Concept of Digital Literation Based on Value of Local Wisdom *Piil Pesenggiri* in History Learning in the Industrial Revolution 4.0

Regiano Setyo Priamantono[1], Warto[2], Akhmad Arif Musadad[3]

[1]Student at Master Degree Program in Historical Education- Sebelas Maret University, Surakarta, Indonesia

[2,3]Lecturer at Master Degree Program in Historical Education- Sebelas Maret University, Surakarta, Indonesia

ABSTRACT

Literacy is one of the abilities that are considered important in facing the 21st-century world. The distinctive character of the 21st-century world is the industrial revolution of 4.0. The impact of the industrial revolution 4.0 has been felt by anyone in every aspect of life, including aspects of education. The low condition of Indonesia's digital literacy capability must be overcome immediately. For this reason, this study aims to propose a thesis on the concept of digital literacy based on value of local wisdom *piil pesenggiri* in learning history in the era of the industrial revolution 4.0. Local wisdom *piil pesenggiri* is the behavior and outlook on life of Lampung people who are still held firm to this day. It is hoped that through this strategy the historical awareness of the students at Public High School 2 Kalianda in Lampung Province will increase amidst the current of Industrial Revolution 4.0. This study used qualitative research methods. Data collection was conducted in January and February 2020 with natural conditions, primary data sources and more data collection techniques in participant observation, in-depth interviews, and documentation. The results show that there must be a change in conventional history learning resources to a digital history book that can understand current students without losing their cultural identity.

Keywords: Digital Literacy, *Piil Pesenggiri*, Learning History, Industrial Revolution 4.0
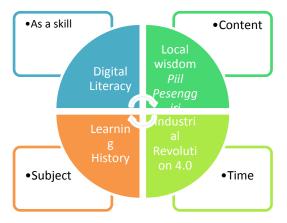
I. INTRODUCTION

Literacy is one of the abilities that are considered important to face the 21st-century world. According to the 21st Century Education framework developed by the World Economic Forum (WEF), there are 16 important skills that children need to prepare and possess for them to survive and succeed today. The sixteen skills are divided into 3 large groups, namely foundational literacies, competencies, and character qualities. The distinctive character of the 21st-century world is the industrial revolution of 4.0. The impact of the industrial revolution 4.0 has been felt by individuals, communities, companies, and even a country. What is most felt is in the economic field, not infrequently many companies are not ready to face the industrial revolution 4.0.

Then what is meant by the industrial revolution 4.0 and how will it affect education and especially learning history? The fourth Industrial Revolution Era was colored by artificial intelligence, supercomputers, genetic engineering, nanotechnology, automatic cars, and innovation. These changes occur at the exponential speed which will have an impact on the economy, industry, government, and politics. In this era, more visible forms of the world have become global villages (Hasudungan & Kurniawan, 2018).

Especially in the field of digital literacy, Indonesia's education world is deemed necessary to improve its digital literacy abilities, given that Indonesia is in a low position. precisely reading interest in Indonesia is still low. Of the 61 countries surveyed in "Most Literred Nation in The World 2016", Indonesia is almost in the position of caretaker, entrenched in rank 60. Indonesia's ranking is only one level above Botswana, which ranks protruding. Besides, as the beginning of the explanation, digital literacy is one of the basic abilities that a person must possess to face the world of industrial revolution 4.0. This can be started among students.

Figure 1.1: The Concept of Application of Digital Literacy Based on Local wisdom Piil Pesenggiri

The low ability of Indonesian digital literacy may be the reason for the lack of close and relevant material or literacy content with students. Therefore, it is felt necessary to integrate local wisdom that is essentially close and relevant to the daily lives of students. Also, based on preliminary data obtained through interviews with students it can be concluded that historical awareness still does not show maximum results. Thus, it is necessary to see the extent of conducting this research, digital literacy will be integrated with local wisdom *piil pesenggiri* in the history learning conducted at Public High School 2 Kalianda, South Lampung. Based on the introduction above, the research problem formulation is to find out how the concept of Digital Literacy based on Local

wisdom *piil pesenggiri* in Learning History in the Industrial Revolution Era 4.0.

