Reconceptualizing assessment for learning from culturally embedded pedagogy to add further impetus to curriculum as a school-based initiatives

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This article revisits the traditional paradigms of school based curriculum development (SBCD) until 1990s in light of modern trends of curriculum reform. Nowadays SBCD is developed in opposition to the traditional paradigms as a tension between future-oriented concepts like sustainability, entrepreneurship, globalization and citizenship. Moreover it extends SBCD over diverse, mutually interfering incentives by which school wide forms of formative assessment are used. Here assessment is examined from culturally embedded nature of pedagogy in Japanese contexts. Yet assessment is often considered as a stumbling block to change educational reform. The challenge is to facilitate a global exchange of experiences on school-based initiatives as well as assessment in practices. School-based networks or school-based research consortiums should be strengthened to raise awareness among members and key stakeholders to take concrete actions to actively engage in local and global initiatives to support and promote broader issues.

**Keyword**: assessment, pedagogy, curriculum, school-based initiatives, Japanese culture

1 Introduction

The March 2011 earthquake and tsunami that struck the Tohoku region in Japan was devastating. The ensuing accident at the Fukushima Nuclear Power Plant led to the evacuation of more than 120,000 people living in the area. These events created a great deal of insecurity for members of the community. Despite the wide-spread destruction caused by the earthquake and the disruption from the large-scale evacuation, shattered communities are being rebuilt upon the indestructible foundation of common heritage and shared cultural values.

Nowadays, in the "post-modern" era, young learners face a heightened sense of uncertainty about the future, particularly the need to increase the use of renewable sources of energy after the disaster. Schools, through carefully structured curricula, need to address these concerns about the future of the communities that they serve. However there are multiple layers of serious

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constraints in thinking about curriculum as a school-based initiative to include broader issues and Western, future-oriented, abstract concepts: 1) sustainability, 2) entrepreneurship, and 3) global citizenship.

2 Background of School Based Curriculum Development (SBCD) in Japan

Scriven (1967) described formative evaluation as the evaluation of an ongoing and malleable educational program. It was Bloom (1969) who attempted to transfer the term formative from evaluation to assessment. This is where an understanding of the process of defining formative assessments first became complicated.

Bloom came to Japan in 1972 and he said the following:

“I think the basic idea of the Taxonomy can apply to curriculum development and educational research in various countries including Japan; nevertheless I think it might be necessary to reform the Taxonomy in relation to specific educational objectives and philosophy of Japan as they are made in a different situation. I hope some aspiring researchers will attempt to do this, particularly the affective domain of the Taxonomy was made from the American point of view. I am sure educators in Japan probably have different ideas about objectives on the affective domain. So, the taxonomy on the affective domain is sure to differ somewhat between Japan and the US. I would like you to review this point fully in Japan.”

And also he asserts “A good self-concept is the foundation of a happy and successful life. But the school systematically destroys self-concepts for many children, as early as second grade (Bloom 1977).”

But this task was not necessarily easy for us even 1980s as Japanese school practices tended to focus on the “lesson study” and evaluating teaching, rather than curriculum evaluation. In the 1980’s, the first author learned the experiences of the UK \(^1\), based on the OECD reports of the 1970’s and also tried to create devices or instruments to evaluate curriculum in primary and junior high schools. However since the early 1960s at the high school level, each student has received a percentile ranking (“hensachi”) from “practice” entrance examinations. Thus, the framework then included perspectives to broaden record-keeping in the classroom and school management or regional education planning, by entering and focusing on lesson study. In those days based on Japanese indigenous culture, Arimoto (2006) focused on school research themes (a kind of banners) to combine lesson study and a new type of school management. Then Arimoto focused on the key concept of “resources” necessary for curriculum development and created checklists as instruments to diagnose between teachers and resources.
In October 2005, Arimoto had a chance to discuss the findings in UK and Japan with Dr. Pam Sammons of Nottingham University (now Oxford University) by inviting to NIER (National Institute of Education Policy in Japan). Then Arimoto and Sammons shared the importance of improving schools rather than school choice based on new public movements. And also Arimoto (1995) asserted the difference between UK and Japan, criticizing the situation of the UK that assessment is used for direct school effectiveness and accountability, summed up in a metaphor from Grimm’s Fairy Tales: Frog Prince (curriculum as frog and effectiveness as princess—frog is ugly, so prince was injured by princess). The conclusion is that starting points are different. In short, data-driven manual-oriented society with no pedagogy (UK) versus improving on-going practices in the process-oriented socially self-awareness society with only methods (Japan). So it seems like a pitfall for Japan to model the UK unconditionally.

Now SBCD is an integral part of nation-wide policy making in New Zealand, Finland and other nations, SBCD is moving towards future-oriented concepts like sustainability, entrepreneurship, globalization, and citizenship. Nowadays SBCD is developed as a tension between future-oriented concepts, and crucially disaster prevention. It extends over a large area under the mutually interfering incentives by which school wide forms of formative assessment are used. Curriculum refers to the knowledge that a country (or group of countries) agrees is important for all students to have access to. The traditional curriculum is not broad or future-oriented.

