CICE Hiroshima University, *Journal of International Cooperation in Education*, Vol.16 No.2 (2014) pp.139 ～ 155

Sustainable Security for Lifelong Learners and Society

Hideki Maruyama
National Institute for Educational Policy Research (NIER)

Abstract

We believe education is important across the world. Education equals to schooling in many contexts, especially development cooperation, and EFA prioritized basic education. It is however true that we need to continue learning for new things and changes and present school system can hardly provide wide variety of educational needs no more. If school education produces the labors who match the present system, it makes sense that educated adults feel a disparity between what is required and what is learned. This article does not point out reasons why schooling means education but tries to show a different role of education and learning in various settings for sustainable future. First, it reviews how education is understood in scale of effectiveness. Second, what lies beyond high performance or good results shown by international surveys? Finally, taking Japan as an example, this article shows what direction we could choose for the future in the discussion about the rights to education.

The right to education is ensured by the constitution in many countries because it is one of the basic human rights. Economic development often separates us into donor and recipient countries, but education is believed to be very important among us all. In international discourse on development and cooperation, education no doubt equals schooling, frequently shown by indicators such as enrollment rates and student performance, while early childhood education is a recent priority because it is understood that the earlier parents invest in their children, the more employable the children will be. Schooling and teaching styles are widely accepted as the main part of education, although lifelong learning in life-wide settings—from early childhood care and education to ending education—originally covers all learning and education activities.

There is growing visible uncertainty today, especially in the labor market, about globalization and life after retirement in light of the tight social welfare system, and developing technology could leave school knowledge and people in the past if they choose not to keep up with change. These trends seem to further enhance the present system, although virtual networking has the potential to make a breakthrough. In other words, educating people requires a more continuous approach in today's changing world because knowledge updating and skill developing could lead to more security for learners and their communities tomorrow.

This article does not address why schooling means education, because it is quite a simple matter that policymakers and influential actors have successful experience in

school in many cases and sometimes strongly believe that schooling is the best answer for educating children and adults. Rather, this article tries to point out a different role of education and learning in various settings because it could offer a clue for supporting the base of sustainable security for both individuals and groups. First, we review how effective education is understood. The school education system is a major field of study concerning the learning outcomes and education policy for any type of development. In addition to the school system, however, we should also remember other influences, such as shadow education. For example, Bray (1999) points out that the high performance among Asian countries is supported by tutoring out of school and non-formal schooling, but research pays little attention to the shadow system. The results of learner's performance and learning outcomes, measured by extensive international surveys, put countries in ranking lists and have become influential in policy making.

When a country is ranked highly, policymakers are happy, but are learners? Who is responsible for unemployment after authorities confirm that learners are employable? Senge (1999) describes that all actors fail to gain control and hardly recover from a situation after they have selected the best choice for themselves because they fail to grasp the whole picture of their influences while only believing that they are right and that others are wrong. He calls such a situation "Systems Thinking" and identifies the phenomena that people tend to think that external or other people's factors out of their control change the situation but are less likely to recognize their own influence. The harder people try, the worse the situation becomes, according to this assumption. Of course, not everything influenced in such situation can be explained in this article, but education cannot be easily analyzed separately from other factors. Therefore, the second question is what lies beyond high performance and a high ranked education system.

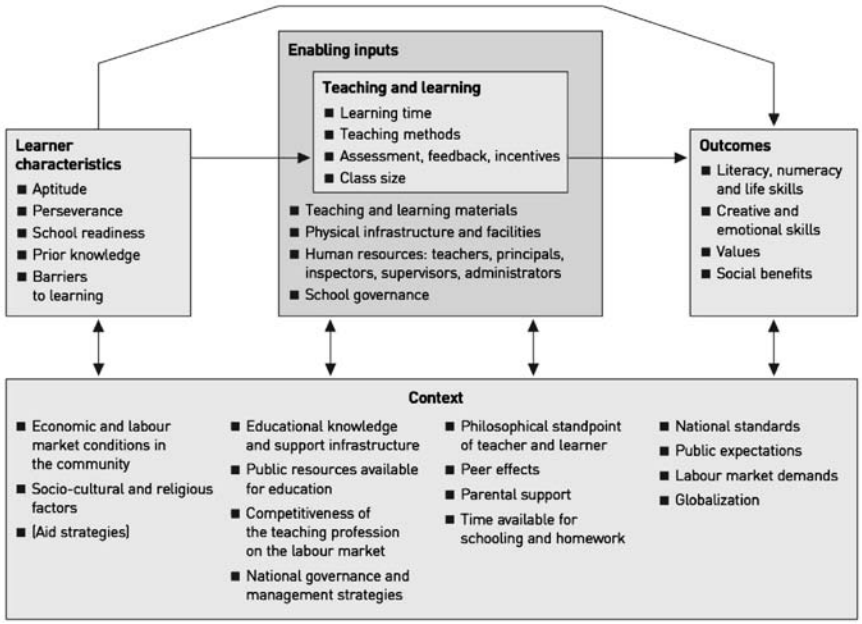
Finally, using Japan as an example, the article tries to show what direction we could choose for the future in discussion about the right to education. Finding an opportunity to learn anytime and anywhere and providing conditions for such opportunity are the minimum requirements for all learners to achieve the well-being of individuals and groups. The society with these minimum requirements could be sustainable and ensure the right to education practically.

Education Achievements in International Assessments

Education achievements represent a major outcome of education practices and policies. EFA promotes quality education in its target countries. As UNESCO (2004) shows in a model of input and outcomes (Figure 1), input quality and outcome quality are related in an important way when mass-education is achieved.[1]

[1] However, the so-called last 10% for outreach targets still remains.

