Language Learning Adaptation Model in The Era of Society 5.0

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ABSTRACT
This article aims to explain the adaptation model of language learning in the 5.0 society era. The method used is descriptive qualitative. The data used a library study on various studies of Language learning in the 5.0 era of society. The data were then identified and analyzed to build an understanding of the adaptation model of language learning in the 5.0 era as a form of response to future learning. The results of this study indicate that the adaptation model of Language learning to the era of society 5.0 is closely related to mastery of the field of Language which is integrated with mastery of the latest Information Technology, and mastery of 21st-century skills, namely creative thinking, critical thinking and problem solving, communication, and collaboration. However, the adaptation process and its results are largely determined by the ability of lecturers, students, and supporting facilities and infrastructure so that they can run well.

1. Introduction

The concept of society 5.0 was conceived in reaction to the industrial revolution 4.0. Both are connected topics that are now highly debated. The industrial revolution is a significant technological advance that affects other sectors. Industrial revolution 1.0 began in 1750 with the invention of the steam engine; industrial revolution 2.0 began when the use of steam engines was replaced by machines that used electricity; industrial revolution 3.0 began when the production process used machines that could move and control, beginning with simple robots and progressing to computers; and industrial revolution 4.0, marked by the introduction of artificial intelligence (Wihadanto, 2017; Annisa, 2021).

The Industrial Revolution 4.0 is an era that sees information technology as the basis of human life. The massive development of the internet and digital technology has made human connectivity borderless. This era has disrupted various human activities, including in the field of education (Suwandi, 2018). The revolution resulted in major changes to the way people live and work. During the age of Industrial 4.0, advancements in information technology were made that connected the two worlds, the actual world and the digital or virtual world, which inevitably had repercussions on other disciplines. Industrial Revolution 4.0 has ushered in a new era of technical advancement for nations. The advent of digital technology has had an effect on the structure of human existence around the planet (Nusantara, 2020).

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The Industrial Revolution 4.0 has not been successful for a number of reasons, including a lack of workforce skills, communication technology security issues, the reliability of production machine stability, the inability of stakeholders to adapt, and the number of jobs lost as a result of the development of digital technology. Nonetheless, the beneficial influence of technology is evident (Rohmadi, 2018; Suwandi, 2018; Ibda 2109), as demonstrated by several studies, depending on how individuals reduce risks and capitalize on possibilities presented by the Industrial Revolution 4.0's transition.
Observing the rapid progression of Industrial Revolution 4.0, the State of Japan suggested to the world the period of Society 5.0. Civilization 5.0 is a human-centered society conceptually coming from technological advancement. Japan created the notion of society 5.0 as a result of seeing the Industrial Revolution 4.0, wherein the complexity of information technology diminished human responsibilities. One of the fundamental tenets of the concept is that artificial intelligence products are anticipated to transform big data from internet transaction products in all spheres of life into new knowledge, thereby fostering optimism for the enhancement of human capabilities and the creation of new opportunities for humanity (Nusantara, 2020). Society 5.0 is the solution to the problems caused by the expansion of the industrial revolution 4.0.

The emergence of Industrial Revolution 4.0 presents both obstacles and opportunities for the advancement of education. The challenge consists of disruptions in diverse aspects of life, such as language and human culture. The Era of Disruption is characterized by massive, rapid, and difficult-to-predict changes. Rapid changes result in uncertainty, the emergence of complex relationships between change-causing factors, and a lack of clarity regarding the direction of change, all of which contribute to ambiguity. This era also disrupted a variety of human activities across all fields, especially in the field of education in the world of higher education. a number of cases have demonstrated an increase in false news, lies, and cyberbullying. (Ibda, 2019).

The advancement of the education sector entails the provision of quality and optimal educational services. Universities must be able to shape teaching and learning based on current circumstances. Teachers are expected to carry out their tasks and obligations in a professional way, as well as meet the demands of students and the user community. In addition, education and learning must be transformed in accordance with prevailing situation. These issues must be addressed appropriately (Hidayati & Andani, 2020).