II. METHODS AND MATERIAL

Qualitative research is research that uses a natural setting, intending to interpret phenomena that occur and is carried out by involving existing methods. Meanwhile, according to Donald Ary, qualitative research is trying to understand phenomena by focusing on images rather than breaking them into variables. The aim is a holistic picture and depth of understanding rather than numerical data analysis (Donald Ary, 2004).

According to Donald Ary (Donald Ary, 2004) qualitative research has six characteristics, namely: (1) concern of context, (2) natural settings, (3) human instruments, (4) descriptive data, (5) emergent design, (6) inductive analysis. Data collection was carried out in natural settings, primary data sources and more data collection techniques in participant observation, in-depth interviews, and documentation.
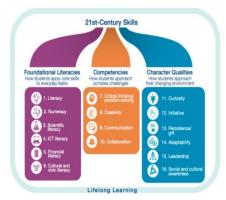
III.RESULTS AND DISCUSSION

A. Digital Literacy

What is the Importance of Digital Literacy? The rapid development of information and communication technology provides challenges and prospects on a multidimensional basis. In the context of education, this development provides opportunities and challenges, both for teachers and learners, providing new nuances in learning and learning, social interaction, and professional work. For teachers, for example, mastery of digital literacy provides convenience and effectiveness in planning, implementing, and evaluating learning programs that it does.

It can be imagined when non-literate teachers operate computers, it will take more time and energy and more money to prepare Learning Plans, compile teaching materials, and develop practical learning media, which can be attractive and strengthen learners' understanding of teaching material. Conversely, educators who are literate in digital technology can compile and develop teaching materials and instructional media more attractively by utilizing images, videos, and music that are suitable for that purpose. This, in turn, increases the quality of student learning. Especially considering students currently living in the era of the industrial revolution 4.0 it is felt necessary to develop learning that is up to date and contains local values of local wisdom.

Foundational literacies are skills related to the child's ability to apply core skills in everyday tasks. Skills related to basic literacy consist of (The skills needed in the 21st century, 2005)
a) **Literacy** (skills related to text and language)
b) **Numeracy** (skills related to numbers)
c) **Scientific literacy** (skills related to scientific thinking)
d) **ICT literacy** (skills related to the use of information technology)
e) **Financial literacy** (skills related to decision making related to personal finance
f) **Cultural and civic literacy** (skills related to cultural understanding and civic rights)

Figure 1.2 : 16 21st century capabilities
(https://widgets.weforum.org/nve-2015/content/exhibits/02.svg)

Digital literacy is a person's knowledge or skills in understanding, analyzing, evaluating, managing, using, and utilizing various information from digital (including online) media, including how to re-communicate that information to individuals, groups and the wider community (Hary Soedarto Harjono, 2018). Digital literacy in this context does not merely mean the ability to use computers to write and read as in the context of general literacy, but rather a set of basic skills in the use and production of digital media, information processing, and utilization, participation in social networks to create and share knowledge, and various skills professional computing (Tour, 2015). Rila Setyaningsih et al summarize the seven elements of digital literacy include: (1) Information literacy is the ability to search, evaluate and use information needed effectively; (2) Digital scholarship is an element that includes the active participation of digital media users in academic activities to make information from the digital media as a data reference, for example in research practice or completion of college assignments; (3) Learning skills are effective learning of various technologies that have complete features for formal and informal learning activities, (4) ICT literacy or so-called awareness of information and communication technology that focuses on ways to adopt, adapt and use ICT-based digital devices and media both applications and services (Setyaningsih et al., 2019).

