

# Embedding core values of creativity and teamwork in higher education: lessons learned from Japanese universities<sup>1</sup>

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**Abstract:** *The era of globalization and integration requires a lot of important 21st century skills in training human resources, including critical thinking, problem-solving, communication and teamwork skills. In terms of organizational culture, many higher education institutions (HEIs) today, being faced with competition, try to build up a set of core values for their reputation and prestige as a tool for improving their quality and accountability. The paper first gives an overview of organizational culture and university culture, then analyzes creativity and teamwork as important core values of HEIs in the 21st century with the case studies of some Japanese universities, and finally gives some recommendations for embedding these 2 core values or educational philosophy in the Vietnamese higher education curricula in the globalization era with lifelong learning opportunities.*

**Key words:** creativity, teamwork, core values, higher education, 21st century

## Introduction

In the era of globalization, especially of the Industrial Revolution 4.0, innovation has become increasingly important for all countries. Creativity education has become the key issue in higher education all over the world. The Japanese government is enhancing creativity to boost national competitiveness. As Japan has a long history of innovative risk-taking, innovation has been embedded in Japanese higher education training and research activities in addition to the economic activities. In addition, the culture of continuous improvement or *Kaizen and PDCA* (Plan-Do-Check-Act) has promoted innovation and creativity in Japan. More suggestions have been given to remove some obstacles including hierarchy for promoting creativity further in Japan through educational reforms to improve the young people's innovative skills and flexibility (McCreedy 2004 & Hayakawa 2004). Cramond (1999) also predicts that, in the future, the world will continue to become increasingly complex with problems requiring novel and elegant solutions. It has been

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proposed that the *Idea-Marathon System* can be one of the innovative methodological breakthroughs for building a creative infrastructure for college and university students in Japan. In addition, the globalization context requires more teamwork, especially multicultural teamwork. Japanese education has placed strong emphasis on developing young people to *think creatively and independently* with individuality and lifelong learning. These 2 core values of creativity and teamwork are important in education at all levels. In Vietnam, they should be the key training objectives and values in all HEIs shared by all teaching staff to prepare for the graduates' employability in the more globalized labor market.

## 1. Theoretical framework of organizational culture and University culture

There are many definitions of group culture and organizational culture, among which the definition of Schein (2004:17) is quite popular "The culture of a group can now be defined as *a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems*".

The university as a higher education institution is also an organization which is established on the basis of its missions, vision, educational philosophy and core values. The university culture consists of shared values, beliefs, assumptions, philosophies among the staff and learners. Another concept which can be used interchangeably for university culture is the campus culture by some authors, in which creativity is usually emphasized nowadays. "*Campus culture is the combination of various cultures on campus created jointly by all university person and accumulated in the long-term practice of school-running. It consists of three aspects, namely, material culture, institutional culture and spiritual culture.... Campus culture in a university is characterized by individuality, academic feature, opening, leading, variety and creativity.... Creativity is an eternal trend of culture that we should exhale the old and inhale the new. University is an antenna and passageway to approach to heterogeneous culture, and it is the basis of creating a new culture. As a part of campus culture subject, undergraduates are able to fully develop their wisdom, imagination and creativity and make campus culture colorful, since they have a sharp mind, active thinking, enthusiasm to seek their ideal and creative spirit of designing an ideal culture*" (Shen & Tian 2012).

The AUN-QA criteria for the quality assessment at the institutional level (version 2.0) in 2016 which are recently applied in Vietnamese HEIs require the articulation of the university culture in policies, guidelines, programs and communication media, cascading them to all levels of staff as well as the review and the improvement of its culture to meet stakeholders' needs and to their satisfaction "*Senior Leaders foster institutional culture including a set of values to align with the vision and mission of the institution. The culture and values promote desirable behaviors of leaders and employees to achieve the strategic goals of the institution*" (AUN-QA 2016:19). The AUN-QA guidelines give the definition

of the HEI culture in the explanation as follows: *Culture can be defined as shared values, beliefs, norms and behaviors of a group of people. These three elements should be aligned and provided direction for strategic planning and formulation of strategic goals and policies of the institution* (AUN-QA 2016:20).

