

The future challenges of Japanese Education in Society 5.0 and students' understanding of Society 5.0

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Abstract

As Japanese Language lecturer, we are currently facing new challenges on how to teach in face of Society 5.0. We are required to be able to think in a critical and innovative way in all aspects mainly in technology-based learning. Since March 2020 learning process in Indonesia has relied on internet due to COVID-19 Pandemic. Japanese language learning through virtual platform is actually a part of Industrial Revolution 5.0. Consequently, teachers/lecturers are required to develop themselves and be familiar with IT. UNNES has applied technology-based learning via ELENA. UGM and UNESA have also implemented their own system in order to make learning process run smoothly even without face-to-face classes. However, there is still a problem in internet connection and human resources. Training might be needed since on-line learning will probably be more advanced as we are moving forward to society 5.0.

Key Word: Future challenge, society 5.0, students' understanding of Society 5.0

I. Introduction

Society 5.0 is a term the Japanese government has given to a new society where life is controlled by progresses in such technologies like artificial intelligence, robotics, self-driving vehicles and the internet of things. If such a naming is to be accepted, it is logical to assume that there existed in human history societies 1.0 through 4.0. In chronological order, we began with hunting society, farming society, industrial society and then information society. Today we live in the information society, but the transition to Society 5.0 is just around the corner.

Society 5.0 era brings consequences and changes in many aspects of life including education. Things that previously only existed in our imagination are about to come real soon. To mention a few: remote medical services, automatic translation that removes language barriers, AI and robots supporting the elderly or people with disabilities, autonomous driving technology assisting elderly drivers, and real-time access to necessary information are expected to eliminate problems arising from social disparities.

As reported on *foreignpolicy.com*, Japan has started to prepare itself. Japanese Ministry of Education, Culture, Sports, Science and Technology is now carefully considering how to adjust the education system to meet the needs and values of Society 5.0, from primary school to university level. It is considering two radical changes that that could be critical. If successful, the shifts would be relevant to traditional education systems worldwide and position Japan as a role model for teaching in the age of high technology.

The first idea is to make grade progression more flexible. This would mean that instead of either totally failing or totally passing each year, more support classes would be provided to ensure there are no gaps in understanding. For example, if a student passes fifth grade but didn't do well in math, he or she could retake the fifth-grade course subject until the skills are fully learned and understood. And then second is removing the barriers between subjects and disciplines. It is another adjustment that must be made for the next generation to be prepared for the super-smart future.

Unlike Japan, Indonesia is beginning to get to know Industrial 4.0 and Society 5.0. Since March 2020 learning process in Indonesia has relied on internet due to COVID-19 Pandemic. Regardless its disadvantage, this situation is also beneficial. Teachers and students are forced to adapt to new way of learning, counting more on technology and the internet where teachers are not the only source of knowledge. Students are provided with various resources. These changes must be therefore addressed by educational institution in order to provide quality, appropriate and well-targeted educational services.

UNNES has applied technology-based learning via ELENA while UGM & UNESA have also implemented their own system, but the result is not quite satisfactory as expected. It is understandable since introducing ICT tools does not necessarily lead to its usefulness in education. Instead, we have to think of the way to shift from traditional learning paradigm to technology-enabled learning. Based on this background, the research questions can be stated as follow:

1. What do students understand about Industrial Era 4.0?
2. What do students understand about Society 5.0 Era?
3. What do students think about
university/institution/government's readiness to facilitate
learning in Society 5.0 Era?
4. What should students do to prepare learning Japanese language
in Society 5.0 Era?

II. LITERATURE REVIEW

Society 5.0

Society 5.0 is a concept put forward by Japanese government which is not limited to manufacture but also covers social issues with the help of integrated physical and virtual spaces (Skobelev & Borovik, 2017). Society 5.0 relies on the concept of big data based technology included in Internet of things (IoT) (Hayashi), developed Artificial Intelligence which can be beneficial to the public and lead to a better life (Rokhmah, 2019), (Özdemir, 2018). Society 5.0 will have an impact on various aspect of life like health, urban planning, transportation, agriculture, industry and education as stipulated in Laws on National Education System of the Republic of Indonesia (as cited in Nastiti, F.E dan Abdu, A.R.N, 2020).

Basic principle in society 5.0 is balance between growth in business & economy with the environment. Technology in Society 5.0 helps to solve problems which appeared Industrial 4.0 era like (less interaction in society, limited employment, and other impacts of industrialization (Faruqi, 2019). Use of technology should bring not only prosperity to personal life of an individual but also promote social welfare.