It would be better to quote the literature of sociology/anthropology/social psychology to describe schools in Japan. Saying that Japan might seem to be best exemplified by Durkheim’s (1961) transcendentationalized (aimai/wakarikukui) “Society”, Takie Lebra attempts a new understanding of the Japanese self through her unique use of cultural logic. She begins by presenting and elaborating on two models (opposition logic and contingency logic) to examine concepts of self, Japanese and otherwise. Guided by these, she delves into the three layers of the Japanese self, focusing first on the social layer as located in four ‘zones’ - omote (front), uchi (interior), ura (back), and soto (exterior) - and its shifts from zone to zone. New light is shed on these familiar linguistic and spatial categories by introducing the dimension of civility (Lebra 2004). The author still can’t get over the complexity of schools in Japanese culture. The concepts four ‘zones’ - omote (front), uchi (interior), ura (back), and soto (exterior) is sure to relate to investing in ceremony, rituals in schools, and so on and teacher related matter such as catalyst, counterpoint and casualty but that’s a review for another time.

The first surface layer of constraint is securing time in a system’s implementation of curriculum. Finding a curriculum that can address new challenges for science such as renewable energy is very problematic. Mode 3 Science provides opportunities to expand active and
community-oriented participation in scientific inquiry, which supports the future quality of life beyond traditional content-based separate subjects. Now pump-priming \textit{yobimizu} central policy provides fresh impetus and support for school based (extra-) curricular activities in local schools and communities from other ministries beyond the so-called vertically divided narrow administration. Even the UNESCO Education for Sustainable Development (ESD) school-based initiative lacks large-boned policy. Such UNESCO Associated Schools (ASPnet) designated from other departments within the Ministry of Education (MEXT) face a dilemma with other schools, because teachers, as public servants in almost all public (state) schools, are transferred (continuously shuffled) to other schools every several years. We face a three-way competition (\textit{san sukumi kouzou}) among local authority, schools and the central government. All three want their program/ agenda to be given dedicated time in schools. Adding to the problem of time is the increase to content; the average number of pages in Japanese and mathematics textbooks for high school students in Japan will increase by almost 30\% in the 2014 fiscal year.

The deepest layer explores the most crucial constraint at the level of curriculum structure by revealing historical/traditional, holistic views of human nature. The curricula reform agenda goes beyond science-related courses, including geology, biology, geography and mathematics (components of STEM: Science, Technology, Engineering, and Mathematics) by including art (to promote STEAM) based on social-constructivism.

3 Some historical and Philosophical Background on assessment in Japan

While Japanese foreign policy is often perceived as weak and ineffective, Japanese education has much to offer the world. According to the World Top 20 Education Poll (NJMED 2013), Japan is a world leader in educational provision. Japan holds a 10 point lead over second place South Korea, and a twenty-eight point lead over third place, the United Kingdom, and a surprising forty point advantage over Finland.

In Japan assessment practices are inherently and unknowingly embedded in the classrooms, although assessment is often considered a trojan horse, or stumbling block and a matter of attitude. We can say the following from learning activities that will elicit evidence of learning. Through both curricular and extracurricular activities, Japanese children learn early that individual self-sacrifice is often necessary for group success (Ellington 1990; Arimoto 1995). We can say the concepts of “criteria” “standard” relate to “habitus” as Pierre Bourdieu says, lifestyle, the values, the dispositions and expectation of particular social groups that are acquired through the activities and experiences of everyday life. Their moral is called \textit{Bushido}, the code of the samurai. Based on the ideas of Confucianism and Buddhism, originated in the \textit{Kamakura} period (1192 - 1333) and reached perfection in the Edo period. It puts emphasis on loyalty, self-sacrifice,
justice, sense of shame, refined manners, purity, modesty, frugality, martial spirit, honor, affection, and other such values. Japanese workers also appear to have more respect for authority than their U.S. counterparts, as well as an entirely different attitude towards work. The Japanese apparently live to work and are willing to sacrifice their personal lives for the company.

Much human communication of intentions and ideas is transmitted by words, but there are instances in which words are not used. Oriental peoples place great stress on communications between the spiritual aspects of human beings. This kind of communications (called ishin-denshin in Japanese) is unaided by words (Yamada 1997, p.51). The Japanese self tends to communicate through triologue or monologue more than the Western self, for whom dialogue is the most “salient” communication style as in debate. In conversation, a sentence is typically open-ended and value. Missing here is a continuous, coherent, assertive speaker, the “I” of western-language-based discourse.

By tracing the origins of lesson studies in Japan, it could be concluded that its origins back to the time of 1900’s at the latest, and furthermore culturally back to the time of famous Noh player, Kan’ami & Zeami in 1300’s. To them must be attributed child’s spontaneousness and initiative “jihatsu-sei” and view on children kodomo-kan (in Japanese “kan” means “perspective” or “perception” “Great Concentration and Insight on mind, heart in practices”) and “Kata”(Minamoto 1992, 1985, De Mente 2003). Behind the Japanese school culture is “a view of improvement” of noticing what should be improved down to the smallest and most detailed level (self-introspection) to make schools better by working harder as well as clean-up duty and always humble and modest, which is a different view from those in Western and many other Asian nations (Arimoto 1995). Japanese could share the common value of social cohesion between Scandinavian countries.