Figure 1: A Framework for Understanding Education Quality



Source: UNESCO. 2004: 36

Recent international surveys and projects evaluate the performance of learners or learning outcomes, no matter what the level of economic development is in the participating countries. This does not mean, however, that the inputs are not important. There is always a need to improve input conditions such as facilities, teachers, and textbooks because local contexts are diverse. One of the most influential international assessments of young students' learning outcomes is the Programme for International Student Assessment (PISA), targeting those who have just completed compulsory school education in most countries. The assessment started in 2000 and has been held five times up to the latest 2012 survey.[2] The main purposes of PISA are to identify the concept of student competencies for this century and to analyze education systems and policies by comparing them at the international level, and the results shown as a ranking list have received a lot of public attention.[3] Figure 2 shows the latest list of the participating countries in order of performance level in the assessment.

[2] http://www.oecd.org/pisa/
[3] The "PISA shock" of poor performance ran across Germany in 2000 and Japan in 2003 because both countries believed that their education systems were good enough for their children.

Figure 2. Countries Participating in PISA

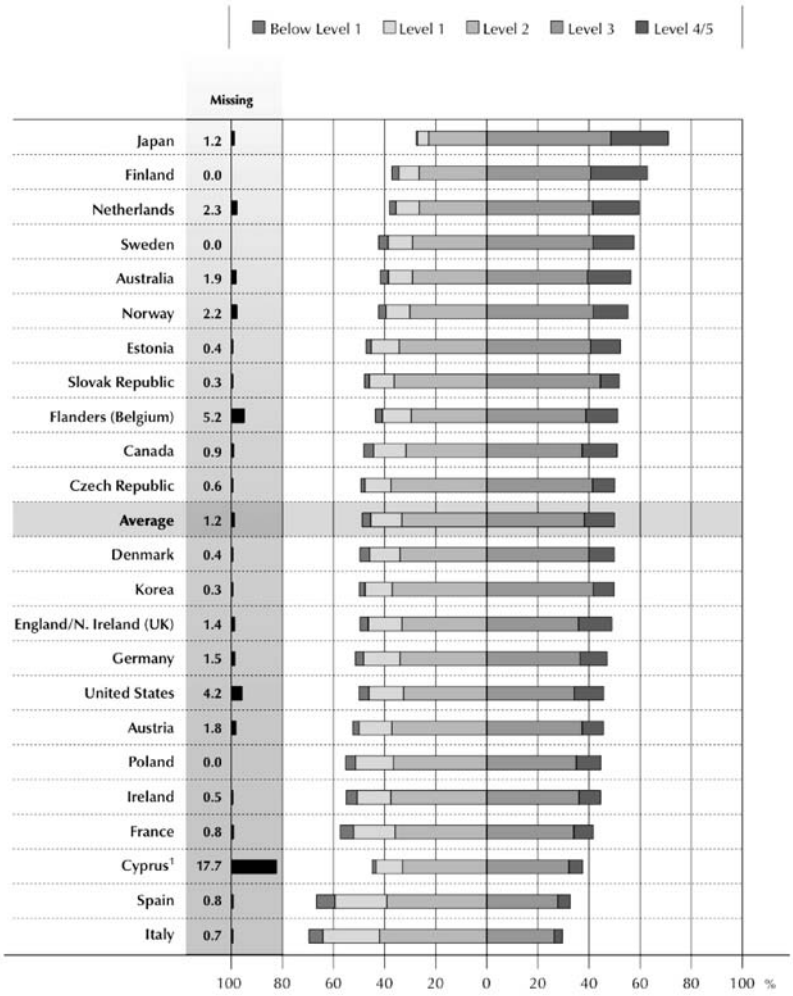
	Mathematics				Reading		Science	
	Mean score in PISA 2012	Share of low-achievers (Below Level 2)	Share of top-performers in mathematics (Level 5 or 6)	Annualised change	Mean score in PISA 2012	Annualised change	Mean score in PISA 2012	Annualised change
OECD average	494	23.1	12.6	-0.3	496	0.3	501	0.5
Shanghai-China	613	3.8	55.4	4.2	570	4.6	580	1.8
Singapore	573	8.3	40.0	3.8	542	5.4	551	3.3
Hong Kong-China	561	8.5	33.7	1.3	545	2.3	555	2.1
Chinese Taipei	560	12.8	37.2	1.7	523	4.5	523	-1.5
Korea	554	9.1	30.9	1.1	536	0.9	538	2.6
Macao-China	538	10.8	24.3	1.0	509	0.8	521	1.6
Japan	536	11.1	23.7	0.4	538	1.5	547	2.6
Liechtenstein	535	14.1	24.8	0.3	516	1.3	525	0.4
Switzerland	531	12.4	21.4	0.6	509	1.0	515	0.6
Netherlands	523	14.8	19.3	-1.6	511	-0.1	522	-0.5
Estonia	521	10.5	14.6	0.9	516	2.4	541	1.5
Finland	519	12.3	15.3	-2.8	524	-1.7	545	-3.0
Canada	518	13.8	16.4	-1.4	523	-0.9	525	-1.5
Poland	518	14.4	16.7	2.6	518	2.8	526	4.6
Belgium	515	18.9	19.4	-1.6	509	0.1	505	-0.8
Germany	514	17.7	17.5	1.4	508	1.8	524	1.4
Viet Nam	511	14.2	13.3	m	508	m	528	m
Austria	506	18.7	14.3	0.0	490	-0.2	506	-0.8
Australia	504	19.7	14.8	-2.2	512	-1.4	521	-0.9
Ireland	501	16.9	10.7	-0.6	523	-0.9	522	2.3
Slovenia	501	20.1	13.7	-0.6	481	-2.2	514	-0.8
Denmark	500	16.8	10.0	-1.8	496	0.1	498	0.4
New Zealand	500	22.6	15.0	-2.5	512	-1.1	516	-2.5
Czech Republic	499	21.0	12.9	-2.5	493	-0.5	508	-1.0
France	495	22.4	12.9	-1.5	505	0.0	499	0.6
United Kingdom	494	21.8	11.8	-0.3	499	0.7	514	-0.1
Iceland	493	21.5	11.2	-2.2	483	-1.3	478	-2.0
Latvia	491	19.9	8.0	0.5	489	1.9	502	2.0
Luxembourg	490	24.3	11.2	-0.3	488	0.7	491	0.9
Norway	489	22.3	9.4	-0.3	504	0.1	495	1.3
Portugal	487	24.9	10.6	2.8	488	1.6	489	2.5
Italy	485	24.7	9.9	2.7	490	0.5	494	3.0
Spain	484	23.6	8.0	0.1	488	-0.3	496	1.3
Russian Federation	482	24.0	7.8	1.1	475	1.1	486	1.0
Slovak Republic	482	27.5	11.0	-1.4	463	-0.1	471	-2.7
United States	481	25.8	8.8	0.3	498	-0.3	497	1.4
Lithuania	479	26.0	8.1	-1.4	477	1.1	496	1.3
Sweden	478	27.1	8.0	-3.3	483	-2.8	485	-3.1
Hungary	477	28.1	9.3	-1.3	488	1.0	494	-1.6
Croatia	471	29.9	7.0	0.6	485	1.2	491	-0.3
Israel	466	33.5	9.4	4.2	486	3.7	470	2.8
Greece	453	35.7	3.9	1.1	477	0.5	467	-1.1
Serbia	449	38.9	4.6	2.2	446	7.6	445	1.5
Turkey	448	42.0	5.9	3.2	475	4.1	463	6.4
Romania	445	40.8	3.2	4.9	438	1.1	439	3.4
Cyprus[1,2]	440	42.0	3.7	m	449	m	438	m
Bulgaria	439	43.8	4.1	4.2	436	0.4	446	2.0
United Arab Emirates	434	46.3	3.5	m	442	m	448	m
Kazakhstan	432	45.2	0.9	9.0	393	0.8	425	8.1
Thailand	427	49.7	2.6	1.0	441	1.1	444	3.9
Chile	423	51.5	1.6	1.9	441	3.1	445	1.1
Malaysia	421	51.8	1.3	8.1	398	-7.8	420	-1.4
Mexico	413	54.7	0.6	3.1	424	1.1	415	0.9
Montenegro	410	56.6	1.0	1.7	422	5.0	410	-0.3
Uruguay	409	55.8	1.4	-1.4	411	-1.8	416	-2.1
Costa Rica	407	59.9	0.6	-1.2	441	-1.0	429	-0.6
Albania	394	60.7	0.8	5.6	394	4.1	397	2.2
Brazil	391	67.1	0.8	4.1	410	1.2	405	2.3
Argentina	388	66.5	0.3	1.2	396	-1.6	406	2.4
Tunisia	388	67.7	0.8	3.1	404	3.8	398	2.2
Jordan	386	68.6	0.6	0.2	399	-0.3	409	-2.1
Colombia	376	73.8	0.3	1.1	403	3.0	399	1.8
Qatar	376	69.6	2.0	9.2	388	12.0	384	5.4
Indonesia	375	75.7	0.3	0.7	396	2.3	382	-1.9
Peru	368	74.6	0.6	1.0	384	5.2	373	1.3