The challenges faced by educators in the era of computers and digital technology are increasingly complex. Arends (2008) suggests several challenges for educators in this century, namely: (1) teaching in a multicultural society, (2) teaching to construct meaning, (3) teaching for active learning, (4) teaching and accountability, (5) teaching and choice, (6) teaching with a new view of ability, and (8) teaching and technology.

Sharma (2019) explained that,

Digitization and virtualization in education are motivating, inspiring and potentially broad challenges for individuals and societies. Smart and intelligent educational tools and resources should allow individuals to develop more complete expertise, knowledge and skills and unleash their innovative prospective.... The revolution of higher education is a key factor in the digital transformation of IR 4.0. Higher education pioneers must ensure that their foundations are computerized, open the doors created by IR 4.0, and have a high level of commitment and agility. If we misuse the progress of the fourth round of IR, it will unquestionably lead us away from our lifestyle, the quality of the centre and the happy nature of the schools, universities and colleges. In this way, higher education should develop codes of ethics and responsibility to monitor the progress of fourth investor relations by organizations and staff. To be successful in the workplace of the future, people must have appropriate digital and virtual education.

The development of information and communication technologies has resulted in the modification of pedagogical strategies. Students are able to learn anywhere, at any time, with anybody. The Online Learning Model has assisted in enhancing the efficacy of Language courses at universities. Using internet-based social media and mobile phones or cell phones as the methods, the Online Learning Model is created using the Online Interactive Learning Model method. Online learning has created a novel experience that is more difficult than traditional or face-to-face approaches (Kuntarto, 2017). Due to the Covid-19 condition, the Online Learning Model is expanding fast in Indonesia (Mansyur and Taharu, 2021), despite the fact that not all schools and institutions, especially those in distant locations, are able to apply it effectively.

In the era of society 5.0, learning Indonesian in higher education remains crucial. Indonesian has a crucial function since it serves as a means of communication for the Indonesian people and is an uniting language that must be utilized effectively. Nevertheless, there are still a significant number of Indonesians who are unable to speak Indonesian correctly (Barowi & Aba, 2015). Indonesian is utilized for both official and casual communication in Indonesian society.

Based on the above description, the period of industrial revolution 4.0 and society 5.0 have a significant impact on the global education system, including Indonesia. This article aims to show how lecturers and students in higher
education might implement the adaption model of language learning in the 5.0 era. To respond to this question, the author will discuss the idea of society 5.0 and learning in the period of society 5.0, followed by a review of the results of research relating to the adaptation or learning techniques of Indonesian in the society 5.0 era. The findings of this study may undoubtedly be expanded upon by future studies.

2. Method

This study employed qualitative research methodology (Sugiyono, 2015) due to the qualitative nature of the data collected (Mansyur, 2018; Mansyur et al., 2021; Mansyur & Suherman, 2020). This study is also known as library research since researchers obtain the majority of their data from prior studies. Literature research is the research conducted using sources from previously published works and research outcomes. In the era of the 5.0 revolution, the library technique entails searching for and locating materials that are pertinent and associated with learning. Reading sources might include journals, scientific articles, theses, dissertations, papers, and other works that have already been written. The results of the investigation were identified, categorized based on the formulation of the problem and the objective of this study, and then utilized to create and support the researchers’ arguments regarding the adaption model of Language learning in the 5.0 era of society.

3. Result and Discussion

3.1 The concept of society 5.0

The Japanese government established the phrase Society 5.0 in 2016, and the notion has subsequently expanded. Society 5.0 is described as a “smart society” capable of integrating the real and virtual worlds. Despite its emphasis on humanity, society 5.0 refers to a new form of society that fosters scientific and technology innovation in order to address social issues and ensure economic growth. “Society 5.0 focuses on positioning the human being at the center of technological and innovation modification for the benefit of humanity and it is considered a quiet revolution started in Japan that promises to revolutionize society.” (Costa, 2018).

Society 5.0 and Industry 4.0 are inextricably linked. Industry 4.0 focuses on production, while Society 5.0 seeks to place humans at the center of innovation, utilizing the results and impacts of Industry 4.0 technology, by deepening technology integration to improve the quality of life, social responsibility, and sustainability (i-SOOP, n/d, Serpanos, 2018). Society 5.0 is a civilization that can address numerous issues and social problems by leveraging many inventions produced during the industrial revolution 4.0, such as the Internet of Things (IoT), Artificial Intelligence (AI), Big Data, and Robotics, in order to improve the quality of human existence. Society 5.0 can also be interpreted as a concept of a human-centered and technology-based society in which educational information focuses on all ages as a learning community, learning is obtained from various sources including books and the internet, and curriculum development is conducted globally. (Wardana, 2021).

