

# Cultivating 21st-century Competencies: A Comparison of Higher Education Reforms in Japan and the UK

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## Abstract

Humanity must contend with an increasingly uncertain and complex future. It is therefore necessary to reconsider the competency requirements of coping with such unpredictable conditions. The roles discharged by school education thus become increasingly crucial. Now, more than ever, higher education (HE) should inculcate independent lifelong learners and prepare students to participate in a global society. Accordingly, universities should encourage students to become more autonomous in their learning. Students need to become more self-directed and self-regulated, and able to make independent decisions about their focal tasks. This study addresses the ability of students to *learn how to learn*, enabling them to become more self-controlled and to navigate an uncertain future. It aims to precisely define the ability of university students to learn how to learn and examines what HE can do to develop the relevant skills. To achieve this end, the authors perform a comparative analysis of HE in Japan with that of the UK, with the intention of highlighting those areas of Japanese HE in which further improvements are required in this regard.

**Keywords:** learn how to learn, self-regulation, critical thinking, Japanese and UK Higher Education

## 1. Introduction

Humanity is confronted with an increasingly uncertain and complex future as globalisation progresses; hence, it is important to reconsider ways of creating new maps through which to comprehend the world and develop innovative solutions to contemporary problems. The role of education is indubitably pivotal in this process. Japan has applied educational reforms toward the 21st-century education, acknowledging that the roles discharged by teachers have changed significantly and are now increasingly crucial. One of the reforms in higher education (HE) involved changing the system of university entrance examinations. In 2021, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) replaced the National Center Test for University Admissions with the Common Test for University Admissions, which emphasises the ability of students to think, make judgements and express themselves (MEXT, 2020a). However, changing the entrance exam would not in itself guarantee a drastic transformation of university education. The very skills required to be nurtured in HE must also be reconsidered, along with the methods by which university students accomplish their learning.

Humanity has experienced transformations such as rapid and continued advances in technologies and

their use. Human societies face “a future that will consist of greater volatility, uncertainty, complexity, and ambiguity: (VUCA)”<sup>1</sup> (Fadel et al., 2015, p.13). The term VUCA is gaining popularity and describes an unpredictable environment. Surviving a future with VUCA crucially requires students to develop the ability to learn how to learn or, as Friedman (2005) puts it, “to constantly absorb, and teach yourself, new ways of doing old things or new ways of doing new things” (p.309). Higher educational institutions must prepare students for lifelong learning. Clearly *learning how to learn* represents one of the most critical educational issues confronting HE.

The present paper intends to precisely define the ability of university students to learn how to learn and to ascertain what HE should do to develop these relevant skills. To achieve this end, the authors perform a comparative analysis of Japan with overseas nations, in particular the UK, a nation with a long history and a university education system valued worldwide for its renowned standards and quality. Indeed, it has been asserted that “continuous improvement and enhancement of the quality of provision offered to students forms an important part of the overall quality assurance philosophy in UK universities” (Universities UK, 2008, p.10). With this in mind, analysing the similarities and differences between Japan and the UK could offer certain significant insights.

## 2. The Significance of *Learning How to Learn*: Self-regulation

A critical mission for universities is to cultivate lifelong learners. University students must stay abreast of the explosive growth of knowledge and skills in their careers and live in a future of flux with VUCA. Therefore, their ability to learn how to learn is essential. According to Schleicher (2015):

as much as skills of learning to learn are important, we always learn by learning something. Educational success is no longer mainly about reproducing content knowledge, but about extrapolating from what we know and applying that knowledge in novel situations. (p.2)

Students must continuously adapt, improve and act proactively in the emergent future. *Learning to learn*, also known as meta-learning, is necessary for continual growth and development so that human beings can flourish and meet the challenges confronting their societies. Fadel et al. (2015) argue for the importance of meta-learning, which can help people effectively recognise their weaknesses and thereby drive personal improvement. Therefore, meta-learning, a part of metacognition, is a crucial factor for a growth mindset<sup>2</sup> that recognises opportunities for self-improvement. Husman’s presentation slides (2008) explain that, “metacognition refers to the act of ‘*thinking about one’s own thinking*’; in psychology, the term is typically used to describe the process by which one exercises deliberate conscious control over one’s own cognitive abilities”. Fadel et al. (2015) contend that metacognition, “involves self-reflection on one’s current position, future goals, potential actions and strategies and results” (p.146). Furthermore, Hofer et al. (1998) assert that

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<sup>1</sup> According to Fadel et al. (2015), “The use of the acronym VUCA began in the late 1990s in a military context. It has subsequently influenced emerging ideas on strategic leadership in a wide range of organizations, from for-profit corporations to educational institutions and governmental systems” (p.13) .