ICT-based media in question such as computers or LCD projectors/power points that have been designed/designed in such a way that can be used following their understanding, moreover already connected to the internet as a basis for learning (5) Career and identity management related to ways to manage online identity. A person's identity can be represented by some different avatars who can have relations with more than one party at almost the same time; (6) Communication and collaboration is a form of active participation for learning and research

through digital networks; (7) Media literacy includes critical reading skills and creative academic and professional communication in various media. The existence of media literacy makes audiences not easily deluded by the information that at a glance meets and satisfies their psychological and social needs. In the context of historical learning, listening, speaking, reading and writing skills can be trained with the help of digital technology. For learning these four language skills, historical learning resources are not limited to printed materials, but also digital materials and media that can be used more practically and efficiently. The learning media are very flexible and easy to develop.

In terms of learners, how enjoyable are students who live in the millennial era who are facilitated by qualified digital technology? College assignments can be typed on a computer, learning resources from all over the universe are available. Like fruit, just pick it from the tree. However, to be able to download and upload information that we need and need by others, or just reading and listening to information requires digital literacy. In other words, learning resources will not provide benefits if we do not have sufficient knowledge to use them.

In the era of the industrial revolution 4.0, historical education experienced quite a big challenge and now its role is demanded so that it can foster historical awareness, both in its position as members of society and citizens, as well as to strengthen the spirit of nationalism and the love of the motherland without ignoring a sense of togetherness in life between nations in this world. To deal with these challenges, an approach that utilizes digital literacy needs to be done by integrating the value of *piil pesenggiri* local wisdom in learning history.

B. Local wisdom *Piil Pesenggiri* Lampung Community

Hadikusuma (1990), said, Lampung people inherit the nature of behavior and outlook on life called *Piil Pesenggiri* which has the following characteristics:

1. *Pesenggiri*, meaning unyielding do not want to lose the attitude and behavior.
2. *Juluk Adek*, implies liking with a good name and honorable title.
3. *Nemui Nyimah*, meaning accepting and giving in an atmosphere of joy and sorrow.
4. *Nengah Nyappur*, implies sociable and deliberative in solving a problem.
5. *Sakai Sambayan*, implies helpfulness and cooperation in kinship and neighborhood relations.

In the research of Sulistyowati and Risma Margaretha (Irianto & Margaretha, 2011), it can also be understood that the condition of Lampung today experiences a seriousness in its existence as Lampung ethnicity which is increasingly marginalized due to cultural changes both in diffusion or assimilation perspective and the like or in challenges as multicultural society, national and global.

In the book written by Umar Rusdi and friends, there is a quote that signifies the uniqueness of the people of Lampung. The quote reads: (Umar Rusdi et.al., 1986)

"tandonou ulun Lappung, wat piil pesenggiri, you balak piil ngemik malou ngigau diri. Ulah nou bejuluk you beadek, iling mewari ngejuk ngakuk nemui nyimah. Ulah nou pandai you nengah you nyappur, nyubali jejamou begawiy balak, sakai sambayan"

The translations are:
The sign of the people of Lampung, there is *piil pesenggiri*, he has a big heart, has a sense of shame, self-respect, because it is more, big name and title. Like

brothers, give open arms. Because he is smart, he is sociable. Work together with a large work, please help.

In the observation of researchers in the field, that there is a kind of flexibility from the Lampung people towards the use or application of the *piil pesenggiri* culture in the contemporary or modern context. This can be said of an effort to dynamize the culture of the Lampung people themselves in response to the demands of the times. If in a traditional context, the meaning of *piil pesenggiri* is a condition with a ceremony or custom, norms that apply, for example about the meaning of *berjuluk beradok*, in the sense of customary Lampung, it is defined as a title or title that brings the name of greatness to the person who is given *berjuluk beradok* (nickname in the form of a title, for example, Raja Sejagat Lampung), with this title, then the person who is given this title has a principle or mandate of values that must be upheld, then he must apply the principle of his *piil pesenggiri*, namely self-esteem, dignity, authority personally and family. Usually to get a degree in a Lampung traditional event, obtained by holding a *Begawi* (Lampung traditional party), by holding the event Lampung people use their philosophy to meet *nyimah* which means understanding like receiving guests, with sweet face, and open arms to all guests, then by the title of the title is also that he must bear the philosophy of *nengah nyappur*, which is to live together in a community, both indigenous people or the general public, so that they can consult in solving problems or about certain activities, then the last *sakai sambayan* is to work together in working on events good events in traditional parties or other activities, this can be interpreted the meaning of cooperation.