Source: OECD. 2013b: 11.

Adults have also been ranked in another recent international survey. There are already many studies on adult literacy at the various levels, and for a mass comparison

OECD also conducted an international survey for adult literacy and competence across 24 countries called the Programme for the International Assessment of Adult Competencies (PIAAC) in 2011 and 2012.[4] Figure 3 shows adult literacy proficiency across the countries. Life expectancy is generally increasing thanks to the improvement of living conditions across countries. In connection with this is that school education is not the only choice for learning anymore, but lifelong learning also comes up as an important concept for the development of individuals. Moreover, the share of facilitation or participatory approaches, such as learner-centered and critical thinking approaches, is increasing in the education field.

Figure. 3. Adult Literacy Proficiency



Source: OECD. 2013a: 63.

[4] http://www.oecd.org/site/piaac/

The surveys strive to prove influential relationships in the whole system by analyzing the diversity among countries and within individual countries. This article is to answer the question of what lies beyond education achievements. Performance-based evaluation or assessment is justified to grasp quality education and learning outcomes, and a series of questions lead to study for applicable general and useful specific issues that require reflective answers in developing and developed societies.

For example, if the age of national education has ended, does citizenship education deal with all residents today? The virtual world has greater influence and many service providers have started to enclose their users by using various methods for the retention of customers. Resource-rich users gradually select paid services, and the divide between the rich and the poor grows. In short, the virtual world accelerates the divide between the two more than real life.