As both phenomenal matrices and physical imprints, the cycles of the Japanese kata appear as paradigmatic illustrations of trajective process. Inasmuch as Japanese culture has institutionalized some of its patterns or kata (as in martial arts: see Barioli), this culture has brought to the level of collective consciousness, and systematically used, certain things which cannot be grasped by the individual subject’s consciousness, and which individualistic cultures like the modern European one therefore leave in the realm of the unconsciousness (thus unmanageable) (Berque, 1992).

The importance of human ties and interconnectedness often were specifically expressed in prosocial utterances stressing the need for others through elements of amae and omoiyari – values encouraged in shudan sekatsu as essential features of a “human-like” person.··· Children also demonstrated their capacity for self-regulation in the context of cleanup behavior, in which they showed no reluctance to remind each other of mutual responsibilities (Kelly 2001).

The two most fundamental characteristics of the Japanese thought-tradition and of Japanese culture, even today, may be summed up in the expressions “direct (or immediate) experience,”
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the general experiential point of view, and “indirect thinking,” “indirect-ness,” or “indeterminateness in thought,” called variously “irrationalism,” anti-intellectualism, “non-rationalistic tendencies,” etc. (Moore 1967).

Regarding Ki, Shugyo, Shintai, Yuasa says that “Somesthesia (the faculty of bodily perception) is a consciousness that one feels about the state of one’s body. I will call this self-conscious grasping of one’s body, that is, an awareness (kizuki) of one’s body” (Yuasa 1986). Kizukai (or kikubari) is meaning alertness and caring attention to other’s needs or feeling. It is done by using wakimae language.

Assessment is embedded and multi-layered in classroom process and school process. Kizuku, Tashikameru, kakunin-suru, Mitoru, Mikiwameru, Mitateru, Yosoku-suru, Haaku-suru, Miru, and so on. All Japanese kotoba comes from high contexts and mutuality and interdependence in Japanese deep culture. It related to Neriai or Neritage shared among teachers. Neriai assessment-embedded pedagogy is Kata-ized According to Kumiko Ikuta there are lots of Waza (craftsmanship) language in Sumo wrestling. And it may be based on textbook transforming culture in schools. The proposal of Shu-Ha-Ri framework famous in martial arts could be applied to classroom process more than 80 years ago.

### 4 Exemplary case study-an example practice of SBCD at high school in Japan

Here we will see an example of SBCD at high school in Japan, with a focus on Japanese high school original subjects about global citizenship. A school-based initiative is introduced in order to discuss how to assess student learning as well ways as to improve classes or lessons.

An education for global citizenship has never been more necessary, as globalization continues to be an important determinant in many aspects of life. In a fast-changing global and interdependent world, education for global citizenship should and can help young people lead fruitful lives, while enabling them to develop their knowledge, skills, and sound values needed for creating a better world.

In 2010, an original Global Citizenship (GC) elective was offered to students in the English course as newly implemented in the school curriculum at Miyagi-pref. high school. The subject’s name was Global Citizenship, and the students learned about various global issues such as poverty, human rights, peace and conflict, sustainable development and so on. The course of study was designed to foster students’ 21st century skills through student-centered activities including group discussions, participatory workshops, role-playing, and presentations. After one year, with support of formative assessment and interactive pedagogy, the students’ global awareness grew drastically, and they were enlightened as global citizens.

Table 1 is a GC syllabus designed by Ishimori (2012), which was put into practice in the year 2010-2011 at a Japanese high school.
### Aims for learning

1. Broaden your view and raise your awareness and responsibility as a global citizen.
2. Deepen your knowledge & understanding required as a global citizen (social justice, diversity, interdependence, sustainable development, peace and conflict and so on).
3. Acquire skills and desirable attitudes as a global citizen (critical thinking, discussion skills, respect for others, cooperation, self-esteem, consideration for environment and so on).

### Intended skill outcomes

- Thinking skills, discussion skills, communication skills, problem-solving skills, team-work, multi-angled view etc.

### Learning Style

1. Lecture
2. Tutorial (exchanging ideas, discussion, summing up opinions, understanding others’ opinions)
3. Participatory learning (activities, workshop, group learning, role-playing)
4. Presentation/Expression (expressing own opinions, presentation)

### Advise for learning

1. Participate in the class positively, think well, and express your opinions.
2. Listen to others and think over their ideas, and reorganize your own.
3. Always reflect back at yourself as a global citizen and think what you should be like.

### Teaching materials

- It’s All Connected (Facing the Future), DEAR, and original materials
- Everyone has to prepare for A4 sized clear files wherein you put worksheets and references.