<sup>2</sup> Dweck (2017) mentions that the best ingredient in creative achievement is the kind of perseverance and resilience created by the growth mindset.

“students’ metacognitive knowledge and use of metacognitive strategies can have an important influence upon their achievement” (p.67). Metacognition is associated with the ability of learners to monitor, plan, organise and evaluate their learning.

Husman (2008) elucidates the distinction between metacognition and self-regulation by emphasising that self-regulation is a more expansive concept than metacognition, which is itself a part of self-regulation. Zimmerman (2002) argues that “self-regulation is important because a major function of education is the development of lifelong learning skills” (p.66). According to Nilson (2013), “self-regulation encompasses the monitoring and managing of one’s cognitive processes as well as the awareness of and control over one’s emotions, motivations, behavior, and environment as related to learning” (p.5). As stated above, self-regulation is of the utmost importance and it can help build resilience in the face of the VUCA. Therefore, the present study focuses on self-regulatory skills to foster learning how to learn among university students. Evidence strongly suggests that students need to acquire self-regulatory skills.

Self-regulated learning is a cyclical process. After students plan for a task, the following skills must selectively be adapted to the task:

- (a) setting specific proximal *goals* for oneself, (b) adopting powerful *strategies* for attaining the goals, (c) *monitoring* one’s performance selectively for signs of progress, (d) *restructuring* one’s physical and social context to make it compatible with one’s goals, (e) managing one’s *time use* efficiently, (f) *self-evaluating* one’s methods, (g) *attributing* causation to results, and (h) *adapting* future methods. (Zimmerman, 2002, p.66)

The cycle repeats as students apply reflection to adjust and prepare for the next cycle. Learning is viewed as an open-ended process encompassing three major phases: forethought, performance, and self-reflection (Zimmerman, 1998). Each of them is separately dynamic as well as jointly interactive. The phases of learning cycles are explained as follows:

The *forethought* phase refers to influential processes and beliefs that precede efforts to learn and set the stage for such learning. The second self-regulatory phase, *performance* or *volitional control*, involves processes that occur during learning efforts and affect concentration and performance. The third self-regulatory phase, *self-reflection*, involves processes that occur after learning efforts and influence a learner’s reactions to that experience. (Zimmerman, 1998, p.2)

Teachers perform vital roles in instructing and coaching students through every step to ensure effective and smooth transitions through all the phases.

Setting a goal is the first step taken by a self-regulated learner, and teachers can guide and lead their students to establish optimal objectives: “Not only does it help students set a high goal for themselves, but it also induces them to develop plans for attaining that goal” (Nilson, 2013, p.17). In Zimmerman’s (2002) words, “There is considerable evidence of increased academic success by learners who set specific proximal goals for themselves” (p.68). Evidently, learning is an activity that students should perform for themselves proactively.

### 3. University Students' Uncertainty-coping Skills

The ability to learn how to learn was discussed in the previous section. In addition to this, it is important to consider non-cognitive skills for university students. Bjorklund-Young (2016) states that well-developed non-cognitive skills promote the development of cognitive skills and non-cognitive skills influence school performance and beyond, extending their influence into adulthood.

Harari (2019) states many pedagogical experts mandate teaching *the four Cs* as non-cognitive skills: critical thinking, communication, collaboration and creativity, insisting that “Most important of all will be the ability to deal with change, to learn new things and to preserve your mental balance in unfamiliar situations” (p.305). The authors regard these four Cs as vital factors associated with the ability to learn how to learn because the ability to tackle changes and attain new knowledge has never been so important. Kondo (2021) emphasises the importance of the four Cs as non-cognitive skills that comprise emotional flexibility (critical thinking and communication) and mental balance (collaboration and creativity). According to Kondo (2021), *communication* alludes to sharing ideas in multilingual and multicultural contexts, and *collaboration* relates to diversity and inclusion in diverse and multinational contexts. UNESCO (2016) has mandated that the assurance of lifelong learning opportunities for all must ensure that diversity, ethnic or linguistic, is no cause for exclusion. Kondo (2021) also posits the importance of the creative envisioning of ideas. Bjorklund-Young (2016) stated that non-cognitive skills reinforce cognitive abilities; more robust non-cognitive skills can directly help students attain higher academic achievement.