Japanese Issues

High Competency but…

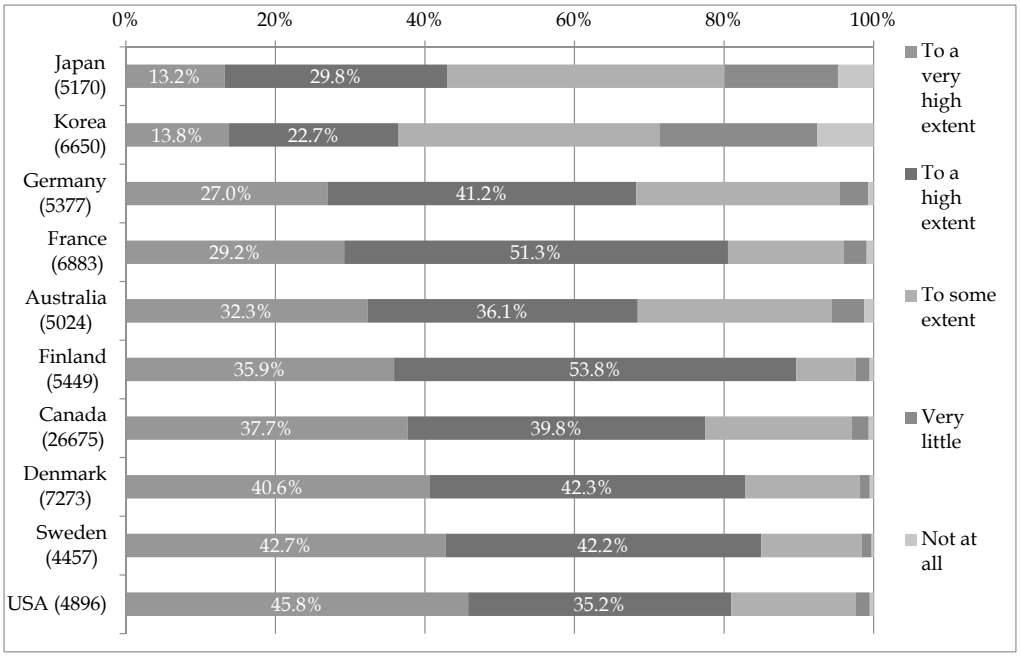
Japan is one of the top ranked countries among OECD members as shown in Figure 2 and 3 above. The public is generally satisfied with the results, but media and governments are still seeking problems to solve in education for economic growth. The results of the surveys have raised concern about the ranking of participating countries, but we need to focus more on the backgrounds of the results.

For example, the present central administration recently tends to prioritize the fostering of competitive human resources against those in rising countries such as China and India. Japan seems to adhere to its miraculous success in the past.[5] One of the reasons why the Ministry rushes to emphasize “global” education and national education is paradoxical synchronization because the globalization and localization movements strongly stand at the same time. The present popular government is promoting English education, and meantime it is also trying to lead moral education to the same level of other subject lessons which require scoring.[6] But do governments still need to decide what to learn? Even though Japanese children and adults are good performers, they might not be active learners because they seem to be unwilling to learn something new after schooling. Figure 4 shows each country’s response rates (and numbers) of adults to “I like learning new things.” It is interesting that only 40% of adults are willing to learn in Korea and Japan, which both are ranked high and have a high-pressure examination culture.

[5] The virtual competitors were Western countries in the late 19th century, when Japan began to open its market in the modernization process, and the United States in the 1980s, when Japan first reached the top in the GDP scale.

[6] This is basically because the main supporters of the present administration are industrial groups and conservatives.

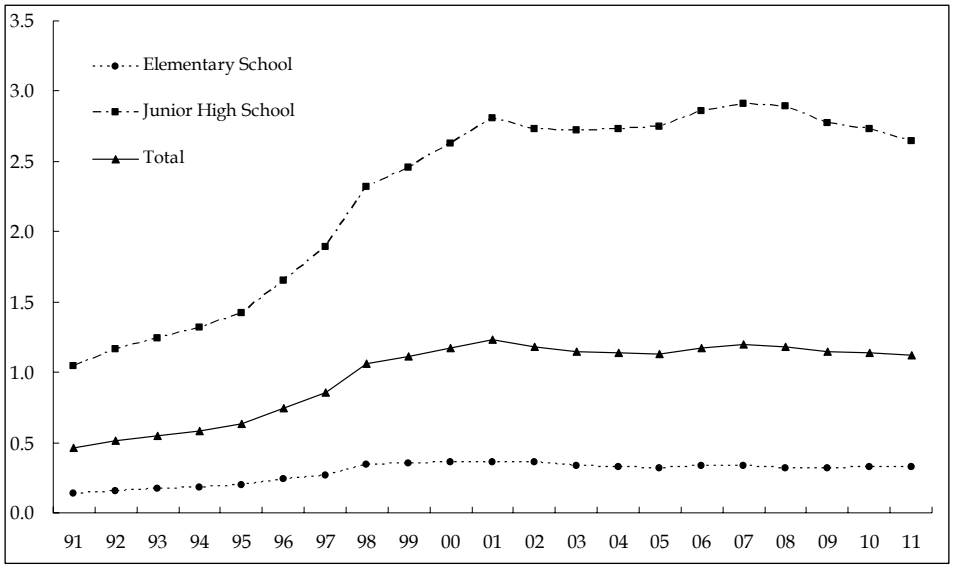
Figure 4: Adult Intellectual Curiosity across Countries



Source: OECD. n.d.

Perfect access to education does not create a perfect society. Japan does not record any official literacy rate or enrolment ratio because both are believed to be 100%. The actual figures must surely be almost 100%, but there is a growing non-Japanese population and a certain number of out of school children. For the latter, official records show that there were 117,000 school refusers out of 10 million students enrolled in compulsory school in 2011. Figure 5 shows the rate of school refusers from 1991 to 2011. The rate reached 1.12% of total students in compulsory education as of 2011. How do we guarantee the right to education for such a “small” number of children?

Figure 5: Out of School Children in Japan



Source: MEXT. 2012: 48.

