

Portrait of Human Literacy from the Perspective of Adaptive Educators

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Abstract: This research describes human literacy abilities as a forum for creating adaptive prospective educators at the Faculty of Education, Universitas Negeri Medan. The method used is development research with the stages of Analysis, Design, Development, Implementation, and Evaluation. Data was obtained from questionnaires, observations, interviews and documentation. The instruments used to collect data were questionnaires, observation sheets, interview guides, and documentation lists. The data was described qualitatively, starting with data reduction, data presentation, and drawing conclusions. This research is limited to the stage of testing the effectiveness of students' human literacy abilities which in the previous stage were treated using a human literacy-based learning model. The results of the effectiveness test regarding human literacy abilities obtained an average score of 2.90 in the Medium category. This means that students' human literacy abilities are still in the Medium category in preparing prospective adaptive educators at the Faculty of Education, Universitas Negeri Medan.

Keywords: human literacy, adaptive educator

1 Introduction

Indonesia is trying to respond to the challenges of industry 4.0 and society 5.0, by opening as many new job opportunities as possible, taking advantage of the demographic bonus, and improving the quality of education, especially for students who will enter the world of work. Efforts made by the government is a new literacy movement which is carried out to strengthen and perfect the existing literacy movement [6]. There are three main literacies, namely human literacy, technological literacy and digital literacy [10] [4]. This literacy movement may be able to create a competitive personality, perfecting the old literacy movement which previously only focused on improving writing, reading and arithmetic skills (literacy, reading and numeracy) [3]

The main focus of the new literacy agenda in the disruptive era is human literacy [7]. This is very important, because the inability to understand and apply humans as humans will cause failure in implementing any program that is prepared. So, how do higher education institutions prepare students in the disruptive era? Future students need to fine-tune their skills to adapt to change. They must have a paradigm as technology makers, not just consumers [12]

Currently, discussions about human literacy have not been studied much by previous researchers, so this study needs to be of common concern to all parties, for several reasons. First, the World Economic Forum formulated 10 competencies that workers must fulfill to face

future challenges, especially in the Disruptive Era [13]. There are several competencies and skills that must be met, namely managing emotions, solving complex problems, critical thinking, creativity, team work, decision-making ability, excellent service and cognitive flexibility. Second, uniquely, more than half of these abilities are soft skills. So, soft skills are very important for every worker in the future, including future educators. Thus, the millennial generation or those born in the 1980-1999 range need to hone their soft skills. Third, in order to adapt to the changes that will occur in the disruptive era, every worker needs to have skills that cannot be done by machines, for example, the ability to solve a problem (problem solving) [14].

In general, the conditions above illustrate the need to strengthen human literacy through several abilities that are demands in the disruptive era which are supported by all parties [15]. For this reason, learning on campus must ideally be able to explore strengthening human literacy in students so that they are ready to compete and adapt to the disruptive era. Several previous studies on the importance of integrating human literacy in learning include: (1) Anggaira's research [2] with the article title "Latest Literacy in BIPA Learning in the Era of the Digital Revolution" explains that prospective teacher competence is needed to develop teaching materials or learning models that refer to literacy content, namely, human literacy, data literacy, and technological literacy. (2) Muliastri's research [11] with the article title "Strengthening New Literacy (Data Literacy, Technology, and HR/Humanism) in Elementary School Teachers in Responding to the Challenges of the Industrial Revolution Era 4.0." explained that strengthening new literacy among teachers in the scope of basic education is the key to change, as well as efforts to revitalize the literacy-based curriculum and strengthen the role of teachers who have digital competence. Teachers are also tasked with creating students who have superior competencies, character, literacy skills and can carry out content analysis (Higher Level Thinking).

Responding to the explanation above, as an educational institution that focuses on developing adaptive future educators, we are trying to develop human literacy-based learning. One of the efforts made is to develop a human literacy-based learning model at the Faculty of Education. With the model developed, it is hoped that it can integrate important elements of human literacy development in every course at the Faculty of Education. The aim of developing this model is to prepare prospective educators who are adaptive in accordance with the demands of the disruptive era, especially with regard to the human literacy abilities of students at the Faculty of Education.