Piil pesenggiri, as a pillar of Lampung philosophy with the four pillars of the *Nanggah nyimah, Sakai sambayan, Nengah nyappur, and Bejuluk beradok* have lived for centuries and have been lived by indigenous peoples in Lampung. *Piil pesenggiri*, ethos and the spirit of this village, if carried out consistently

and sincerely, will bring people to a harmonious and harmonious order of life. *Piil pesengiri* alienates people from division and strengthens in a multicultural society.

So, *piil pesengiri* can be recommended and lived by anyone who loves peace but also likes diversity. Local wisdom and ethics of *piil pesengiri* can become spirit and capital in fostering development in *Sang Bumi Ruwai Jurai* so that Lampung people can stand tall with other tribes in the global community.

C. The Concept of Learning Implementation Plan Digital Literacy Based on Value of Local Wisdom *Piil Pesenggiri*

Historical education taught in schools is an alternative way to achieve the goals stated above. As explained by Isjoni that "Historical education in schools aims to build the personality and mental attitudes of students, awakening awareness of a fundamental dimension in human existence (continuity of movement and continuous transition from the past towards the future), bringing people to the values of honesty and wisdom in students and instilling national love and humanity "(Isjoni, 2007). Djamarah, Hamalik, Wiyanarti in Ahmad Fakhri Hutauruk (Hutauruk, 2018) stated that there were five (5) main activities in designing historical learning strategies, namely: 1. Identifying the ability of the initial conditions of students, as well as determining the specifications and qualifications of behavior changes and personality of participants students as expected. 2. Choosing a historical learning approach system based on people's aspirations and outlook on life. 3. Choosing and determining the procedures, methods, and techniques of teaching history that are considered the most suitable and effective so that they can be used as a guide by the teacher in carrying out their assignments. 4. Establishing norms and minimum limits of success or criteria and standards of success to be used as a guide by the teacher is doing. 5. Evaluate both the process

and the learning outcomes of history, which will then be used as feedback for improving the overall learning system.

D. **Digital Literation Based on Value of Local Wisdom** *Piil pesenggiri*

Digital Literation Based on Value of Local Wisdom *Piil pesenggiri*

Learning Implementation Plan

Educational Unit   : Public High School 2 Kalianda, South
 	
                          Lampung
 Subjects   : Mandatory History
 Class / Semester   : X / 1
 Main Material   : Historical Thinking
 Main Sub-Material   : Chronological, diachronic, synchronous,
 	
                          space and time thinking
 Time Allocation   : 1 x Meeting (2 x 45 minutes)

Learning objectives
Through Learning activities that examine local wisdom *piil pesenggiri* with a scientific approach using Discovery Learning learning models through digital sources, students can understand about historical thinking that includes chronological, diachronic, synchronous, and able to understand the concepts of space and time and presenting the results of discussions to the class by using technology and information and developing an attitude of Religiosity (Peace of Love, Tolerance), Independence (Likes to Read, Curiosity), Mutual Cooperation (Cooperation, oriented towards mutual benefit) and Integrity (Responsible).