Of the four Cs, the present study attends primarily to critical thinking because many scholars consider it foundational to 21st-century learning (Trilling & Fadel, 2009). Scriven and Paul (n.d.) define this skill as “the intellectually disciplined process of actively and skilfully conceptualizing, applying, analyzing, synthesizing and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action”. Furthermore, Seale (2020) postulates four components in defining critical thinking: “(1) the set of *skills* and *dispositions* we need, (2) to *learn what we need to learn*, (3) to *solve problems across disciplines*, and (4) that are *grounded in the spirit of doing right instead of simply being right*” (p.21). Critical thinking is probably one of the most crucial skills university students can acquire because of the vastly increased worldwide dissemination of data due to information and communication technology (ICT). Thus, students must be able to analyse information, including statements, data, propositions and research findings and critically discern their benefits and credibility. Kariya (2016) advocates that, “higher education plays a role to develop students’ critical thinking through liberal education” (p.71) and also contends the significance of nurturing students who can argue based on their acquired knowledge. It seems clear that contemporary university students urgently need to acquire the necessary critical thinking skills to cope with the increased amount of information, ambiguity, and uncertainty in the world due to the proliferation of ICT during the past two decades. The following sections include a comparative evaluation of university education in Japan and the UK with a view to assessing their relative effectiveness in this regard.

## 4. Higher Education in Japan and the UK

### 4.1 Higher Education in Japan

#### 4.1.1 Education Reform

Higher education (HE) in Japan currently includes universities (undergraduate programs, junior colleges, and graduate schools), Colleges of Technology (*Kosen*), and Professional Training Colleges (Post-Secondary Course of Specialized Training Colleges) (National Institution for Academic Degrees and University Education (NIAD-QE), 2019). However, at the outset there was only one national university, namely Tokyo University which was established in 1877. As time passed, the number of universities and other HE institutions increased, and as of 2021 there were 788 universities offering bachelor undergraduate degree courses (Obunsha, 2021).

The objectives of HE in Japan have changed since the first national university was established. At that time, HE was intended only for the elite, who were carefully selected using a stringent examination process, and the quality of education was guaranteed (National Institution for Academic Degrees and University Evaluation (NIAD-UE), 2014)<sup>3</sup>. However, after the second World War (WWII), different standards of schools such as high schools from the old system<sup>4</sup>, vocational schools and higher normal schools, were incorporated into the category of four-year universities. The number of students going on to university continued to grow from under 10% immediately after WWII to 26.8% (universities and junior colleges) in 1971 (NIAD-UE, 2014). The face of HE changed from being only for the elite to being accessible to the masses. Furthermore, from the 1980's onwards, HE has shifted in its focus to *universal education*, accepting a more diverse range of students who are willing to continue to study (NIAD-UE, 2014). Through the emphasis of universal education, the autonomy and unique attributes of each university and college have been encouraged.

Since the beginning of the 21st century, Japanese educational reforms have been influenced by worldwide trends. In 2005 the OECD published *Guidelines for Quality Provision in Cross-border Higher Education*, which encourages the international mobility of students. Japanese education shifted to a *globalized* perspective, and strived to assure the quality of HE and systems of transferring credits earned at different HE institutions. The Central Council for Education (2008) published a report regarding bachelor's degree education, and proposed the nurturing of *graduate attributes* (*gakushi-ryoku*), which consist of skills in the four categories of firstly knowledge, understanding, general skills, and attitudes; secondly, intentionality; next comprehensive learning experience and finally creating thinking ability. Some of the skills included in the attributes are communication skills, problem-solving, teamwork and leadership, and lifelong learning (Central Council for Education, 2008)<sup>5</sup>. Students in HE are expected to acquire skills to answer questions which do not have clear answers, and in cooperation with others. These 21st-century educational reforms are aimed at equipping students with such skills.