Because the needs for assessments have become common—although their purposes are sometimes not clear—students and teachers must be involved in the examinations at the national and local levels. The largest official examination at the compulsory level is the yearly survey for grades six and nine and has recently caught the public's attention because the individual and school results will be available upon request from local authorities and parents; the authorities want to select good schools for efficient return, and parents want to send their children to a good one, although the school reputations are already shared at the local level. A student's score for the examination is not built upon only school lessons, because shadow education or torturing *juku* is effective when available in urban areas. People tend to attribute children's performance to their own efforts, not to these conditions. Therefore, what does the background analysis tell us about lower performing countries?

Critical Thinking for Own Lives

The 98.88% net enrolment ratio could mean no problem at all for the rest of the world. However, Japan still has a serious issue of access to quality education and contents for visible outcomes at a certain level because schools authorized by the government are the only institutes to provide a certificate for the next level of schooling[7] and because there

[7] There are movements to recognize alternative education and authorization. IBE is one of the official decisions to promote good education in the name of "global human resources." There are many international and ethnic schools not authorized by the Japanese government.

is little choice of alternative public and continuing education channels. The public attitude against drop-outs is quite negative, because it is thought of as truancy, and it is similar to the attitude against adults who quit their job.[8] Social pressure is so strong that students feel guilty about absence, and this leads to the school refusers shown above. School education in a sense is connected to authority, and a student who leaves school is considered a social loser in this country.[9]

It was March 2011 that the Japanese school educations system should have had fostered more interests and commitments among the people in their living environment after they graduated from formal schooling. The people recognized how they were indifferent about energy sources when the situation arose upon the great earthquake and radioactive pollution caused by the meltdown at a nuclear power plant in northern Japan. More than half of the population experienced this series of events and many people were awakened to the fact that access to trustworthy official information is limited in a case of severe accident. Nobody had experienced such a serious nuclear accident and no absolute answers were available at that time. The government chose to prevent public panic.[10]

It is sometimes inevitable that a strong life event change a person's mind completely beyond reason. Mothers in Tokyo, for example, bought Geiger counters from Russia and China and started to check the values of radiation in their surroundings. They built online and face-to-face networks to share the values, although many errors occurred in measurement operation, while sensational rumors were running around the networks then. They found that little information was sufficiently trustworthy because both accurate and doubtful comments and feedback were all around. Nuclear experts from famous universities and official institutes explained how safe the environment was but lost people's trust when online information revealed that enormous research funds were supplied by electronic companies, who the researchers spoke for. Many European media transmitted their experiences of 1989. For example, the former USSR government had denied the change of the radiation value in the air after Nordic countries firstly pointed it out. The Japanese public's lack of confidence in the administration increased further due to allegations of corruption.

Science became about real life, not merely a matter of lessons. Some parents still

[8] Almost all of the new graduates from universities and high schools in Japan start job hunting at the same time in winter of their junior year. They have to fill in dozens or even one hundred entry forms for companies they wish to apply for, sometimes after receive training on interviews and group discussion prior to their final academic year. Some universities complain that they cannot educate the students; others call for more students, with their good job guidance. The latter group consists mostly of small private universities which are striving to survive in this time of young population decline.

[9] Of course, there are many alternative choices to receive a graduate certificate for higher level schooling. The Ministry of Education has started to include alternative schools into the formal school system, but this requires such schools follow the national curriculum and have the same subject contents as general schools, so their response is complicated.

[10] Local governments and national governments received much critical feedback from the public and media because the information about the estimation of radiation spread was not utilizable.

check the origin of the food they buy today; others pay no attention anymore after three years have passed. School lunches in northern Japan continue to use local ingredients, and despite having jobs, some families decided to move out of the affected areas, where social pressure toward homogeneity is traditionally stronger than in Tokyo. People are not easily controlled by authorities when information becomes more accessible. At the same time, the divide is widening between parents who are safety sensitive and those who are not. The limit of formalistic school education is becoming clear.

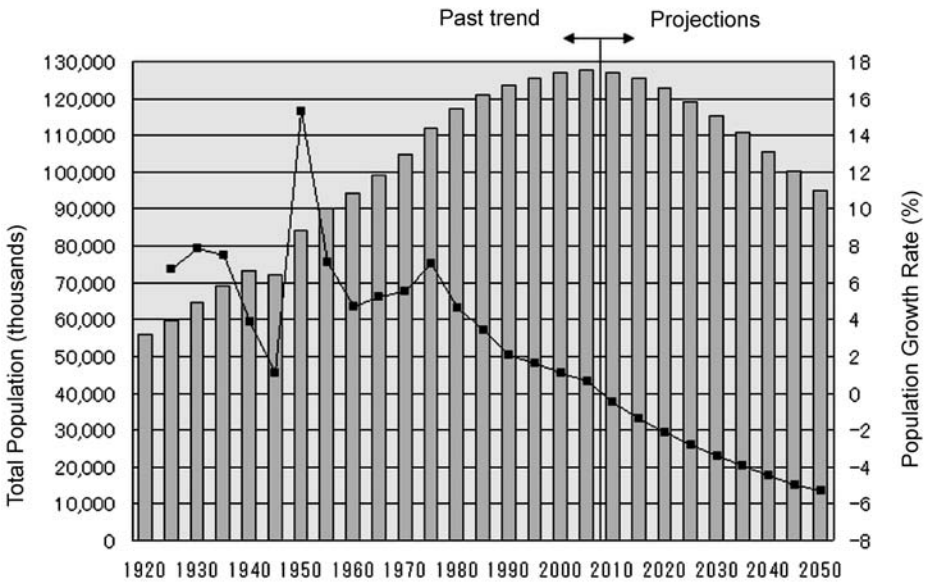
Population Decline

The modernization of Japan at the end of the 19th century is sometimes understood as a miracle among world history, and the myth that the Japanese economy stemmed from education still lingers. It was somewhat true that many lucky events for Japan occurred and that education enabled substantial good labor when the Japanese population was growing. Much "leading innovation[11]" was made in Japan after the country caught up with the economic level of Western countries in the early 20th century and after the recovery from defeat in World War 2. Based on this success, Japan always gives importance to education for its high-tech preference, and infrastructure has become one of its strongest domains.