Keidanren (Japan Business Federation) (2016) stated the goals of Society 5.0,

“Every individual including elderly people and women can live safe and secured comfortable and healthy life and each and every individual can realize his/her desired lifestyle. [...] Improvement of productivity through digitization and reform of business models are promoted, and at the same time, the new economy and society will be realized by promoting innovation and globalization. [...] Efforts are made to solve a pile of issues of our country such as fal ling population, super aging society and natural disasters so that rich and vigorous future will be realized. Through overseas expansion of new businesses and services, we can contribute to solving global scale issues as well (p. 10).

Society 5.0 is a notion of intelligent society that stresses how humans may play a significant part in reacting to the most recent technological and informational advancements. Society must be the central actor and source of innovation so that information technology is only a tool that facilitates human endeavors on earth and enhances human wellbeing.

3.2 Learning in The Era of Society 5.0

The learning system in the age of society 5.0 is closely connected to the learning system in the era of the industrial revolution 4.0, where creativity, critical thinking, cooperation, communication skills, and character qualities play a significant role. Students must have skills, knowledge, and abilities in the disciplines of technology, media, and
information, learning and innovation, and life and job skills in order to study (Putriani & Hudaibah, 2021). Frydenbeg et al. (Age, 2020) suggested that everyone must possess critical thinking skills, knowledge and abilities of digital literacy, information literacy, media literacy, and master information and communication technologies in order to study in the era of industrial revolution 4.0. According to Bernie Trilling and Charles Fadel (2009), there are three categories of 21st-century skills: life and career skills, learning and innovation skills, and information media and technology skills. Learning society 5.0 is strongly tied to the notion of 21st-century skills, which emphasizes skills or talents, innovation, and the application of technology. Obviously, it must be correlated with the competences anticipated to be attained by the skills that exist in the period of civilization 5.0, in this case, the skills of the 21st century.

To allow students to discover the notions of knowledge and creativity, the Learning Concept of Society 5.0 must, of course, be aligned with the desired skills of the twenty-first century. Campbell (1998:11) defines creativity as an activity that produces novel and beneficial outcomes. In contrast to Campbell, Santrock (2002: 327) defines creativity as the capacity to conceive of things in novel and uncommon ways and to generate an original solution to a given challenge. Different learning paradigms, such as discovery learning, project-based learning, problem-based learning, and inquiry learning, are available to educators. These diverse approaches help pupils to develop their creativity and critical thinking. According to Schunk (2012), the most essential learning result is that students have the power and capacity to learn to develop themselves further, gaining not just information and metacognitive competence but also the capacity to grow their skills.

Yamnoon (2018) states that there are learning abilities that students must possess, i.e.: (a) sensory perception, (b) retrieving information, (c) the ability to recognize patterns or categories, (d) generating new patterns/categories, (e) solving problems, (f) maximizing and planning, (g) creating (creativity), (h) articulating or displaying output, (i) coordinating with multiple parties, (j) using language to express ideas, and (k) using language to understand (l) social and emotional sensing; (m) making social and emotional considerations; (n) creating emotional and social output; (o) fine motor/dexterity; (p) gross motoric; (q) navigation; and (r) mobility. Adaptability, agility, mobility, and responsiveness are buzzwords for civilization 5.0, which encompasses the fact that mutation, change, and evolution are daily observable constants, which are also represented in infrastructure, knowledge, and abilities. Essential qualities include adaptability, agility, and reaction. The world of education must be able to adapt to the industrial eras 4.0 and 5.0 by implementing changes in the learning and assessment system in universities through a curriculum approach employing the Student-Centered Learning method, with the goal of producing outputs to improve the quality of students and attain the beacon certification (Wahyuni and Abdillah, 2019).

