the developing countries. And each country has each problem or issue in the educational system and teacher

education. That means the ideas of this study cannot create a solution for these countries. However, the ideas of this paper have a possibility through cooperating with higher education institutions all around the world, especially for the one who is joining the United Nations Academic Impact. These colleges and universities should collaborate to implement this case. How to embodying the idea and taking real action must be the next research question.

### **Conclusion**

This paper show MDGs have made a huge impact to end the poverty and also still remain issues in the global society through the brief review. That is suggestion of the importance of Post-MDG framework. However, educational matters tend to brush away rather than health or environmental issues in the discussion of Post-MDG for now. These problems should be solved, but education is core for any kinds of global issues as pointing out in EFA report and this case study. Improving quality of teachers and their education system should be one of the main tasks in Post-MDG framework because teachers have a responsibility in large part of education.

The focus of this study is the students who are the future teachers. Some developing countries have not teacher education system in the university level for now. This idea, will find solutions for quality issues in teacher education, shortage of numbers and lower level social class of teachers on the based on the concept of learning pyramid and experiences of ASPIRE Japan as an example. Teach others between college students in higher education institutions including international setting and even for high school students, which promote not only communication skills but cultivate joy in learning. Finding pleasure in

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learning and teaching can leads good practice of student's educational activities especially for teacher

education. Even if only a student deeply impresses the job of teacher and to be one, he/she must have

made better future through education. The teacher who has a passion, ability and willingness to education,

they inspire young persons.

William Arthur Ward, one of the America's greatest educator in the 20th century, he quoted like

below.

The mediocre teacher tells.

The good teacher explains.

The superior teacher demonstrates.

The great teacher inspires.\*

(William Arthur Ward Quotes<sup>2)</sup>.)

Note: Bold by authors

Post-MDG framework and global engagement by universities (e.g. ASPIRE and this case study),

which should be one of the ways of fostering "great teacher" in developing countries.

## **Reference**

EFA Global Monitoring Report Team. (2013). EFA Global Monitoring Report, UNESCO

Fumihiko Saitoh. (2005). International development. Tokyo, Nihonhyouronsha

International Telecommunication Union. (2013). Measuring the Information Society. ITU

Ministry of Foreign Affairs in Japan. (2014). What about ODA. MOFA

(http://www.mofa.go.jp/mofaj/gaiko/oda/doukou/mdgs/about.html#background, accessed 2014-06-02)

Saranne Magennis and Alison Farrell. (2005). *Teaching and Learning Activities: Expanding the repertoire to support student learning*. All Ireland Society for Higher Education.

United Nations. (2014). MDGs and beyond 2015. Fact sheet

(http://www.un.org/millenniumgoals/pdf/Goal\_2\_fs.pdf, accessed 2014-06-02)

United Nations. (2013). *MDGs 2013 Progress Chart*. (http://www.un.org/millenniumgoals/pdf/report-2013/2013\_progress\_english.pdf, accessed 2014-06-02)

Valerie Strauss. (2013). why the learning pyramid is wrong. WashingtonPost

(http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/03/06/why-the-learning-pyramid-is-wrong/, accessed 2014-06-02)

#### **Endnote**

1) The World Conference on Education for All was held by World Bank, UNICEF, UNESCO and UNDP at Thailand in 1990. This conference pass resolutions "Education for All" and "Framework for Action:

Meeting Basic Learning Needs". However, the progress of EFA was far from achievement even after 10 years later on that declaration. That is why MDGs demand to achieve universal primary education as the goal.

From William Arthur Ward Quotes, "William Arthur Ward Quotes." Quotes.net. STANDS4 LLC,
 2014.