Society 5.0 can be defined as smart community where physical world and cyberspace are very integrated (Salgues, 2018). Society 5.0 focuses on humanism by prioritizing the development of scientific and technological innovation that have the main development purpose in economic sector. Salgues (2018) stated that Society 5.0 has the following characteristics: (1) use full information and communication technology; (2) is centred on community; (3) people participation; (4) has common values: sustainability, inclusive, effective, and intelligence power; and (5) development of economic disruption.

In terms of radical changes in society, language learning is still needed since it bridges human and technology and helps to avoid dehumanization. Japanese language teachers must learn and apply a new concept in teaching in the 21st century which focuses on *creativity, critical thinking, communication and collaboration* or more well-known as 4Cs (Risdianto, 2019). In the 21st century we should also have skills like the following: leadership, digital literacy, communication, emotional intelligence, entrepreneur ship, global citizenship, problem solving, team-working.

Language & education

Language serves as a media for human being to socialize by considering esthetic values and humanity. Language is a social institution, both shaping and shaped by society at large, or in particular the "cultural niches" in which it plays an important role (Armour-Thomas & Gopaul-Nicol, 1998: 92). Language is not an "autonomous construct" but social practice both creating and created by the structures and forces of the social institutions within which men live and function. Duranti defines culture as "something learned, transmitted, passed down from one generation to the next, through human action, often in the form of face-to-face interaction, and, of course, through linguistic communication" (Fairclough, 1989: 6). It becomes evident from this that language plays a pivotal role in culture transmission.

Language helps us express our feelings and thoughts — this is unique to our species because it is a way to express unique ideas and customs within different cultures and societies. By learning a foreign language, you can understand ideas and thoughts that may be different from your own culture. You can learn customs and how people interact in a given society. Language helps preserve cultures, but it also allows us to learn about others and spread ideas quickly.

Education and language are closely interrelated because the content of education is passed on through the medium of language. Education is a dynamic process which helps to shape the personality, the character and behavior of a person in a positive direction. It helps young people to shape themselves and also carve a niche for themselves in society. According to Ottaway, "Education is the process of preparing people to fit into this complex social structure, and to play particular social roles as members of more than one institutional group" (Ottaway, 1962: 13).

ICT and Japanese Language Learning

It is believed that traditional learners of Japanese had disadvantages because they were in less exposure to the authentic Japanese language contents and interactions with native speakers. However, thanks to ICT development, our language practice has changed and learners in the JFL context now can have different learning experiences.

Synchronous tools such as an online video conference have made it possible to connect people in the distance, letting learners reach native speakers to practice conversations more easily. Asynchronous tools such as Emails, SNSs, blogs, or LMSs can facilitate the co-creation of the

contents in which learners can collaborate. Now countless of the language resources can be found everywhere in our daily lives, including YouTube videos, blog posts, podcasts, etc. These technologies can have a possibility of letting learners not only expose themselves to a variety of resources but also “engage in activities that produce comprehensible output and where meaning has to be negotiated (Motteram, 2013: 23)

III. Method

To capture a broad picture of the current state of students, a questionnaire was distributed via Google form. The questionnaire was written in Bahasa Indonesia and the link was shared through WhatsApp Group and emails. Students from Universitas Negeri Semarang, UGM, and Universitas Negeri Surabaya took part in this study. Data was taken from students in the 5th and 7th semesters since they were considered to have longer experience in Japanese learning and quite representative. 90 respondents were initially targeted but due to limited amount of time for collecting data, only 47 students filled up the questionnaire. Quantitative descriptive method was used to present questionnaire's result from students.

IV. Findings and Discussions

The learning environment and atmosphere in the digital age are rapidly changing. Today almost all students use the internet every day and every time through their own/personal devices to obtain information as well as learning resources. Here is the result:

Mohon Anda menjawab pertanyaan berikut, Jawaban ada yang dapat dipilih lebih dari satu.

Saat ini kita sedang memasuki era revolusi Industri 4.0. Literasi apa saja yang diperlukan dalam mengikuti era 4.0 ini?