In 2008, the percentage of students studying in HE (universities and junior colleges) was 55.3% (NIAD-UE, 2014), and quality assurance of HE was in dire need. In order to ensure the quality of education, each HE institution is currently obliged to undergo a comprehensive evaluation by Certified Evaluation

<sup>3</sup> A detailed summary of the history of HE in Japan is given in MEXT (1992) and NIAD-UE (2014).

<sup>4</sup> High schools in the old system were categorized as HE. However, after School Education Act was announced in 1945, high schools in the new system were established as secondary education in 1946 (MEXT, 1992).

<sup>5</sup> English translation for categories and skills of graduate attributes is based on NIAD-QE (2019, p.19).

Accreditation (CEA) organizations accredited by MEXT once every seven years (NIC-JAPAN, n.d.). The evaluation of universities and colleges is conducted in terms of education and research. How the educational reforms affect students' learning environment will be discussed in the next section.

#### 4.1.2 Japanese Universities' Educational Environment

The recent changes in HE can be observed from the perspective of students. The Center for Research of University Management and Policy (CRUMP) at Tokyo University conducted surveys concerning the learning ethos of university students in 2007 and 2018. The participants were 48,233 students from 122 universities in 2007, and 32,913 students from 77 universities in 2018 respectively (CRUMP, 2008, 2019). MEXT (2020b) also conducted a similar survey, collecting responses from 111,051 students at 515 universities in 2019.

The results of the three surveys show significant changes of students' learning situations related to Japanese educational reforms aimed at nurturing graduate attributes. The comparative results of items in the surveys related to graduate attributes are summarized in Table 1.

**Table 1.**  
*Experiences of Subjects*

Subject & Experience	Experienced			Not Experienced		
	2007	2018	2019	2007	2018	2019
Learning how to study at university (study skills)	38.2%	49.8%	74.8%	60.7%	49.1%	25.1%
Learning about jobs and careers	47.2%	62.5%	76.1%	51.8%	36.5%	24.0%
Internship	24.4%	38.0%	30.2%	74.6%	61.2%	69.9%

*Note.* Data based on CRUMP (2008, 2019) and MEXT (2020b). Internship for CRUMP included teacher training and on-site in-factory training, while internship for MEXT's survey was for periods of five or more days.

Table 2 shows the comparative results of learning experiences in class, particularly related to graduate attributes such as communication skills, teamwork, and autonomous learning. Preparation and review requirements were not investigated in 2007, but this item was included in the 2018 survey. The results indicate that students experienced more opportunities to express their own ideas and to participate in class in 2018 compared to in 2007.

**Table 2.**  
*Learning Experiences in Class*

Class Experiences	Year	Almost Never	Not Often	Sometimes	Often
Can express own ideas and opinions in class	2007	25.7%	42.2%	26.6%	4.2%
	2018	14.2%	39.4%	37.0%	7.5%
Can participate in class (e.g., group work)	2007	24.2%	36.7%	30.3%	7.3%
	2018	7.5%	29.8%	47.6%	13.1%
Class preparation and review required	2007	-	-	-	-
	2018	14.6%	37.5%	37.8%	8.0%

*Note.* Data based on CRUMP (2008, 2019).

The results in Table 2 indicate that curricula and classes seem to have changed in a way which should help to cultivate desired graduate attributes and skills. Educational reforms clearly seem to have beneficially affected university education.

In contrast, the length of university students' self-study time has not increased. Kaneko (2020), responsible for the two surveys by CRUMP, compared the results of the surveys in 2007 and 2018, along with the survey results of the National Institute for Educational Policy Research (NIER) conducted in 2014, 2016, and 2019. The data indicates that the percentage of students who study outside class for less than six hours was approximately 66% in 2007, 69% in 2014, and 67% in 2019, which suggests that self-study time has not increased in 2010s (Kaneko, 2020).

According to the MEXT's survey (2020b), the average study time for preparation, review and assignments of classes was 5.9 hours in 2019 and the average time for self-study unrelated to classes was 5.2 hours. This suggests that university students may not spend enough self-study time to assure the quality of HE<sup>6</sup>. Self-study outside classes requires students to be equipped with self-regulatory skills, which was discussed in Section 2. In that sense, the skills of Japanese university students have not developed during the last 10 years.