The most serious problem today in Japan is population decline. The population has been dropping since it peaked in 2005, and for the first time ever in Japan senior citizens account for a larger portion of the total population. The increase of seniors presses the budget while tax income is shrinking, and no economist makes an optimistic estimate of social welfare for the future. Figure 6 shows a Japanese demographic snapshot from 1920 to 2050, with a future estimation. The bar graph indicates total population, whereas the line chart indicates the population growth rate. Education is not immune to this problem. Japanese universities are struggling due to the decrease of their target population—new high school graduates—, because they must fight for a larger piece of a smaller pie than that in the 1990s, when the entrance examination was called "hell" and many new universities and colleges were opened.[12]

[11] The slogan of Toshiba, a Japanese electronics giant (http://www.toshiba.eu/).
[12] The child population peaked in 1973.

Figure 6: Population Trend in Japan



Source: National Institute of Population and Social Security Research. 2006

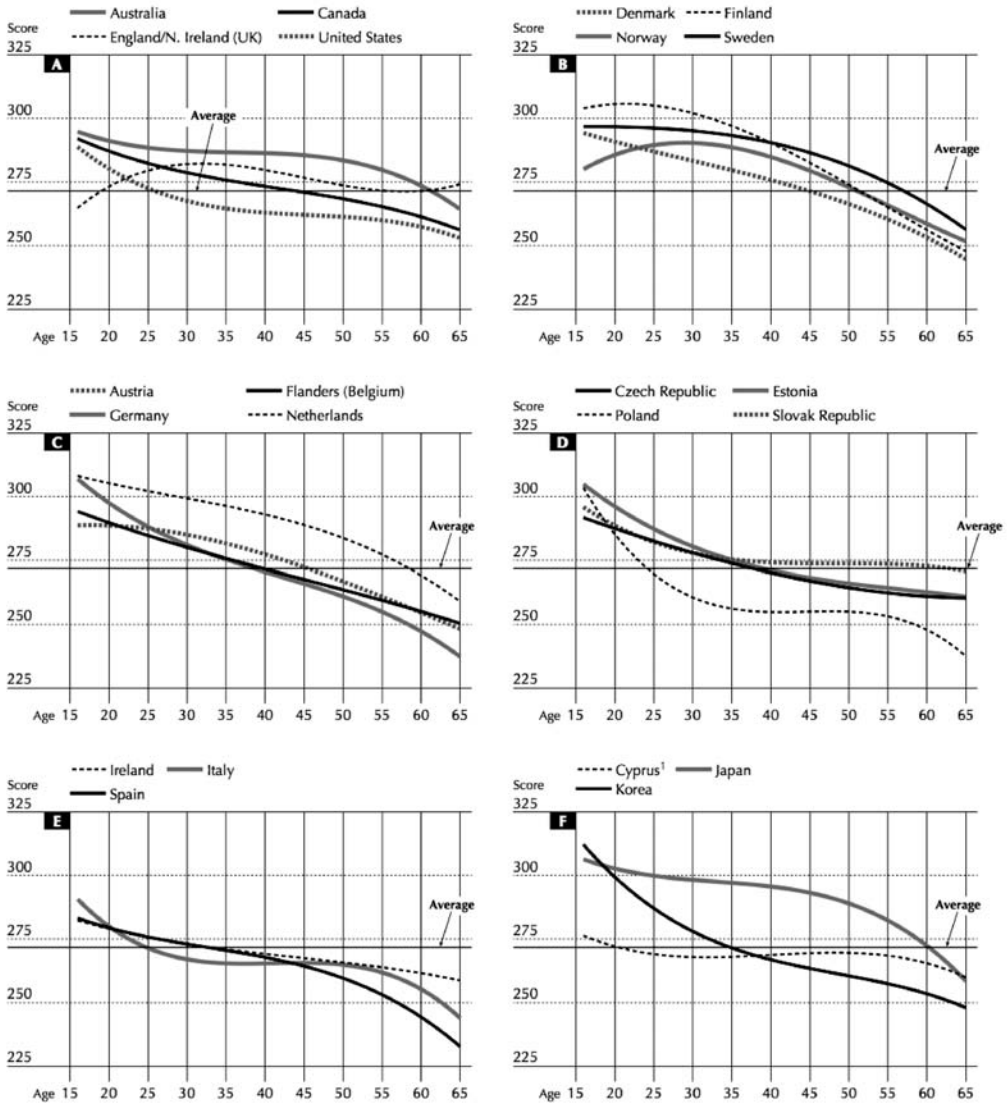
Considering data showing that learning outcomes diminish as people age (Figure 7), the present school education system will face its limitations sooner or later because it still targets children and refuses to change from what it was in its successful past. The learning divide is widening due to different forms of risk management by parents and learning adults' attitudes. The education system needs a more flexible approach to learning as well as networking with multiple channels. Education could maintain its present system if people do not engage in the process of active learning.

A typical example appears in rapid changing technology. When a person tries to use a search engine, many unrelated results may come up and irritate the person because it takes more time to find appropriate information. Internet service providers suggest filtering functions to help with this problem. Software companies are developing applications for specialized purposes, such as a library search engine, social network, and an online auction without using a general internet browser, especially for use on mobile devices. This noise-free environment—sometimes a paid service—is so attractive that a matching mechanism is built between users and companies. Here again, the so-called digital divide widens because those who can access the fast and stable information network can reach and exchange more information. The resource-rich conditions include having the same language or cultural capital, both in physical and virtual space, which could make it difficult for the resource-poor to reach the qualified information.[13]

[13] Sassen already pointed out in 1999 the phenomena in which rich people share the same values across the world but never with people living only one block away.