47 responses

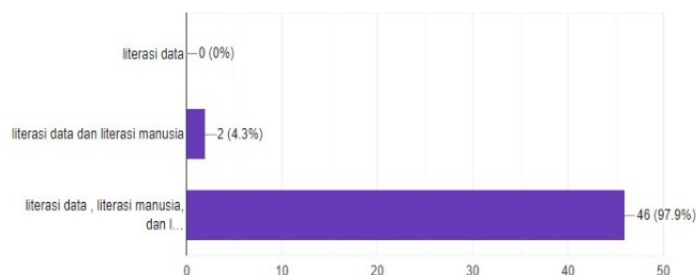
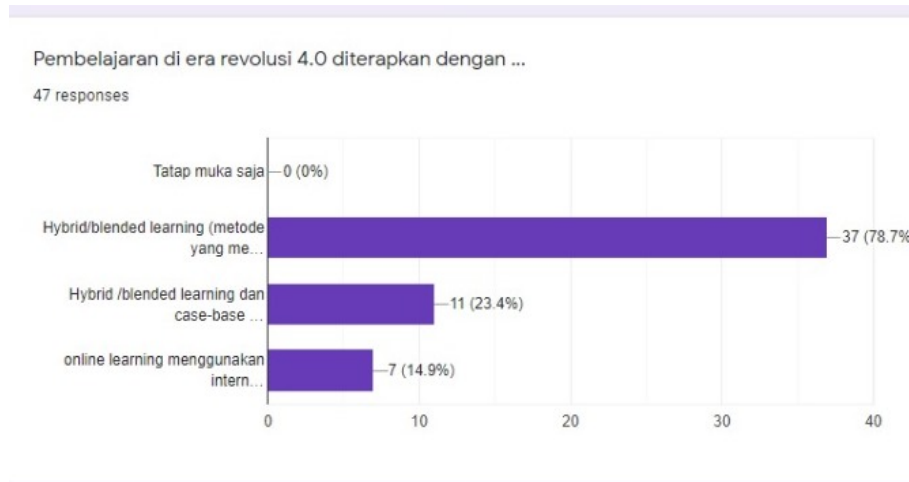


Figure 1

As described in the figure above, 46 respondents (97.9%) understand what kinds of literacy are needed in 4.0 era. It means that respondents are aware that data, technology and human literacies are very important in order to succeed in this era. 2 respondents (4.3%) assume that only data and human literacies are vital. No respondent answer that data literacy is the only factor that matters.



In relation to learning in 4.0 era, only 11 respondents (23,4%) realize the importance of hybrid, blended and case-based learning. 37 respondents (78.7%) think that 4.0 era only requires hybrid/blended learning while in fact it should also be supported with case-based learning. 7 respondents (14.9%) think that 4.0 era is identical with the internet. And no respondent considers that face-to-face learning is suitable with 4.0 era. See figure 2 above.

Regarding respondents' knowledge about Society 5.0 era, 33 (70.2%) respondents answer that human beings play a key role and society 5.0 era is based on technology. 20 respondents (42.6 %) assume that robot can replace teachers in teaching-learning process. 15 respondents (31.9%) think that learning process may take place anywhere with or without teachers. 8 (17 %) respondents answer that learning process may take place anywhere but teacher is needed. 2 respondents (4.3%) consider that Society 5.0 is a concept of a society which only relies on technology. See figure 3.

Apa yang Anda ketahui mengenai pendidikan di era masyarakat 5.0 (era society 5.0) yang diprakarsai oleh pemerintah Jepang pada Januari tahun 2019?

47 responses

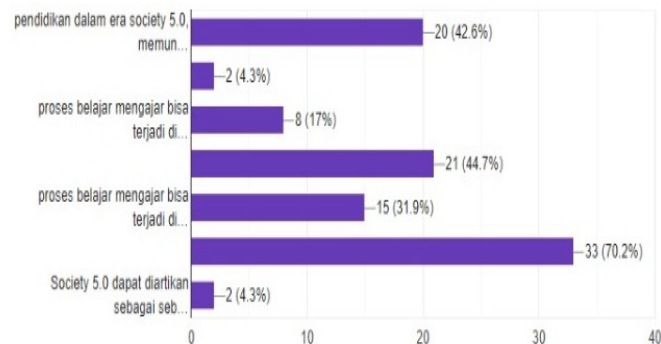


Figure 3

As presented in figure 4 below, 27 respondents (58.7 %) think that we have started Society 5.0 era. It is indicated by Japanese learning which is conducted fully on-line. Other 19 respondents (41.3 %) consider that we have not started to live in Society 5.0 era regardless on-line learning. See figure 4 below.

Apakah pembelajaran bahasa Jepang saat ini yang seluruhnya menggunakan Daring dapat dikatakan bahwa kita sudah memulai era masyarakat 5.0?