Recently, UNESCO's global convention on the recognition of qualifications concerning higher education (2019) has been adopted by UNESCO's general conference. Responding to the policy, MEXT has proceeded with educational reforms to improve the quality of education. The number of classes where students can actively participate seems to have increased (see Table 2). However, the development of students' self-regulatory skills seems to have been largely unsuccessful. In a global society, students need to continue studying autonomously even after graduating from university in order to survive in an unpredictable and rapidly changing environment. In the next section, university education in the UK will be examined, and contrasted with the Japanese system.

<sup>6</sup> To graduate university, students need to earn at least 124 credits, and in the case of lecture type class, one credit requires 45 study hours including lectures and self-study such as preparation and review of the class (MEXT, 2012).

## 4.2 Higher Education in the UK

### 4.2.1 Background

The United Kingdom (UK) is made up of four countries: England, Wales, Scotland and Northern Ireland. Each country has the same five stages of education: Early years, Primary, Secondary, Further Education and HE. The fifth stage, HE, happens primarily at the 142 universities in the UK (Department of Education, 2017). UK government figures show that in 2017, almost exactly half (50.2%) of all student school-leavers went on to study full-time at university (Department of Education, 2017). In the academic year 2019/20, women made up the majority (57%) of HE students in the UK, with the largest gender gap in undergraduate courses, and a smaller gap in post-graduate courses (HESA, 2021). Universities in the UK offer traditional research-oriented degrees as well as practical programs with a more professional orientation. The most common form of undergraduate degree is a 3-year bachelor's with honours.

### 4.2.2 Higher Education Reform and Curricula Changes

The UK university system has undergone dramatic changes during the last 40 years in terms of funding and the number of students attending university. During the 1980s, the UK government, led by Margaret Thatcher, introduced sweeping changes to the way the country was run<sup>7</sup>. The political project used competition and private sector funding to strip away layers of bureaucracy in an effort to improve the efficiency of the nation's institutions. At the time, HE was considered poorly managed, highly inefficient, and lacking public accountability (Land, 2006). Since the end of WW II, universities had been funded solely by public money. However, in 1983 the first private university was established in the UK, a portent of things to come. In 1992 polytechnic colleges were relabeled as universities which doubled the number of young people attending university at a stroke. The numbers going on to university increased dramatically, from just 1-in-17 school leavers in the early 1970s to 1-in-3 in the mid-1990s (Robertson, 2010). The rising costs associated with funding such a significant increase triggered the National Committee of Inquiry into Higher Education in 1997 with the goal of assessing the state of HE in the UK. The resultant report recommended a uniform framework for academic standards and degree work, with measurable learning and research outcomes (Trowler, 1998). The report also emphasised the importance of access to HE for everyone and lifelong learning (Watson and Taylor, 1998). Prior to the 1997 report, all tuition fees had been paid for by the state, with loans available to students for living expenses. However, the report recommendations ushered in a new era with students paying about 25% of the average cost of a degree in tuition fees. More money was made available in the form of student loans to help students meet the increased costs of attending university (Robertson, 2010). The number of students studying at university, along with the financial burden placed on students have both increased dramatically during the past forty years.

The universities have undergone change in response to government strategic policy aimed at making the UK more globally competitive. Since 1997, the government has emphasised the importance of becoming a predominantly knowledge-based economy, believing this is the key to the UK maintaining its competitive edge on the world stage. Government officials see the role of university education as the driving force in this process. Policy narrative dictates that citizens needed to acquire the *global competences* necessary to

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<sup>7</sup> The history of Higher Education Reform is explained in Robertson (2010) in detail.