If it is true that the general trend is loss of literacy proficiency with age, then education should be suitable to all age groups for their own purposes. School education to enable good-quality labor is not enough for various learning needs, especially for retired people. We do not have to check the unemployment rates across countries because a diploma does not guarantee employment anymore. As a rapidly-ageing society, Japan showed better performance in the international survey but its rate of learning new things was lower than other countries, as shown in Figure 4 above.

Figure 7: Relationship between Literacy Proficiency and Age



Source: OECD. 2013a: 193

One more serious problem is that more than 80 Japanese people kill themselves every day. Figure 8 shows the trend of suicide in Japan from the end of World War 2 to now. More people committed suicide when Japan had a difficult time during the recovery from the war in the 1950s, during economic competition in the 1980s, and during the impact of globalization after 1998. The rate for men jumped from 1997 to 1998, after the economic bubble burst and a lot of fathers lost their jobs. It has remained flat since then, although the economy has briefly recovered several times.

Figure 8: Suicide in Japan

Note: The graph shows the rate for the total, men, and women from top to bottom.
Source: Cabinet Office. 2012: 3

On the one hand, international surveys have proved that Japanese children and adults perform well in terms of literacy and competency. On the other hand, many adults are unwilling to learn new things, some children do not want to go to school, and parents are afraid due to risky information which is not always accurate, while many people commit suicide. It will be a common issue for any countries how ageing society with population decline can make itself sustainable.

For Sustainable Society

Education for Sustainability

Orr (2004) illustrates how formal school education is for moving upward socially, becoming elite, and separating knowledge and the body. This argument shows the need to integrate many channels of education, although it seems to be extreme in the discussion

of the right to education, especially in light of the situation in areas within a developing country where no school or education provision is ensured. But if the present system is causing environmental and social problems, education as a part of the whole system reproduces global and local problems; Senge (1999) explains that every part influences the whole.

Here, therefore, we should consider more about education for sustainability, taking account of the extent of the influence of education and learning. There is already a global movement for education for sustainable development. The Brundtland Commission's report, *Our Common Future*, in 1987 defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.[14] Japan has not yet found a fundamental solution for nuclear waste, even though industrial companies and the majority of politicians plan to restart more than 50 nuclear power plants across the country, while the declines of population and of energy demand are estimated and many possible earthquakes are scientifically expected in the near future.

The large earthquake and subsequent aftershocks in 2011, however, revealed that the people had blindly believed that they were living safely or had just been unaware of the danger but living with fear. They understood they could choose what to learn.[15] It is logical that today's technology cannot solve the nuclear problem so that we have no choice but to pass this issue on to future generations. The above definition, however, does not accept today's situation sustainable. How can education then make our society sustainable before a sudden technological innovation will hopefully become a solution?

Flexible Learning Opportunities

Education can hardly promote self-education or continuous learning when it forces learners to learn what providers want to teach, unless the learners have to complete that course. The East Asian culture of examination is an example of mandatory education which sometimes includes training for discipline. The people believe discipline is a good virtue and leads to norms in society. An interesting fact is that Middle Eastern countries ask Japan for school education concerning discipline instead of technical assistance because the officials worry that young people are too westernized and do not respect their seniors. But what will education for children be like if they stop paying attention to learning for their own interests when they grow up?

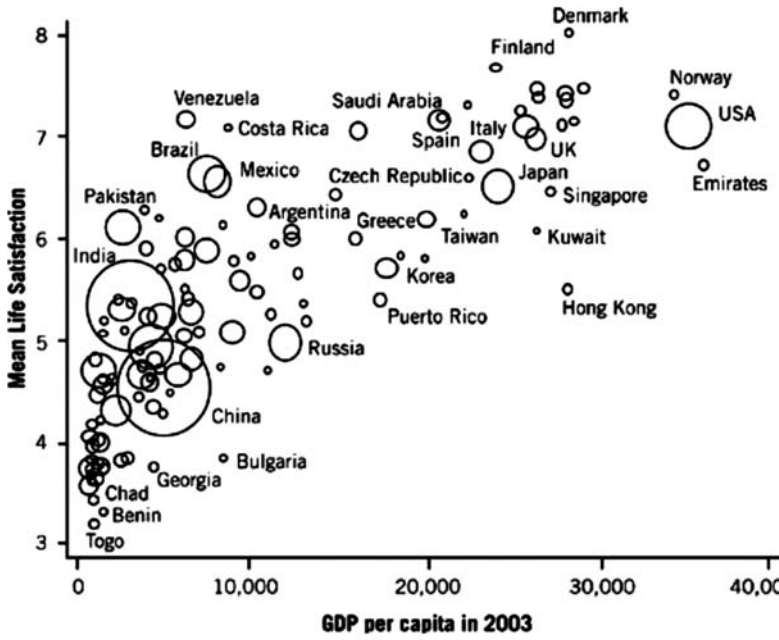
Currently, the only way is lifelong learning, because the world is changing and

[14] http://www.un.org/documents/ga/res/42/ares42-187.htm

[15] The author should mention that the adults chose the political party which promised to promote nuclear power plants in Japan and export them to Viet Nam, Turkey, and India at the national election in July 2013. Some politicians who were actively against such policy were elected in urban areas but they were the minority. As usual, only a small portion of eligible younger voters actually voted.

people need to decide whether to change or not for their own purpose in life. Lifelong learning is always flexible, includes formal schooling and informal learning, and supports social security because learners can control and build their society and update their knowledge and skills for their own interests. To make society sustainable, the authorities need to ensure learning opportunities anytime and anywhere.