### Evaluation & Assessment

1. First mid-term examination : paper test
2. First end-term exam : report
3. Second mid-term examination : paper test
4. Second end-term exam : project
   - Work-sheet, assignment, essay, attitude, presentation are all evaluated.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topics and contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>What are global issues?</td>
</tr>
<tr>
<td>Social justice</td>
<td>Think about a gap (the North-South problems, poverty, gender)</td>
</tr>
<tr>
<td>Human rights</td>
<td>(ex. If the world were a village of 100 people, Fair trade)</td>
</tr>
<tr>
<td>Globalization and interdependence</td>
<td>Think about human rights (Children’s rights)</td>
</tr>
<tr>
<td>First mid-term exam</td>
<td>Globalization</td>
</tr>
<tr>
<td></td>
<td>(ex. coffee, bananas, chocolate, globalization and traditional culture)</td>
</tr>
<tr>
<td>Globalization and interdependence</td>
<td>Interdependence (connections among food, clothing and shelter, connections between our lives and world’s happenings)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>(ex. Cell phone, convenience stores etc.)</td>
</tr>
<tr>
<td>Value and respect for diversity</td>
<td>Raising self-esteem</td>
</tr>
<tr>
<td>First term exam</td>
<td>Multicultural society</td>
</tr>
<tr>
<td></td>
<td>(local internationalization, noticing bias and stereotype, tolerance)</td>
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<tr>
<td>Sustainable development and Environmental issues</td>
<td>Sustainable development</td>
</tr>
<tr>
<td></td>
<td>(ex. ESD, palm oil and global issues, Water problems, Climate change, Biodiversity etc.)</td>
</tr>
<tr>
<td>MDGs</td>
<td>MDGs (Learning global issues through MDGs)</td>
</tr>
<tr>
<td>Peace and conflict</td>
<td>Peaceful solution (ex: Hō'ōponopono)</td>
</tr>
<tr>
<td>Second mid-term exam</td>
<td></td>
</tr>
<tr>
<td>Self-initiated project</td>
<td>What we should do as a global citizen?</td>
</tr>
<tr>
<td>What is a global citizen?</td>
<td>Take up one issue that you are most interested, and suggest an action plan. (Presentation and submission of report)</td>
</tr>
<tr>
<td>Second term exam</td>
<td></td>
</tr>
</tbody>
</table>
4-1 Framework of the course of study

In order to equip students with qualifications as global citizens and to make global citizenship education work effectively, it is essential to establish a framework for designing and assessing the Global Citizenship education class, rather than using event-based practices or programs enforced on a piecemeal basis without assessment. It should be feasible to nurture global citizenship in such a program with clearly delineated outcomes and assessment.

Regarding the framework of the course of study, three key components are to be considered: teaching/learning contents, teaching/learning style and intended (desired) outcomes & assessment.

4-2 From Assessment culture

As global education is characterized by an interactive and inquisitive nature and since learners’ changes and learning process are the base, assessment in global education is to be “formative”. Therefore, paper tests (written tests), work-sheets, assignments, essays/reports, learning attitudes and participation and presentation are all to be evaluated. Also, interaction between the students and the teacher (facilitator) is valued in the class. There are the elements of Assessment for Learning (AfL). Students will not just be evaluated for grading, they are encouraged to learn for their future. Multi-assessment which contains various ways of assessment such as discussion, essays, worksheet, performance, and portfolio etc shall support and enhance student learning for their living better (Table 1).

By analysis of students’ statement following a year-long class, students learning in the class are categorized into five groups: 1) Connections between the world and the individual, 2) Improvement of thinking skills, the spirit of inquiry and interests, 3) a wide view and multi-angled perspective, 4) self-searching, self-exploration. In addition, there is a comprehensive rise in learning as the following comments by students show:

• I’d like to study global issues deeply in the university, although I was not interested in going to the university before, because the GC lesson opened my eyes. And I want many people to know various global issues, and I will try my best to solve them. I really appreciate this GC class.
• In every lesson I could realize that my view had been broadened and that I had improved myself.
• Not knowing is a fear. I learned in this class that this is the most important subject for us, the young generation who will make the future. If I had not taken this class, I think I would not have known this in my life.
• In addition to a lot of knowledge and skills that I could acquire in the class, my biggest
achievement, I think, is a mental change in myself. My view of the world and life has broadened. Now I understand there is a meaning in every event happening in the world, and I’d like to create ideas to solve the issues. I gained such a positive attitude and wide view and a will to action.
• Since there were many opportunities to express my opinions, now I am able to state my opinions and take in others opinions as well. I gained confidence in myself.
• I deepened my thinking and how I will live, through knowing the reality and the problems the world are facing. There are a number of people who don’t notice that humans harm humans and destroy the earth. I was one of them. Now I do know it is very important to know, learn and think about the issues and take action, and that’s what we should do.

What’s more, as a result of the focus group discussion four months after the GC class ended, it is revealed that the core elements of learning remain deeply ingrained in the students. The learning attained by the students is not just about knowledge acquisition but also various skills, attitude and values. For example, the students mentioned things like, “Now I don’t deny those personalities whose values differ from my own.” “I am able to see thing not only from my personal view but also from the views of the person that I talk to, or even a third party.” “It is very enjoyable to learn and know new things now, so I buy books and learn by myself.” “I have found what I want to learn in the university.” “I can connect many kinds of issues in my brain and think them out well.” “After the lesson, I feel my troubles are very small.” “I’ve got to imagine the person’s situation, and understand the pain.” “I understand how precious it is to learn at school, so I enjoy studying now.” These comments provide evidence of what they learned in the GC class has taken root in them and has been utilized in their daily lives.