Learning Steps

Description of Activities	Time Allocation
Introduction	10 Minutes
1. Students pray and give greetings when starting learning (Discipline of worship, the value of Religiosity). 2. The teacher conducts classroom management (The teacher checks the readiness of students to learn, starting from class cleanliness, neatness of student clothing, and the neatness of tables and chairs). 3. The teacher checks student attendance. 4. The teacher prepares digital history tools, media, and books 5. Apperception to focus students in following the lesson. The teacher conducts questions and answers that relate prior knowledge to the material to be learned. 6. The teacher explains the learning objectives or basic competencies to be achieved. 7. The teacher conveys an outline of the learning material and assessment to be carried out.	
Core	70 Minutes
Stimulus • Students observe historical timelines about local wisdom *piil pesenggiri* (Hard Work, Independence). • Students read digital history books to discover the concept of Chronological (diachronic) and synchronous thinking in the	

development of local wisdom *piil pesenggiri* (Reading fondness, Value of Independence).

Problem Statement

Through observing images on the projector screen and reading digital history books, the teacher gives an opportunity/motivates students to formulate the problem that will be discussed in the next steps, for example:

- What is chronological, associate local wisdom *piil pesenggiri*?
- What is meant by chronological thinking, linking local wisdom *piil pesenggiri*?
- How to think chronologically, associate local wisdom *piil pesenggiri*?

Data Collection

Students are divided into 4 groups consisting of 7-8 people per group. Each group has been divided into topics according to sub material that local wisdom *piil pesenggiri* is discussing with what will be discussed (Collaboration, Mutual Cooperation values).

Discourse

If we study history we will never be separated from the concept of chronological thinking in history. History teaches us how to think chronologically, meaning to think coherently, orderly and continuously. With a chronological concept, history will give us a complete picture of the local wisdom *piil pesenggiri* from a review of certain aspects so that we can easily draw the benefits and meanings from the development of local wisdom *piil pesenggiri* every era. The diachronic concept sees that the development of local wisdom *piil pesenggiri* in his journey experiences development and moves over time. Through this process students at Public High School 2 Kalianda can make comparisons and see the development of local wisdom *piil pesenggiri* in the lives of the people of South Lampung from the era to the next.

Command:

1. Explain the concept of chronological thinking in the development of local wisdom *piil pesenggiri*?
2. Explain the concept of diachronic thinking in the development of local wisdom *piil pesenggiri*?
3. Explain the concept of synchronous thinking in the development of local wisdom *piil pesenggiri*?
4. Explain the concept of space and time in the development of local wisdom *piil pesenggiri*?

Data Processing

- Students formulate answers to the formulation of problems that arise (Responsibility, Integrity Value)

Verification

- Students match the observations of images on the projector screen with digital history books about questions or formulations of problems that arise (Creative and Innovative, the value of Independence).

Generalization

- Thinking chronologically, meaning thinking in a coherent, orderly and continuous manner. The diachronic concept sees that the development of local wisdom *piil pesenggiri* experiences development and moves over time. Through this process, the students at Public High School 2 Kalianda can make comparisons and see the historical development of their people's lives from the ages to the next.
- Synchronous way of thinking in history means thinking that is widespread in space but limited in time. This way of thinking analyzes the development of local wisdom *piil pesenggiri* at one time. This way of thinking is important in the development of local wisdom *piil pesenggiri* because it functions to analyze the state of a place at a certain time. The place is horizontal and analyzes contemporary events.
- The concept of space and time in history is very important. The concept of space is an important element that can not be separated in an event and changes in human life as subjects or agents of history. All human activities must take place simultaneously with the scene. Space is the most inherent concept of time. Space is a place where various historical events occur with time. The study of an event based on the time dimension cannot be separated from the time-space of the occurrence of the event. If the time of minutes is focused on the aspect

of when the event happened, then the concept of space of the minutes focuses on the aspect of the place, where the event occurred in this context namely, the development of local wisdom *piil pesenggiri* at Public High School 2 Kalianda, South Lampung.