Therefore, most of the universities nowadays, in the process of innovation and development, especially in the era of Industrial Revolution 4.0, are trying to embed some core values which can be shared among the people in the institutions to achieve the shared goal of the innovative university. This process requires the synergy and teamwork of the whole institution. In addition, the interdependent world and the UNESCO's pillar of "learning to live together" set the foundation for the integration of the core value of teamwork in the institution's educational, research and community-based programs and activities in the 21<sup>st</sup> century.

## **2. Analysis of creativity and teamwork as core values of HEIs in the 21st century with the case studies of some Japanese universities**

### **2.1. Creativity in Japanese higher education**

It has long been found by many educators in the world that liberal arts play an important role in higher education in all disciplines, which help improve learners' creative thinking. Among the Japanese government's higher educational reforms, embedding liberal arts into the curriculum to improve students' critical thinking has become the trend. Liberal arts have been encouraged to be put into engineering curricula. They try to come back to the past time "*Engineers who received higher education during the prewar years to around 1975 used to read a large volume of books on literature and philosophy during their high school and college days*"<sup>2</sup>. From primary education in Japan, great concern has been given for exploratory learning and creativity "*The only major change in curriculum content came in the first two years of primary school, with the replacement of Social Studies and Science by the new subject of Daily Life, which was intended to allow more integrated, experiential, and exploratory learning*" (Cave 2007: 17)

At the heart of both risk taking and innovation is the ability to adapt to change, to view change as an opportunity rather than a threat (Taplin, R. 2005: 3). Japan has a high score in Hofstede's Uncertainty Avoidance Index (UAI) and the Japanese are trying to balance between uncertainty avoidance and risk-taking in risk management strategies for creativity. As more and more Asian countries have been rapidly catching up to Japan with less expensive good products, Japanese universities are encouraged to train students with creativity for developing industries further. In addition, Idea-Marathon is an innovative system, designed to cultivate human creativity. Developed by Takeo Higuchi in 1984 when he was staying in Saudi Arabia, IMS has already served five thousand people to change their lives to be more creative ones. The idea of IMS is very simple: *Think at least one idea each day. Write it down immediately. Then talk to your neighbors, like your colleague, friends*

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<sup>2</sup> <https://www.japantimes.co.jp/opinion/2013/09/16/commentary/japan-commentary/lack-of-liberal-arts-education-is-sapping-japans-creativity/#.WtLqIx8Urc>

and family. As one makes this into a habit, one finds his/her own hidden ability and may become a very creative person with proper support<sup>3</sup>. More and more universities in Japan have tried to apply this model.

Recently, many universities in the world have tried to apply PBL or *Problem-based learning* (or also Project-based learning) which can help promote the creativity and critical thinking for learners. PBL can be applied for various courses in different disciplines. Problem-solving skill is required and considered to be among the most useful ones in most of the jobs nowadays together with interpersonal skills. Duch, Groh & Allen (2001) introduce series of good case studies that apply PBL in different undergraduate courses among different disciplines from planning to implementing. This approach is very useful for achieving various learning outcomes “*Problem-based instruction addresses directly many of the recommended and desirable outcomes of an undergraduate education: specifically, the ability to do the following: • Think critically and be able to analyze and solve complex, real-world problems; • Find, evaluate, and use appropriate learning resources; • Work cooperatively in teams and small groups; • Demonstrate versatile and effective communication skills, both verbal and written; • Use content knowledge and intellectual skills acquired at the university to become continual learners*” (Duch, Groh & Allen 2001:6). Students have to integrate their new knowledge into the context of the problem, connect new concept to the old ones. Tan Oon-Seng, (2009) also presents the connection between PBL and creativity in different context and different disciplines with different models, techniques and tools.