4-3 Pedagogy is a key to success

Traditionally, at a high school level, lecture-style is still widely common as a teaching style. In that case, students’ main activity in class is listening (to the teacher). However, in Global Citizenship lesson, students are quite busy with various activities including listening, thinking, speaking, reading, discussing, exchanging ideas or opinions, writing, and working together in groups with their friends. This is student (learner)-centered, participatory learning style. A teacher gives students topics and key questions, and the students start learning based on group works. Pedagogy is always an important factor to the success of the student learning. Timely feedback from the teacher to the students is one of the effective AIL (Assessment for learning) strategies to assist student learning.

At the onset of global citizenship lessons in Japanese schools, students hesitate to express their opinions because they fear making mistakes. However, once they know they are in a
peaceful environment and have a feeling of security, then, gradually they start to talk. In this situation, a teacher’s positive oral feedback to their comments is significant.

Through the various activities in group work or pair work in class, students are expected to find something meaningful and notice (Kizuki) by themselves rather than being forced to learn something by heart as memory. The learning process, in other words, discussing, confronting different ideas and thinking are important for their learning. In order to draw students Kizuki, feedback must be given by the teachers in the right moment, which could function as pedagogy.

4-4 Constraints of implementing school-based subjects at a public high school

Students’ learning from Global Citizenship education represents a qualitative change which cannot be explained numerically. What students learn in the class are comprehensive social skills (life skills) and 21st century skills which are necessary to live well in a society. In the present education environment, which tends to demand hasty educational results, the students’ learning proof shown above is thought-provoking when we consider the essentials of education.

As for assessment, we need to explore how we might assess students’ invisible learning and character development, such as motivation in learning; zest for life, cross-cultural tolerance, and improvement of global awareness, all of which a teacher will usually recognize in changes in student behavior.

There remain two main challenges: Firstly, we must create a school system which supports students’ continuous and sustainable global learning. Secondly, we need to share the same educational values with other teachers, so that they may successfully take up the baton. Generally, at public high schools in Japan, teachers have to keep moving from one school to the next regardless of whether they prefer to stay. The average span of working at the same school is from 6 to 7 years. In Miyagi-prefecture, the maximum length of years one may stay at the same school is 10 years. In this case, the know-how and the materials should be handed over to new teachers. However, special knowledge, rich experience and a strong will to work for the course of study are not always attained.

Furthermore, it is important to build up teachers’ consensus and supporting system to encourage the students to keep studying and learning further even after the course of study has ended. They strongly hope to have a time and place when and where they can discuss and think about the issues, connecting the global and the local. Active discussion with classmates in a classroom with a peaceful atmosphere enables the students to develop their motivation for learning and for thinking critically.

5 Assessment – East and West

In the West, the future of the nation is hinged upon the education attainments of individuals.
When governments take on individual students achievements as their own responsibility, national assessment become appealing. In short, inspection becomes a catalyst. On the contrary, in the East, education has always been seen as a national endeavor. There is always a further goal for individual development and that is national development (Cheng 1999).

However in the recent special issues of an Asia-Pacific perspectives on AFL, Japan is not referred to, although more than 1500 copies Japanese version of OECD (2005) were published in the period 2008-2012 in the country. The word assess comes from the Latin assidere, which means to sit beside. Literally then, to assess means to sit beside the learner. From our student’s point of view, ‘Assessment always determines the actual curriculum’ (Ramsden 1992). ‘Assessment is the engine that drives student learning’ (Cowan, 1998). As Clark (2010) says, There is nothing so practical as a good theory.

Based on Japanese culture, Catherine Lewis who introduces lesson study to the US, personally passed the first author the small memo showing the essential strengths of Japanese education in 2002, noting (1) Notice what should be improved, (2) Internalize how to improve, (3) Motivate each other. Notice (Kizuki) is very holistic because peer and self-assessment – reflecting on what they’ve learned; and self-evaluation – reflecting on how they’ve learned it. (CCEA 2009 p.28). However now we should discriminate assessment and evaluation. Self-assessment: Collect evidence of learning and interpret meaning of evidence. Personal goal, external standard; Self-evaluation: Compare their work. Goal, criteria, exemplar, feedback (Joyce 2004). We focus on nurturing “Kizuki” culture, in a Western word, assessment culture in place of test culture, which is unique to Japanese culture. It implies a sudden feeling of inner understanding of a phenomenon and can be roughly translated as ‘becoming aware of ‘noticing’ or ‘realizing’ (Sakamoto 2011). It relates to seishin (spirit), ‘one’s inner being which often derives spiritual fortitude from self-discipline’. "Kizuki" encompass so many key concepts; and, yet are so accessible, and widely understood in Japan.

A recent definition of Assessment for Learning (AFL) states that "[it] is part of everyday practice by students, teachers and peers that seeks, reflects upon and responds to information from dialogue, demonstration and observation in ways that enhance ongoing learning" (AFL, 2009). The definition points to main attributes of this practice: a) its goal to advance learning; b) its continuous enactment (formally and mainly informally); c) the active role of the learners in the assessment that is aimed to empower lifelong learning; d) the variety of tools and strategies employed to make learning explicit; e) the interpretive and integrative manner by which inferences are derived, and f) the way the inferences are conveyed and utilized to advance learning.