Closing	10 Minutes

1. Teachers and Learners conclude as a whole the material development of local wisdom *piil pesenggiri* at this meeting (Friendly/communicative, Mutual Cooperation values).
2. Students with the guidance of teachers do a reflection on learning the development of local wisdom *piil pesenggiri* by writing a summary of the material and the learning process by giving suggestions or responses at this meeting (moral commitment, the value of integrity).
3. Students are assigned to work on Independent Tasks and send it to the email group and the results will be published on the school website https://www.smanegeri2kalianda.sch.id/
4. (Hard work, Value of Independence).
5. Students are given the task of the group to complete the analysis and alternative solutions to the problems that become class studies (Cooperation, Mutual Value).
6. Teachers and students close the activity by expressing gratitude to God that this meeting has been going well and smoothly (Discipline of worship, the value of Religiosity).

Learning Resources
• Internet.
• Google Scholar
• History of Digital Books
Learning Tools and Media
• **Tools :** Laptops, Projectors, Projector Screens, Speakers
• **Media:** Concept Map about the development of local wisdom *piil pesenggiri*

IV.CONCLUSION

Literacy is one of the abilities that are considered important to face the 21st-century world. The distinctive character of the 21st-century world is the industrial revolution of 4.0. Students of Public High School 2 Kalianda in South Lampung live in the era of the industrial revolution 4.0. Besides, students also live with the values of local wisdom *piil pesenggiri* as Lampung people's behavior and outlook on life. These values are, big-hearted, have shame, self-esteem-because of more, big name and title. Like brothers, give open arms. Because he is smart, he is sociable. Work together with a large work, please help. Theoretically by applying digital literacy that integrates the values of local wisdom *piil pesenggiri* in learning history is expected to foster students' historical awareness at Public High School 2 Kalianda, South Lampung in the era of the industrial revolution 4.0. So, further research is needed by making digital learning resources that have contained local wisdom *piil pesenggiri* in learning history.

V. REFERENCES

[1] Donald Ary, dkk., 2004, "Pengantar Penelitian dalam Pendidikan" in Pustaka Pelajar, Yogyakarta.

[2] Hary Soedarto Harjono. 2018. Literasi Digital: Prospek dan Implikasinya dalam Pembelajaran Bahasa. 1(1).

[3] Hasudungan, A. N., & Kurniawan, Y. 2018. Meningkatkan Kesadaran Generasi Emas Indonesia Dalam Menghadapi Era Revolusi Industri 4 . 0 Melalui Inovasi Digital Platform. Seminar Nasional Multidisplin 2018, September, 51–58.

[4] Hutauruk, A. F. 2018. Digital Citizenship: Sebagai Upaya Meningkatkan Kualitas Pembelajaran Sejarah Di Era Global. Historis | FKIP UMMat, 2(2), 1. https://doi.org/10.31764/historis.v2i2.186

[5] Irianto, S., & Margaretha, R. 2011. Piil pesenggiri: Modal Budaya Dan Strategi Identitas Ulun Lampung. Makara Human Behavior Studies in Asia, 15(2), 140. https://doi.org/10.7454/mssh.v15i2.1420

[6] Isjoni, 2007, "Pembelajaran Sejarah pada Satuan Pendidikan" in Alfabeta, Bandung.

[7] Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. 2019. Model Penguatan Literasi Digital Melalui Pemanfaatan E-Learning. Jurnal ASPIKOM, 3(6), 1200. https://doi.org/10.24329/aspikom.v3i6.333

[8] The skills needed in the 21st century. 2005. http://widgets.weforum.org/nve-2015/chapter1.html

[9] Tour, E. (2015). Digital mindsets: Teachers' technology use in personal life and teaching. Language Learning and Technology, 19(3), 124–139.

[10] Umar Rusdi et.al., 1986, "Arsitektur Tradisional Daerah Lampung (Rifai Abu (Ed.))", in Departemen Pendidikan dan Kebudayaan.

Cite this article as :