be competitive in the international job market. A 2004 policy report from the Department for Education and Skills (DfES) recommended that the UK aim for *world-class status* with British citizens acquiring the understanding, knowledge and abilities to participate and flourish in the emerging global society. The report said that for the UK to be competitive in business, people need to understand other cultures and societies (DfES, 2004). In other words, a key role of the universities is to produce global citizens, with a global outlook and with global competences. This policy orientation has significantly influenced the curricula of courses offered at universities in the UK. For example, business and administration degrees have become more internationally oriented and more widespread. Moreover, there has been a steady increase in the number of students from overseas studying at UK universities. In 2008, tuition fees from international students made up as much as 10% of all UK universities' income (HESA, 2008). Government policy has also consistently aimed to draw universities into a tighter relationship with industry and thereby bring ideas, innovation and entrepreneurship into closer and more direct contact (DTI, 1998). This process of commercialization of academic knowledge and leading-edge technology has significantly influenced the curricula of courses offered at universities in the UK. Engineering programs have developed much closer links to industry and commerce, thereby facilitating the flow of ideas and technology, and indeed students, from the universities to the production line and marketplace. The drive to become a competitive knowledge-based economy in the global marketplace has had a significant impact on the UK university system.

In the UK, the government has less direct control of the HE curriculum compared to the primary and secondary stages of education. However, government strategic planning typically encompasses the role of HE in facilitating the nation's long term aspirations and goals. The implementation of these policies therein shapes the HE sector indirectly and the corresponding curricula on offer. According to data published in 2017, during the 2015/16 academic year, the drive to be more competitive on the global stage and the recognition of the key role universities must play in this process has led to greater funding for international business and administration programs and IT skills and a subsequent expansion in these areas (Department of Education, 2017). Despite the indirect nature of the government's exertion of influence on HE, the effects are significant nevertheless.

### 4.2.3. Student Life in the UK

Most bachelor's with honours courses in the UK are conducted through lectures in large groups, supplemented by weekly tutorial sessions with a much smaller number of students<sup>8</sup>. In tutorials students can discuss topics from the lectures and clarify their understanding together with a professor and their peers. While many courses still base students' grades on a single final assignment at the end of the semester, in recent years there has been a shift towards more continuous forms of assessment. The number of contact hours for university students varies a great deal in the UK. A course in the humanities such as a BA in Sociology for example, might include just seven hours a week made up of lectures and tutorial sessions, whereas professional courses such as law or medicine may include up to 30 hours per week of lectures, seminars and other sessions.

In the UK, university students are expected to do a significant amount of self-study outside the classroom, typically involving background reading and working on assignments. According to a survey by

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<sup>8</sup> The student university life in the first paragraph is based on Fry, Ketteridge, & Marshall (2009).

Neves and Hillman (2017), which examined the experience of 14,057 undergraduate students in the UK, students' independent study hours averaged 15.20 in 2015, 14.75 in 2016, and 13.71 in 2017. This shows that UK students are required to study autonomously in addition to attending timetabled contact hours. In addition to independently studying, students studied outside university for on average 5.40 hours in 2015, 5.54 hours in 2016, and 4.56 hours in 2017 (Neves & Hillman 2017, p.30). There seems to be a trend decreasing independent study among undergraduate students in the UK. However, it appears that UK students engage in autonomous study considerably more than their Japanese counterparts.

University-bound school-leavers in the UK typically attend a university in a different part of the country to their parental home. In the first year, it is common to reside in communal accommodation with a large number of other students. After the second year, students typically live with a small group in a house or apartment usually provided through the private sector. The quality and academic standards of university education in the UK are generally recognised as among the highest in the world. According to The World University Rankings (2020), Oxford University has the highest rank of any university in the world, with Cambridge University and Imperial College London both currently ranked in the top 25. Due to extensive government-led reforms and the influence of globalization, the HE sector in the UK has undergone significant changes in recent decades.

### 4.3 Japanese and the UK Higher Education: A Comparison

There are several similarities in both the development and current state of the HE systems in Japan and the UK. First, both have undergone significant change in the post-war period. The number of school-leavers attending university has increased dramatically in both countries. In Japan by 2008 the rate of students studying at university was 55.3% (NIAD-UE, 2014), and by 2017 in the UK, a similar figure (50.2%) went on to study full-time at university (Department of Education, 2017). University education used to be reserved solely for the elite of society in both Japan and the UK, but has become increasingly available to all. In addition, common to both countries is the need to control and maintain educational standards which has come under threat by such a rapid expansion. The introduction of Certified Evaluation Accreditation (CEA) and the National Committee of Inquiry into Higher Education in Japan and the UK respectively were aimed at addressing this need. A second similarity between Japanese and UK HE systems is the adoption of a more globally oriented approach. The Japanese government adopted UNESCO's global convention on the recognition of qualifications concerning HE which encourage student autonomy and learning to learn. Similarly, around 1997, the UK government set out to become a predominantly knowledge-based economy, with the aim of UK citizens acquiring *global competences* which would allow them to be competitive in the international job market. Finally, both HE systems increasingly emphasise the concept of life-long learning. There are clearly strong similarities to be drawn between the Japanese and the UK HE systems both in terms of historical development and their current state.