Contemporary writings about assessment conceptualize it as inquiry (Delandshere, 2002); indeed, an optimal AFL cycle corresponds to an inquiry cycle (Birenbaum, Kimron, Shilton, & Shahaf-Barzilay, 2009). For AFL cycles to be implemented successfully, the learning environment
ought to offer supportive mechanisms and cultivate conducive norms, values and beliefs (Birenbaum, et al., 2009, 2011).

What some people would call a healthy "culture of evidence." (some people might call it a 'culture of assessment,' or 'culture of inquiry' while others might reject the term 'culture. And also all aspects of assessment carry a social and cultural dimension. Teachers need knowledge of their students' cultures, backgrounds and experiences to ensure assessment is appropriate and effective.

Regarding social aspects, to be effective, assessment for learning needs to take place within a positive learning environment. Students should be encouraged to take risks and make errors, and understand that wrong answers can assist learning just as effectively as right answers. Encouraging a culture of listening critically to one another, responding positively and constructively, and appreciating the different strengths, experiences and skill sets among peers will help create such an environment. If this can be accomplished, students can learn to conduct effective peer assessments of each other. Effective assessment for learning recognises the knowledge, skills and understanding that both teachers and students bring to learning interactions, and it acknowledges the way that new knowledge and understandings can grow out of shared learning experiencesviii.

Regarding cultural aspects, in the classroom, non-judgmental exploration of teachers’ and students’ own cultural values, assumptions and understandings about learning and assessment may help them to use the differences that surface to develop their own strengths, and identify areas for improvement. Effective assessment practice needs to recognise different values, assumptions and understandings and the impact they have on how students may respond to different assessment approaches. Effective assessment practice should plan for collaborative and collective assessment, in both formal and informal contexts, in order to reflect the educational values of different cultures, backgrounds and experiences.

However, we distinguish between assessment as feedback on pupil progress to pupils etc. and assessment as a driver of the curriculum and pedagogy (Young 2013, p.111).

5-1 Thinking curriculum structure as a school-based initiative from assessment

It would be better to use the phrase assessment for learning, which had first been used by Harry Black (1986) and was brought to a wider audience by Mary James at the 1992 annual meeting of the ASCD in New Orleans.

There were several projects related to AfL. James et al. (2010) clarified the central role of AfL and provide a self-evaluation questionnaire with thirty statements about classroom assessment practices. Originally, James et al.'s questionnaire consists of three factors; making learning explicit, promoting learning autonomy, and performance orientation.
Now is the time to think the Structure of the School Curriculum. The false dichotomy of swinging pendulum between society and individuals is challenged to overcome in the UK. To rethink course of study at local and national level in Japan, we should draw on National Curriculum Guideline of Department for Education (2011) entitled *The Framework for the National Curriculum*. A report by the Expert Panel for the National Curriculum review. Social knowledge and individual development are not contradictory. Both are on the basis which should stem from experiences. The ‘school curriculum’ comprises the whole curriculum as experienced by the pupils in each school. Communication and language such as listening and attention, understanding across subjects is treated as cross-curricular. Personal, Social and Emotional Development such as self-confidence and self-awareness, managing feelings and behavior, making relationship are emphasized for the development of individuals. At the same time knowledge needed by a diversified society or knowledge the international community expects citizenship is emphasized.

However all knowledge depends on local contexts. Globalization needs local initiative which faces truth: the reality of its external, constraining, obligatory and, moral force, although knowledge and truth are located in who the knowers are and in their interests such as local production for local consumption. To paraphrase Durkheim, “we feel the pressure of the truth on us; we cannot deny it, even if we do not like it. Satisfying a need or relating to an interest are ultimately subjective criteria and can never be adequate as criteria of truth. Sometimes the truth does exactly the opposite to satisfying a need and does not seem to be in one’s interest; however, that does not stop it from being true.” (Young 2011: 207).

It should be appreciated that we have forgotten indigenous legacy of the Meiji Era which seems to relate to Durkheim’s strongest objection to pragmatism. “The relationship between human beings and the earth is very complex, but it is not something remote from our daily lives. Rather, the people/earth relationship is involved in everything we do, and it affects every aspect of our experience. In modern times, major problems have arisen in human affairs because we are inattentive to this relationship. While admitting its complexity, we can still seek to understand our relationship to the earth and bring it more clearly into our conscious awareness. Following reasonable methods of scientific inquiry, I propose that we start with observations of the most immediate facts of mutual existence…” (Makiguchi 1903). There exists in Japan the forgotten heritage of the plant metaphor of “arborescence” related to the curriculum of more than one hundred years ago. This plant metaphor means that academic achievement in each subject corresponds to the growth of each leaf, and core curriculum corresponds to the growth of the trunk, and social capital in the community corresponds to the roots, which bring in nutrients and water. The early literature on curriculum even in Japan should be seriously taken to and reviewed.

In Tohoku region, there is the potential for an increase in opportunities to learn from lots of
sources after great disaster.

5-2 Reconceptualizing assessment from Pedagogy

Pedagogy refers to the activities of teachers in motivating students and helping them to engage with the curriculum and find it meaningful. Pedagogy refers to what teachers do, and get pupils to do; however, teaching is not just a practical activity. Teaching depends on both the knowledge that teachers have of their subject, the knowledge that they have about individual pupils and how they learn – and the knowledge that informs what they require their pupils to do. Pupil experiences are crucial learning resource for both student and teacher.