Several Japanese universities have not only applied PBL but also sent delegates to the US universities to learn more experience about PBL techniques and case studies. Akita International University set schedules for PBL courses during one year abroad or during short-term study abroad or in Japan from International Cooperation Project<sup>4</sup>. PBL tutorials have also been applied at different stages of Japanese university education. In addition, Japanese higher education has also adopted active learning (AL) recently in various forms: cooperative learning, problem-based/project-based learning... to develop students’ higher order thinking skills and active engagement with more improvement<sup>5</sup>. The PBL Japan website has introduced several tutorial skills (PBL can encourage collaborative learning, lifelong learning and leadership) and publications about PBL and evolution of PBL in Japan<sup>6</sup>. Especially, The Japanese Ministry of Education, Culture, Science, and Technology (MEXT) has chosen Ristumeikan’s “Global PBL Program for Innovative Mind and Intelligence” for its “FY2013 Re-Inventing Japan Project”<sup>7</sup>.

The case studies and illustrations above have shown that Japan is trying to develop creativity further in all educational programs in higher education. Therefore, creativity and innovation can be considered as important core values in Japanese higher education. They

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<sup>3</sup> [https://www.ue.katowice.pl/fileadmin/.../2012-09-08\\_IMSEn11.pdf](https://www.ue.katowice.pl/fileadmin/.../2012-09-08_IMSEn11.pdf)

<sup>4</sup> <http://web.aiu.ac.jp/icpt/en/pbl/whatspbl>

<sup>5</sup> <https://www.tandfonline.com/doi/full/10.1080/2331186X.2017.1298187?scroll=top&needAccess=true>

<sup>6</sup> <https://pbljapan.wordpress.com/japan/>

<sup>7</sup> <http://www.ritsumei.ac.jp/international/aims/eng/pbl/>

have translated these core values into the training programs or curricula by integrating liberal arts and applying PBL as well as some models for developing creativity.

## **2.2. Teamwork in Japanese higher education**

The awareness of the importance of teamwork and interpersonal skills for the future success of the graduates come from the values of *independence and interdependence* which should go together. In Japan, they tend to focus on both interdependence/group orientation and independence, individuality and autonomy (Cave 2007: 34). Learning is primarily a social experience and aided by interaction with supportive others, who can engage with a dialogue with the learner, by turns clarifying, querying, challenging, and exploring in the ‘community of inquiry’ (Cave 2007: 219). Japanese are in favor of teamwork, consensus and apply a lot of discussions for decision-making at all levels in most organizations. Students are encouraged to work and discuss in groups.

The labor market always requires team work in nearly all fields. Students who experience teamwork from schools and universities can adapt themselves more easily in their future career. Students of all disciplines, including engineering should know that they need to learn to work together with others, especially with people of different cultures in the globalized context. Not only Japanese companies but also Japanese HEIs integrate building group skills, leadership & human skills into the training curricula, especially engineering programs. The interview with a Japanese engineering manager shows the assertion “*In the Japanese working environment, engineers seldom work alone—they are usually working in groups. Therefore, leadership & human skills are very necessary*” (McCormick 2000: 91).

In health professional disciplines, Interprofessional Education Program has been put into the curriculum to develop students’ interprofessional competence at the University of Tsukuba. Students have to learn the viewpoints of patients and a variety of health professionals as well as the cooperative skills and partnerships required for interprofessional work. There are a lot of teamwork training courses and programs in which small-groups discussions are given “*Through group discussions, students come to understand a wide range of views and thoughts, and they learn how to organize their ideas and convey them to others.*” (Maeno 2010: 33). Many other schools of medicines have similar programs to foster students’ collaborative skills. Teamwork training has well embedded into many medicine curricula and extracurricular activities. For example, some of the goals of IPE/L (Interprofessional education/learning) programs at Kobe University (in both general and specialized courses) are: “*4. Understand meanings and values of collaboration and develop a positive attitude toward collaboration. And 5. Acquire skills required for collaboration (leadership, team organization, problem identification and problem-solving abilities, proposal writing, coordination, communication skills) and demonstrate these skills in practice.*”