## 5. Recommendation: Online Collaborative Learning Project

This section discusses specific projects that could be implemented in HE from a practical perspective in order to stimulate the abilities of university students to learn how to learn and inculcate self-regulated behaviour. As an example of one such project, an online collaborative learning (OCL) project is described.

“Cooperation is defined as the ability to work with others to achieve common goals” (Shonfeld & Gibson, 2019, p.126). That is, collaborative learning requires group members to work together towards a common goal: Thus, all students assigned to a group expect results that would benefit every member. In addition, OCL has now emerged as a significant global means of using ICT to enrich and enable easy worldwide knowledge-sharing. Indeed, advances in ICT have exerted a positive impact on educational domains as well as societies. Learners are simultaneously required to effectively enhance their metacognitive and non-cognitive skills. In other words, students must accomplish projects while respecting the opinions of other individuals and employ critical thinking in mutual discussions on a given subject, independently monitoring and managing processes and actions towards the achievement of their goals. OCL projects are student-driven and designed to impel learners to perform actively and independently. The approach of online collaborations between students from different countries enables students to experience a real-life situation and work with peers from discrete parts of the world<sup>9</sup>.

Students ought to be allowed to establish their ultimate goals and should be induced to develop plans to attain the set objectives. A variety of beneficial social issues may be contemplated in directing and assisting students to decide on their themes: For example, the 17 Sustainable Development Goals (SDGs) aimed at resolving the social, economic and environmental problems facing the world could be considered. Students will in all likelihood be concerned about such issues as members of society and will thereby be motivated to undertake tasks that could ameliorate their societies or even the world generally.

The goals can be shared among students enrolled at different universities. Imai (2020) conducted a study with a partner university in Taiwan and noted three advantages of OCL projects: Language use, collaborative group work and autonomy. The Japanese students were encouraged to perform meaningful or challenging problem-solving tasks, and the project yielded numerous benefits for students, including improved technical knowledge and an increase in L2 proficiency. The OCL project allowed students to autonomously engage in learning tasks as L2 users. The more the students perceived themselves as autonomous in their activities, the more intrinsically motivated they become. Most students would like to self-regulate their academic learning and performance in some way. The OCL project thus empowers students to demonstrate self-regulated behaviours. Based on the perspective of self-regulatory phase processes, students were given the freedom to choose their topic of preference (they could consult their own goals), focused on the task, adjusted involving self-monitoring and optimized their performance, and evaluated on how well they were doing. This cycle can help lead to the further improvement of their performance.

## 6. Conclusion

Schleicher (2015) iterated the necessity of students to become aware of what they can do with what they know, how they behave in the world, and how they adapt to their environment. Education can provide considerable knowledge, however, it does not address every need of university leavers at the start of the 21st century. Learning how to learn does not signify the acquisition of surface-level knowledge by students; rather, it indicates deep learning through self-regulation. The more learners can become responsible for their learning and involve themselves in acts of learning, the more they can improve themselves. Students should

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<sup>9</sup> The International Virtual Exchange Project (IVEPproject) is introduced to improve the linguistic and intercultural competency of the participating students.

be encouraged to practice self-regulated learning if they are to survive a future characterised by VUCA. Therefore, university educators must offer students effective learning opportunities that promote their ability to learn.

The trends and current circumstances of university education in Japan and the UK indicate that both systems are adapting to the skills and knowledge requirements of graduates in the 21st century. The adoption of a more globally oriented approach in Japan and the UK HE, increasing emphasis on student autonomy, learning to learn, and the importance of life-long learning all represent welcome movement in the right direction. However, despite these changes in the Japanese and UK HE systems, the process of adaptation to current needs appears to be lagging significantly given the rapid, and indeed accelerating, pace of change in technology and developed global society at large.

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