According to Durkheim (1911), “Education is entirely different from pedagogy. Pedagogy is not about action but about theory. These theories are the means for thinking about education, not for practicing it. …… Educational practices are not isolated one from the other; but within a society they are part of a system which all parties concur, has the same end: it is the educational system appropriate to the country in its time (Durkheim 1911, from cited in Allal 2011).

Elliott (2008) told first author personally Japan should adapt teachers’ tacit theories of teaching based on Japanese culture based on his early open university video study series E364 in 1981. There is some evidence for assured reasons for supposing it. Japan is exceptional among the nations in the world in that it is strongly committed to treating pedagogics as a science. In Japan pedagogics (kyoju-hou) has a uniquely dominate position in the University even before World War II based on Tao (Ito 1937). Shimahara and Sakai also call the Japanese emphasis on human relationships as a source of motivation "ethno-pedagogy." (Shimahara 2001). In the recent field of assessment matter, 'Neriage' is refereed to which is originally applied to the technique of layering, cutting and re-combining different colours of clay … (Takahashi, 2008 p.8 cited in Wiliams 2009).

Peter Cave (2007) mentions Assessing children’s performance in Integrated Study (sogo gakushu). One of the biggest problems posed by sogo gakushu concerns how to assess the performance of individual children in the area. Teacher B sensei expressed her view that the assessment criteria that Teacher A had devised needed further improvement, as they were currently quite subjective (shukan-tekki). They needed to develop more objective ways of evaluating what students did. Two years later, Teacher C also said that it was difficult to convert children’s performances in sogo gakushu into precisely measurable data. The most useful methods they found involved the assessment of portfolios of work that children produced, including material such as ideas, plans, and reflections that children wrote down. Assessment clearly remains a key issue for sogo gakushu.

We also want to refer to Productive Pedagogies form part of the Education Queensland

6 Conclusion

As mentioned in the previous chapter, interest has been growing in a Japanese form of professional development that engages teachers in rich discussions about instructional problems and their students’ learning (Lewis & Tsuchida 1998, from cited in Shaffer et al 2007). Quality circles, where people come together to share issues and problems and find ways to make improvements to the overall system in which they are working, offer a perfect illustration of double-loop learning in practice (Morgan, 1989). Japan’s social capital exists as a powerful inherent accountability mechanism. There is very strong teacher accountability – in the form of formal accountability to the bureaucracy and an intimate and genuine accountability to one’s colleagues (OECD 2010, 2012).

The challenge is to tackle to facilitate a global exchange of experiences on school-based initiatives as well as assessment in practices. Now MEXT designated Tohoku University to conduct a study on various assessment techniques of competencies for 21st century learning in high schools (2013-2015) as the basis for balancing the priority given to subject knowledge with learning goals not reflected in the existing curriculum: relationships between learning in different subjects; relationships between subject knowledge and learning at work; and the potential of subjects as conceptual tools for linking experiences of learners to futures as citizens and to future changes in society (Young 1999). We are undertaking projects to study the achievement gap, outcome equity, or the 'quality' (mutuality) of classroom dialogue referring to “powerful knowledge” such as STEM program is important in the curriculum (Young 2013, Kärkkäinen et.al 2013).

We like to conduct research on the nature of the practical knowledge with which each teacher does his or her thinking. Teacher practical knowledge is defined in three ways: (1) as having content; (2) as being oriented to situations, to the personal, to the social, to experience, and to theory; and (3) as structured in rules, practical principles, and images (Clandinin 2010). Freema Elbaz-Luwisch could not produce teacher knowledge in spite of researching school based curriculum development in the 1980’s (Elbaz 1983).

The work of Vygotsky, Bruner, Mercer, Lave, Wells, and others concerned with sociocultural ethno pedagogy has clear relevance for research on Japanese education as Stigler et al. (1990; 1996), Lewis (1995) and others have clearly shown as Cave (2007) says.

We also like to conduct research on how assessment regimes on learning could be applied to careers, and such assessment regimes could be done in a comfortable zone of cultural and social capital (Eccestone & Pryor 2003, Eccestone 2004).
As noted above, a framework of global citizenship and assessment is becoming important in upper secondary education and higher education as well (UNSW 2012).

School-based networks or school-based research teams should be strengthened to raise awareness among members to take concrete actions to actively engage in local and global initiatives to support and promote broader issues. Nowadays the purpose of this platform, developed with the support of the Japanese Funds-in-Trust, is to facilitate a global exchange of experiences, materials and information on school-based initiatives and to raise awareness among ASPnet members to take concrete actions to actively engage in local and global initiatives to support and promote biodiversity. We should articulate and share hitherto tacit knowledge about Japan’s education so that others can learn from it and it is organizationally more transferable. Thus, in future studies, the authors hope to describe school-based professional learning communities (SBPLC) from other case studies in the Tohoku region. Further research is necessary to better understand school-based professional learning communities and unknowingly inherently practiced school-based curriculum leadership, pedagogical leadership and assessment practices in light of rapid changes in the digital world we live in.