Teamwork has been encouraged in various forms like Community-based learning, group work learning, team-based learning.... Interaction among students, staff and between students and academic staff has been achieved. Gunma University has developed a curriculum based fundamentally on holistic medicine and interprofessional work (IPW) with the major advantage in its simulated interprofessional training, teamwork clinical training

where students work in groups and undergo a series of activities with good understanding of their roles (Ogawara H 2010). The values of effectiveness, trust and politeness have been embedded in the groupwork activities.

Many case studies of integrating collaborative skills into the programs can be found in the collection of research works by Watanabe H. & Koizumi M. 2010 “*Advanced Initiatives in Interprofessional Education in Japan*”, such as Community-Based Interprofessional Education at Saitama Prefectural University which created an educational framework for achieving collaborative and integrated health and social services with different topics “participation in group work,” “perspectives on a team,” and questions regarding “communicating efficiently so as to convey own thoughts” and “listening to other members’ opinions.”... Jikei University School of Medicine with Interprofessional Education (IPE) program, with exercises enabling students to acquire the ability to understand others and to work in multidisciplinary teams, establishing collaborative thinking and behavior for effective teamwork among students and helping their development as professionals... Interprofessional Team-Based Medical Education Program at Kitasato University has set many team-based medical exercises.

In short, teamwork has spread more widely among Japanese HEIs, not only in social sciences and management but also in many other fields such as engineering, medical disciplines, ... not only in national/local teams but also in multicultural or global teams, not only in specialized/single-disciplinary teams but also in multidisciplinary teams, in teams of internal and external stakeholders with the community and industrial partners.... Teamwork has been considered increasingly important in the globalized world.

### **3. Some recommendations for embedding the core values of creativity and team work in the higher education programs**

Creativity and teamwork are 2 important values which should be embedded into the curricula or educational programs of all disciplines, especially into the learning outcomes of each course of the training programs. There are various teaching and learning activities which can help students fulfill these skills and various criteria for assessing those skills should be developed accordingly. Learning environment is very important in facilitating students’ creative and collaborative learning, empowering them to develop those skills through daily activities in HEIs. Some implications and suggestions can be given to the Vietnamese higher education as follows:

- Creativity and teamwork should be considered among the core values or educational philosophy of the Vietnamese HEIs in the globalized and post-industrial era;
- In curriculum design and development, these values of creativity and teamwork should be translated into the expected learning outcomes from the whole curricula, extracurricular activities to each individual training course;
- Various teaching and learning activities, methods and techniques can be applied to help students develop their awareness of these elements and gain these skills during the training process;

- Roleplay, task-based learning, problem-based learning, project-based learning, group-based learning, service learning, simulation of teamwork at the workplace... with more case studies in the real world should be encouraged to be applied in the classroom;
- Academic advising and tutoring, mentoring, peer-advising should accompany students activities to facilitate students' learning and motivate them;
- Students should be well equipped with leadership skills and principles of groupwork/teamwork by taking advantage of each individual's strengths as well as listening skills before and during the performance of team activities;
- Inquiry and critical thinking can be developed through the guided questions and web-based, community-based learning which also promote lifelong learning;
- Rubrics and clear criteria should be designed for assessing critical thinking and teamwork skills in professional activities, VALUE rubrics<sup>8</sup> can be applied.

## Conclusion

Nobody could be successful in the era of globalization and integration which is full of competition and collaboration opportunities without constantly making efforts to develop creativity and collaboration/team work skills. Japanese higher education in spite of many achievements in economy, science, technology and education during the Meiji Era and Post-War era are also faced with a lot of challenges and weaknesses, which have encouraged to them to make educational reforms. Great attention has been paid to creativity, innovative education and teamwork training programs with various initiatives. Vietnamese HEIs can learn from these good practices of the Japanese HEIs for the sustainable development of the country.

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