In learning innovation, the Indonesian Ministry of Higher Education outlines five essential aspects to promote national competitiveness (Maemunah, 2018): (1) Preparation of a more creative learning system in universities, including curriculum modification and enhancement of student data-related skills. Information Technology (IT), Operational Technology (OT), Internet of Things (IoT), and Big Data Analytic combine physical, digital, and human things to develop graduates who are competitive and proficient, particularly in the areas of data literacy, technology literacy, and human literacy. (2) Reconstruction of institutional systems in higher education that are flexible and responsive to the industrial revolution 4.0. In addition, the Cyber University program has begun to be implemented, including the remote learning lecture system, which reduces the frequency of lecturer and student interactions. The Cyber Anniversary is anticipated to be a solution for youngsters in rural places to have access to a quality higher education. (3) Preparation of human resources, particularly sensitive, adaptable, and dependable lecturers, researchers, and engineers, to tackle the industrial revolution 4.0. Additionally, infrastructure revitalization and the growth of education, research, and innovation infrastructure are required to support the quality of education, research, and innovation. (4) Strengthening and expanding industrial revolution research 4.0. And (5) Strengthening and cultivating innovation to boost the productivity of industry and technology-based startups.

3.3 Adaptation of Language Learning in the Era of Society 5.0

In preparation for the period of society 5.0, higher education must adapt to the most recent necessities. Five learning techniques are proposed by Lung (2018): (1) experiential learning; (2) promotion of digital literacy; (3) diversity of higher education paths; (4) encouragement of lifelong learning; and (5) expansion of the function of universities. Even if the implementation has not been carried out effectively in Indonesia, the first through fourth techniques may be a viable alternative for adapting learning to the society 5.0 age.

Sajidan, et al. (2020) stated that the most essential abilities for navigating Society 5.0 are the capacity to tackle complicated challenges, critical thinking, and creativity. Future mastery of the three most essential skills is the duty of the
school community. Future-adaptive thinking, specifically analytical, critical, and creative thinking, which is usually referred to as Higher Order Thinking Skill, is the type of thinking that must constantly be taught and practiced (HOTS). By allowing students to encounter the notion of activity-based knowledge, it is possible to cultivate HOTS talents within the classroom learning process.

Today’s method of acquiring information differs from that of the past due to the fact that technology has made knowledge more accessible. What is highly prized today is the ability to apply information in the actual world. In other words, learning places a premium on abilities. Consequently, studying Indonesian in schools and postsecondary institutions must incorporate the four characteristics of 21st century learning, namely critical thinking and problem solving, creativity and innovation, teamwork, and communication, or the so-called 4Cs (critical thinking and problem solving, creative and innovation, collaboration, and communication).

In keeping with this, Suwandi (2018) stresses that learning must relate to the four qualities of 21st-century learning: critical thinking and problem-solving, creativity and invention, teamwork, and communication. Therefore, instructors who are receptive, adaptable, and flexible to the diverse requirements of participants are required. Pupils, in terms of providing instructional resources, employing learning models, employing assessment strategies, and fostering a demanding learning environment. Educators, both instructors and lecturers, must be able to produce instructional materials that are not only geared toward fostering language proficiency, but also suit macro-level demands and student requirements, such as multicultural education and ecological education. Mixed learning patterns are an option for taking advantage of technology and informational advancements. Implementation of authentic assessment that emphasizes learning processes and outcomes is required.

Present-day teachers and students of language and literature, according to Rohmadi (2018), must be adept at communicating in a variety of living circumstances. Currently, information is readily accessible via print and electronic media. However, both instructors and students must possess excellent verbal and nonverbal communication abilities. In addition, lecturers and students must possess macro literacy abilities in the era of the 4.0 industrial revolution. Reading and writing literacy is one of the most important literacy abilities that language and literature lecturers and students must acquire to enter the campus environment in the digital age. This is a provision for preparing macro insights in both the core competency and support domains, as well as others.

At order to adapt language Learning in tertiary institutions to the 5.0 era of society, a new literacy viewpoint must be used. Ibda (2019) noted that implementation of literacy may be accomplished through enhancing data literacy, technology literacy, and human literacy. In addition to enhancing students’ comprehension of linguistic material, modern literacy increases their data- and technology-based writing and speaking abilities. In the composition of journalistic, scientific, and literary works, students’ new literacy becomes their soul. The implementation of new literacies is mostly controlled by instructors of the language who must possess digital skills, foster creative learning and critical thinking, and be web-based.