46 responses



Figure 4

Meanwhile, respondents' suggestion on teachers' preparation for Society 5.0 era can be summarized as follow:

- 1) We should prepare teaching material and media in accordance with challenges and needs in Society 5.0 era,
- 2) Training should be conducted especially on on-line teaching methods, We should prepare material and on-line teaching method which are not boring,
- 3) We should equip students with skills needed in Society 5.0 era,
- 4) We should be innovative in preparing media which is suitable with Society 5.0 era,
- 5) We should be able to improve skills in IT, choose suitable method and make use of supporting facilities as effective as possible

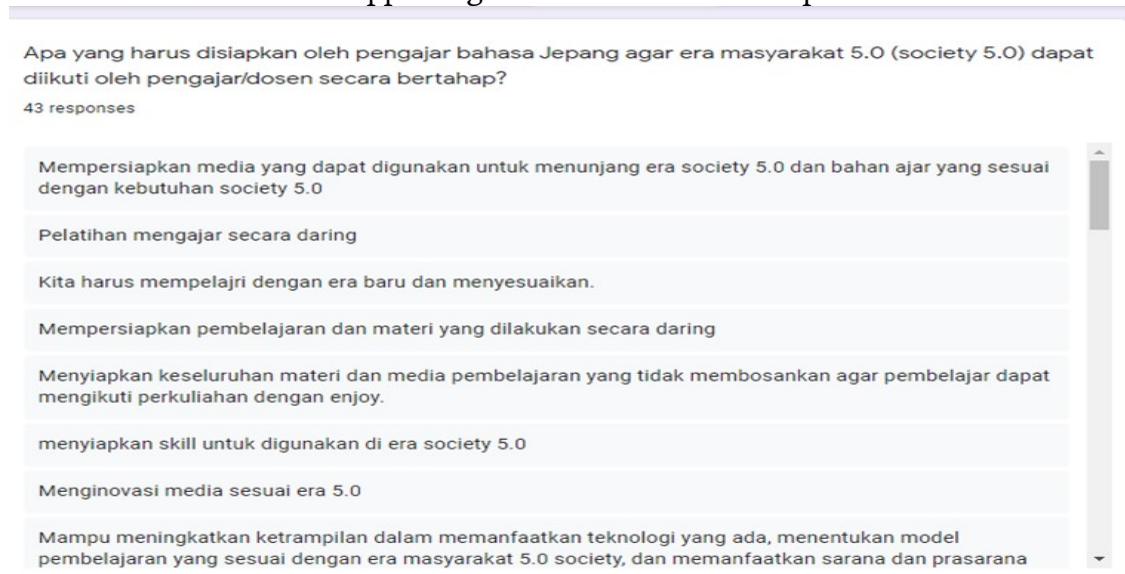


Figure 5

Related to university's preparation, respondents' answer can be described as follow:

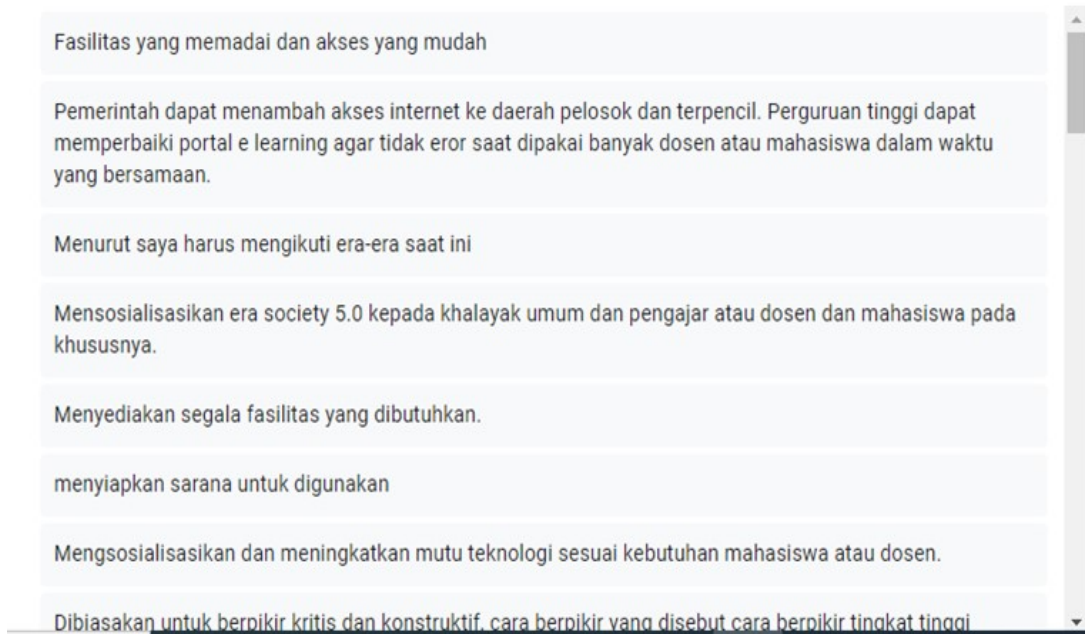
What should university/institution/government do according to respondents?