A follow-up to the development of the human literacy model carried out was an effectiveness test to see the extent of students' human literacy abilities after implementing the developed human literacy-based learning model. The effectiveness test is carried out by describing data on human literacy abilities based on study program, based on gender, and total overall achievement. In this way, authentic data is obtained related to the current condition of the human literacy abilities of students at the Faculty of Education in a comprehensive manner so that continuous improvement efforts are made at the study program and faculty level so that they can prepare prospective adaptive educators according to the needs of the disruptive era in the future.

2 Research Method

This research uses a model of Problem Analysis, Product Design, Product Development, Product Implementation, and Product Evaluation (Development Research Method). The instruments used were questionnaires, observation sheets, interview guidelines, and documentation lists. Data was analyzed qualitatively through analyzing and grouping data, describing data, and presenting conclusions. The research results are limited to testing the effectiveness of students' human literacy abilities after implementing a human literacy-based learning model in learning. The data presented is grouped based on the achievements of each study program, based on gender, and the total achievements. In this way, authentic data was obtained related to the current condition of human literacy abilities of Faculty of Education students in preparing prospective adaptive educators in accordance with the needs of the industrial era 4.0 and society 5.0.

3 Result and Discussion

3.1 Result

The results of the effectiveness test of developing a human literacy-based learning model focused on the human literacy abilities of students at the Faculty of Education after field trials were carried out. The test of students' human literacy skills was carried out involving 20 students spread across 4 study programs, including: 5 Elementary School Teacher Education students, 5 Guidance and Counseling students, 5 Community Education students, and 5 Children's Teacher Education students Early age. A simple illustration of the implementation of the human literacy ability test for students at the Faculty of Education can be seen in Figure 1 below.



Fig. 1. Human Literacy Ability Test of Faculty of Education Students

Aspects of effectiveness are described based on the results of analysis of human literacy indicators ability test of students at the Faculty of Education, grouped by study program and aspects of human literacy. The effectiveness test results based on study programs are grouped into 4 study programs, including Primary School Teacher Education, Community Education, Guidance and Counseling and Early Childhood Education Teacher Education [1].

The results of the human literacy ability test from social aspects, physical aspects, intellectual aspects, cultural aspects and emotional aspects for students in the Elementary School Teacher Education study program can be explained in Table 1 below.

Table 1. Results of the Human Literacy Ability Test for the Primary School Teacher Education Study Program

No	Rated Aspect	Score	Category
1	Social Aspects	2.76	Medium Category
2	Physical Aspects	3.20	High Category
3	Intellectual Aspect	3.20	High Category
4	Cultural Aspects	3.20	High Category
5	Emotional Aspect	3.05	High Category
	Average	3.08	High Category

A simple overview of the results of the human literacy ability test in the Primary School Teacher Education study program can be seen in Figure 2 below.

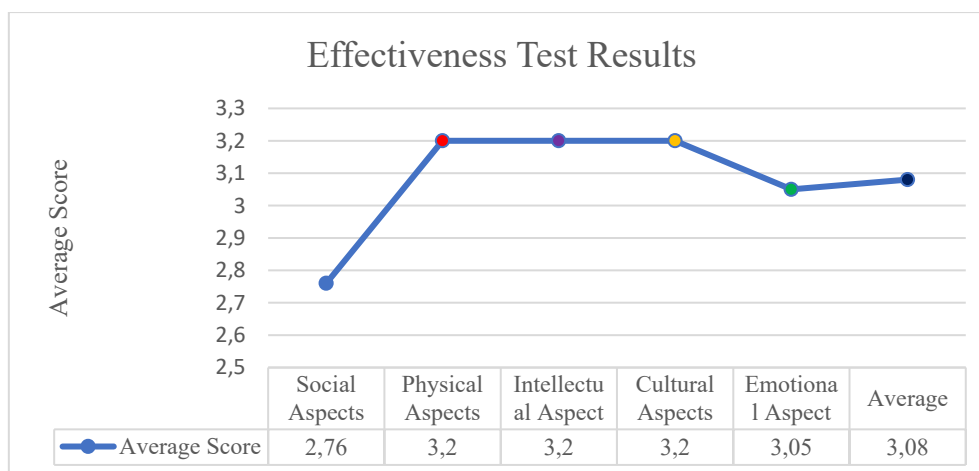


Fig. 2. Results of the Human Literacy Ability Test for the Primary School Teacher Education Study Program