Figure 9: Life Satisfaction and GDP



Source: Seligman. 2011: 224.

The essential goal for people's lives can be happiness for most cases across all levels of economic development. Generally, happiness study focuses on the topic of people's happiness by measuring life satisfaction, such as buoyant mood, merriment, and smiling, but well-being theory can deal with five elements as constructs and happiness as a thing (Seligman, 2011).[16] Money makes people happier to some extend but it is obvious that there is variety when you look within a country rather than between them (Figure 9). At the same time, it also makes sense that Forbes magazine's "richest Americans," the Pennsylvania Amish, and the Inuit people in northern Greenland all have the same score of life satisfaction, followed by African Masai, international college students, Illinois Amish, and Calcutta slum dwellers.[17] What is education for if certificates and economic

[16] According to Seligman, the well-being theory takes account of positive emotions, engagement, meaning, accomplishment, and positive relationships.
[17] Diener, E. and Seligman, M.E.P. 2004. Beyond Money: Toward an Economy of Well-Being, *Psychological Science in the Public Interest* 5: 1-31, cited in Seligman 2011: 226.

success at the individual level bring no difference in terms of life satisfaction between the educated and the non-educated?

Concluding Remarks

Due to powerful globalization we can no longer ever remain in the same state. The competitive environment—which sometimes leaves us no choice but a life for money—influences almost all the types of education, as Systems Thinking illustrates.[18] Lifelong learning brings about the opportunity for learners to reflect on themselves, especially when their chosen education has no requirements. School education, a part of lifelong learning, can ensure the first access to a learning opportunity for many people. In this sense, EFA created an environment for such access, especially for girls. Unfortunately, access to education does not yet guarantee quality education for the moment, but high-quality education itself does not always motivate learners to continue learning even though they perform at the highest level in the world.

Lifelong learning is advantageous from the personal aspects of happiness and well-being by flourishing as well as the social aspects of sustainable development in environmental, economical, and cultural dimensions. People can engage what they learn in their everyday lives and protect themselves or their families and friends in dangerous conditions. It is the strongest part of lifelong learning that the meaning of learning depends on the learner's motivation and purpose, and subjective well-being has nothing to do with someone else's evaluation.

The right to lifelong learning, however, requires an institutional channel in a formalistic society. Laws and regulations should be developed and people maybe need to be educated to recognize the necessity of lifelong learning. It does sound optimistic to think that the private sector will push business people to learn new things, and new business on senior citizens is generated because gerontology will be the next hot topic for many developed countries.[19] Japan is one of the fastest ageing countries and will be a model country for bridging discourse on school education to a wider aspect of learning for elderly individuals and communities. It will need to refer to many good cases, especially those at the small-community level in developed countries for legal systems and those in developing countries for the role of soft power and traditions.

References

Bray, M. (1999). *The Shadow Education System: Private Tutoring and its Implications for Planners*. 1st ed. (2nd ed.) (2007). Paris: UNESCO-IIEP.

[18] For example, MOOCs are popular among the outreach to potential learners, but those who continue learning tend to have already received higher education.
[19] The Republic of Turkey is an emerging country with a large young population but it has started to focus on economics, education, and gerontology at the university level.

Cabinet Office – Government of Japan. (2012). *White paper on Suicide Prevention*. Retrieved from http://www8.cao.go.jp/jisatsutaisaku/whitepaper/w-2012/pdf/honbun/pdf/ p2-4.pdf

Maita, T. (2013). International Comparison of Adult's Intellectual Curiosity [*Seijin no Chiteki Koukishin no Kokusai Hikaku*], *Data Essays* [*Deta Essei*] on 2013-12-8, Retrieved from http://tmaita77.blogspot.jp/2013/12/blog-post_8.html.

Maruyama, H., & Ohta, M. (eds.) (2013). *Possibility of Non-Formal Education*. [*Nonfomaru Kyoiku no Kanousei*] Tokyo: Shinhyoron.

Ministry of Education, Culture, Sports, Science and Technology. (2012). *Issues in Guidance for Student Behavior and Problems [Heisei-23nenndo Jidou Seito no Mondai-Koudou tou Seito-Shidou jou no Sho-Mondai ni kansuru Chousa ni tsuite]*, Tokyo: Government of Japan.

National Institute of Population and Social Security Research. (2006). *Japanese Population in the Future [Nihon no Shourai-Suikei-Jinkou]*, Tokyo: Government of Japan. Retrieved from http://www.stat.go.jp/data/kokusei/2010/kouhou/useful/u02.htm

Noddings, N. (1992). *The Challenge to Care in Schools; An Alternative Approach to Education*. Teachers College Press.

OECD. (2013a). *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing.

OECD. (2013b). *OECD Country Note: Programme for International Student Assessment (PISA) Results from PISA 2012*, OECD Publishing.

OECD. (n.d.) *Public Data & Analysis*. Retrieved from http://www.oecd.org/site/piaac/publicdataandanalysis.htm

Orr, D. W. (2004). *Earth in Mind: on Education, Environment and the Human Prospect*. Island Press.

Seligman, M. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-Being*, NY: Free Press.

Senge, P. M. (1999). *The Fifth Discipline: the Art and Practice of the Learning Organization*. NY: Currency-Random House.

UNESCO. (2004). *Global Monitoring Report 2005*. Retrieved from http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/reports/2005-quality/

World Commission on Environment and Development. (1987). *Our Common Future*, Oxford University Press