The use of modern literacy is crucial to the field of education in the present day. Which may be accomplished in several ways. First, rapidly identify the most pressing issues at work. Find relevant information on the identified issue. Third, review the discovered information critically. Fifth, integrating diverse information sources to develop solutions. Sixth, disseminating the acquired solutions to others so that the knowledge is widely recognized. Due to the fact that our literacy idea defines who we are and who we will become, the seventh step is to analyze and adjust the outcomes of solutions and decisions (Henry, 2017: 1158). In response to the aforementioned problems and possibilities, universities must develop new approaches to teaching Indonesian. Furthermore, new literacy is an advanced ability after traditional literacy, which is part of language skills. Language abilities are often classified into four categories: listening, speaking, reading, and writing (Tarigan, 1981: 1).

Ibda (2019) stresses new literacy that may be used to the study of Indonesian by stressing data mastery abilities, technology, and a human literacy orientation. At addition to focusing on language comprehension and its functions, students must also be taught to grasp technology, data presentation, and the quality of human resources when they study Indonesian in postsecondary institutions. This may be applied to language skills conceptualized via the study of Indonesian at postsecondary institutions. In the past, literacy consisted only of reading, writing, and arithmetic.

In the period of Industrial Revolution 4.0 and civilization 5.0, pupils were expected to possess new literacy skills (data, technology, human literacy). New literacy is deliberately included into the instruction of Indonesian in postsecondary institutions since it may be combined with the other four language skills (listening, speaking, reading, and writing). This new literacy can be introduced in stages. Make data the primary strength of writing, including journalistic,
scientific, and literary works. Data literacy educates pupils to recognize data in the media and scientific publications. They are asked to use the (5W+1H) technique to determine the veracity of data in the news, beginning with what, where, when, who, why, and how, and requiring explanation. In scientific endeavors, students are instructed on data precision, validity, and dependability. They are instructed in the proper collection, processing, and presentation of data. Second, an information and communication technology method may be used to envision the application of technological literacy in studying Indonesian. The goal of technological literacy in education is for students to be able to utilize technology, create, and increase online skills in a healthy and responsible manner while reading technology-based research products. Thirdly, human literacy may be used to the study of Indonesian by enhancing communication, cooperation, critical thinking, and inventive and creative abilities.

The use of new literacies in the context of learning Indonesian can also occur via integrated or blended learning. According to (Wilson, 2018), blended learning is an approach that mixes in-class instruction with online instruction. According to (Maarop & Embi, 2016), blended learning is a combination of traditional classroom learning and virtual environments. This demonstrates that blended learning is a combination of traditional literacy and new literacy (human literacy, technology literacy and data). Blended learning strives to incorporate the use of technology into the learning process to facilitate proper student learning. "Blended learning enables for learning reflection" (Wibawa, 2018). Blended learning is one of the learning options in the revolutionary 4.0 eras and 5.0 societies.

Blended learning offers several advantages. Ronsen, et al. 2015; Oktarina, Budiningsih, & Risdianto, 2018) explain that blended learning is more effective than face-to-face learning or online learning alone, can improve learning outcomes, is the right way to extend study time so that students can meet readiness standards for tertiary institutions and the workplace, enables students to acquire digital literacy and online learning skills, and can be used to cover learning that cannot be covered in a traditional classroom setting.

4. Conclusion

The adaptation of language learning in the era of society 5.0 is a response to the industrial revolution, which has led to the development of digital technology. Adaptation is necessary so that lecturers and students are not only objects of advancements in the world of information technology, but also subjects or innovation hubs that utilize the most recent information technology for their own needs and welfare. The findings of this study indicate that the adaptation model of language learning in the era of society 5.0 can be achieved by integrating new literacy skills, mastering data, technology, and information, and being oriented toward human literacy, as well as by combining 21st-century skills, also known as 4C, critical thinking and problem solving, creativity and innovation, collaboration, and communication. With these modifications, learning Indonesian in the era of society 5.0 will give substantial benefits for the cognitive growth and skill acquisition of students.

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