- 1) Adequate and accessible facility,
- 2) Availability of internet in remote and system improvement to avoid error,
- 3) Teachers/lecturers and students should be adaptive to this new era
- 4) To socialize this Society 5.0 era to the public including teachers and students,
- 5) To prepare facilities and infrastructure needed,
- 6) To keep technology updated in accordance teachers and students' need,

- 7) To promote and train critical and constructive thinking, or high level thinking.

Apa yang harus disiapkan oleh pemerintah atau lembaga perguruan tinggi agar era masyarakat 5.0 (society 5.0) dapat diikuti oleh pengajar/dosen maupun mahasiswa secara bertahap?

45 responses



Fasilitas yang memadai dan akses yang mudah

Pemerintah dapat menambah akses internet ke daerah pelosok dan terpencil. Perguruan tinggi dapat memperbaiki portal e learning agar tidak eror saat dipakai banyak dosen atau mahasiswa dalam waktu yang bersamaan.

Menurut saya harus mengikuti era-era saat ini

Mensosialisasikan era society 5.0 kepada khalayak umum dan pengajar atau dosen dan mahasiswa pada khususnya.

Menyediakan segala fasilitas yang dibutuhkan.

menyiapkan sarana untuk digunakan

Mengsosialisasikan dan meningkatkan mutu teknologi sesuai kebutuhan mahasiswa atau dosen.

Dibiasakan untuk berpikir kritis dan konstruktif, cara berpikir yang disebut cara berpikir tingkat tinggi

Figure 6

This questionnaire also asked students' preparation to face Society 5.0. Here is the result.

What should students do? The answer of the respondents can be summarized as follow:

1. Independent learning,
2. Prepare all devices/gadgets needed
3. To achieve maximum result in online learning, all students should be autonomous because they cannot fully depend on the teachers
4. Mastering technology is required especially related to online learning
5. Mental preparation

Apa yang harus disiapkan oleh mahasiswa pembelajar bahasa Jepang agar era masyarakat 5.0 (society 5.0) dapat diikuti oleh mahasiswa?

44 responses

Mempersiapkan media yang dapat menunjang era society 5.0.
Belajar mandiri
Sama seperti yang di atas
Mempersiapkan gawai dan kuota internet dan mental semangat belajar untuk menjalankan proses belajar online
Pembelajaran mandiri dan otodidak lebih perlu disiapkan oleh seluruh kalangan mahasiswa, terutama mahasiswa bahasa Jepang. Jika hanya bermodalkan melalui pembelajaran dari pengajar, maka kemampuan dari mahasiswa yang bersangkutan masih kurang maksimal. Oleh karena itu, belajar mandiri sangatlah diperlukan di era sekarang. Kemudian, penguasaan teknologi menjadi penting jika dibicarakan di saat yang serba online ini. Pembelajar perlu menguasai teknologi, terutama yang digunakan dalam proses pembelajaran.
mental yg kuat untuk menghadapi era society 5.0

Figure 7

V. Conclusion.

The increased use of ICT and the Covid-19 have pushed us to face Society 5.0 sooner than we may have expected. It is our duty to make learners get engaged in more meaningful language activities and develop skills needed in this rapidly changing 21st century. Some universities like UNNES itself has anticipated this. Nevertheless, the result of the questionnaire showed that there are still many things to improve. Society 5.0 is not simply use of technology but also change in mindset in making use of technology.

In short, the conclusion can be conveyed as follow:

- 1) To face Society 5.0 era, both students and teachers should have 3 types of literacy namely data, technology and human literacies. Japanese learning for all subjects should then be adaptive to the need and use technology as supporting tools in the teaching learning process.
- 2) Students should be able to use Internet of Things as well as Artificial Intelligence to support their language learning.
- 3) Internet facility should be provided across Indonesia since without the internet no online learning can be conducted.

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