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 It means “Integral research on sustainable development and quality of life”. It may relate to mode 2 of knowledge production (Gibbons 1994, 2000). (http://www.esee2009.si/papers/Fruehmann-Conceptualizing.pdf)

 One verse of Kakimoto no Hitomaro says, ‘Ashihara no Mizuho no kuni does not do Kotoage ritual even if he is a god.’

 Kajita has mentioned to me in the 1980’s “Kutai-Ketai Chutai no Santai” to explain formative evaluation when he was asked “what Japan can offer” by Benjamin Bloom. In the passage of the second chapter of the Lotus Sutra, Nyoze-so (nyoze means true or real, and so means an aspect) implies the outward aspect or appearance of life. (It corresponds to Ketai of Santai.) Nyoze-sho means nature originally inherent in life and, in human beings, refers to nature, mind, wisdom, and spirit. (It corresponds to Kutai.) Nyoze-tai indicates the integral entity of life embracing both Nyoze-so (the physical body) and Nyoze-sho (the mind or spirit). (It corresponds to Chutai.) These three compose the reality of life. Buddhism teaches that life must be observed from three viewpoints: aspect, nature, and entity. Nyoze-so, Nyoze-sho, and Nyoze-tai are the true nature of life force (Toynbee and Ikeda

v 21st century skills were designed by The Partnership for 21st Century Skills (the US national organization) as 21st century readiness for every student. Critical thinking and problem solving, Communication, Collaboration, and Creativity and innovation are illustrated.

vi The focus group discussion was held and facilitated by the author (as well as GC conductor) on 13th July 2012 for 90 minutes with 7 students at East Sendai Senior High school.

vii Scaffolding reflection in the classroom involves helping pupils to develop and use the skills of: Peer and self-assessment. Pupils need to have basic information about what they are learning and how it will be assessed. To ensure their reflection is focused, the learning intentions and success criteria need to be accessible. In this way, pupils become more confident in identifying successes and areas for improvement in their learning. Pupils should be involved in peer assessment before they practice self-assessment. Peer assessment helps by: • motivating pupils to work more carefully; • creating deeper understanding as they use the success criteria in both giving and receiving feedback; and • giving them opportunities to communicate in language they would use naturally and understand. Assessing one another’s work enables pupils to build up the skills and confidence needed for effective self-assessment. Self-evaluation: • helps pupils become more aware of and improve their learning strategies; and • can lead to improved outcomes due to its emphasis (CCEA 2009 p.28)


ix Teachers’ tacit theories of teaching contains the following: Informal-structured-guided/ Informal-structured-open ended/ Informal-unstructured guided/ Informal-unstructured-open ended/ Formal-structured-directed/ Informal refers to the creation of space for student to direct their own learning/ Structured refers to the pursuit of reconceived knowledge outcomes/ Guided refers to methods of teaching.

x 1. New Basics refers to categories for organising curriculum. There are four curriculum organisers: • Life Pathways and Social Futures • Multi-literacies and Communications Media • Active Citizenship • Environments and Technologies; 2. Rich Tasks refers to inter-disciplinary activities that have real-world value and use; 3. Productive Pedagogies focus on the learning process. There are 20 Productive Pedagogies which are categorised in four dimensions: 1. Intellectual Quality (• Higher Order Thinking • Connectedness to the World • Cultural Knowledges • Student Direction • Deep Knowledge • Problem-based Curriculum), 2. Connectedness (• Difference Environment • Inclusivity • Social Support • Deep Understanding • Knowledge Integration), 3. Recognitional (• Narrative • Academic Engagement • Substantive Conversation • Background Knowledge • Group Identity ), 4. Supportive Classroom (• Self-Regulation • Knowledge as Problematic • Active Citizenship • Explicit Quality • Metalanguage)

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Reconceptualizing assessment for learning from culturally embedded pedagogy to add further impetus to curriculum as a school-based initiatives


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スクールベーストイニシアティブとして
カリキュラムにさらなる弾みを加えるために文化的に埋め込まれたペダゴジーから学びを創り出すアセスメントを再概念化する

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この論文ではカリキュラム改革の現代的な動向を踏まえて、1990年代までのスクール・ベースト・カリキュラム開発（SBCD）の伝統的なパラダイムを再検討する。今日SBCDは、持続可能性、起業家精神、グローバル化とシティズンシップのような未来指向の概念間の緊張として、伝統的なパラダイムに抗して発展してきている。またそれは形成的アセスメントとして学校での広い形で使用されることでウチとソトの拮抗作用としてのインセンティブへとSBCDを拡張している。ここでアセスメントは日本の文脈において文化に埋め込まれたペダゴジー（教授方法）という性質から吟味される。アセスメントは多くの場合、教育改革を進めるためのつまずきの石と見なされる。課題は、アセスメント実践と同様にスクールベーストでの取り組みのイニシアティブに関する経験のグローバルな交流を促進することである。より広範なイシューを支え促進するために、ローカルおよびグローバルなイニシアティブに積極的に従事する具体的な行動を取るために、メンバーと主要な利害関係者間の意識を高め、スクールベーストネットワークやスクールベースト研究コンソーシアムを強化すべきである。

キーワード：アセスメント、ペダゴジー、カリキュラム、スクールベーストイニシアティブ、日本の文化