The result of data in Table 1 and Figure 2, it is explained that the average result of the human literacy ability test for the social aspects of the Primary School Teacher Education study program is 2.76, which is included in the medium classification; the average physical aspect scored 3.20 (including high classification); the average intellectual aspect is 3.20 (including high classification); the average cultural aspect score is 3.20 (including high classification); The average score for the emotional aspect is 3.05 in the High category. Meanwhile, the average score for all aspects is 3.08 (including high classification). These

results conclude that the human literacy abilities of students in the Primary School Teacher Education study program are in the high category.

Based on the human literacy ability test from social aspects, physical aspects, intellectual aspects, cultural aspects and emotional aspects for students in the Guidance and Counseling study program can be seen in Table 2 below.

Table 2. Results of the Human Literacy Ability Test for the Guidance and Counseling Study Program

No	Rated Aspect	Score	Category
1	Social Aspects	3.13	High Category
2	Physical Aspects	2.80	Medium Category
3	Intellectual Aspect	3.10	High Category
4	Cultural Aspects	3.25	High Category
5	Emotional Aspect	3.05	High Category
	Average	3.06	High Category

A simple portrait of the results of the human literacy ability test for students in the Guidance and Counseling study program can be seen in Figure 3 below.

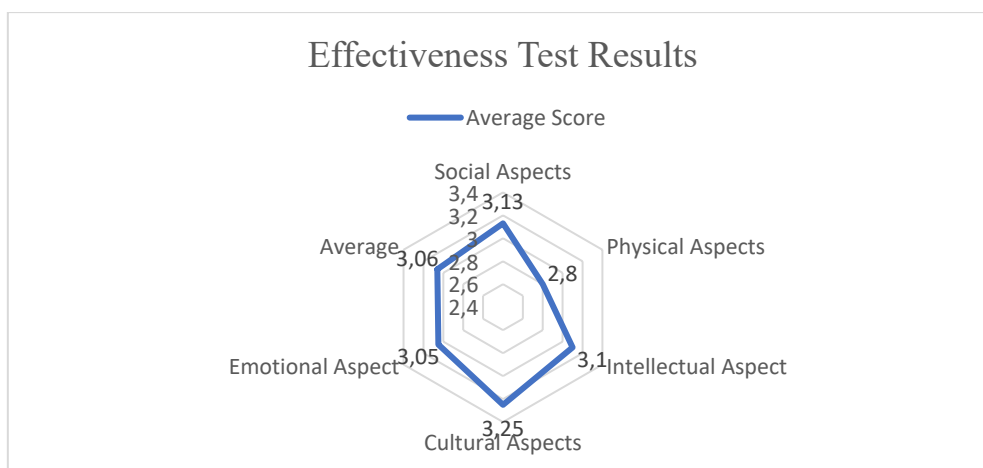


Fig. 3. Results of the Human Literacy Ability Test for the Guidance and Counseling Education Study Program

The result of data in Table 2 and Figure 3, it is explained that the average result of the human literacy ability test for the social aspects of the Guidance and Counseling study program is 3.13, which is included in the high classification; the average physical aspect scored 2.80 (including medium classification); the average intellectual aspect is 3.10 (including high classification); the average cultural aspect score is 3.25 (including high classification); The average score for the emotional aspect is 3.05 in the High category. Meanwhile, the average score for all aspects is 3.05 (including high classification). These results conclude that the human literacy abilities of students in the Guidance and Counseling study program are in the high category.

Based on the human literacy ability test from social aspects, physical aspects, intellectual aspects, cultural aspects and emotional aspects of students in the Community Education study program can be seen in Table 3 below.

Table 3. Results of the Human Literacy Ability Test for the Community Education Study Program

No	Rated Aspect	Score	Category
1	Social Aspects	2.93	Medium Category
2	Physical Aspects	2.70	Medium Category
3	Intellectual Aspect	2.90	Medium Category
4	Cultural Aspects	2.75	Medium Category
5	Emotional Aspect	2.65	Medium Category
	Average	2.78	Medium Category

A simple snapshot of the results of the human literacy skills test for students in the Community Education study program can be seen in Figure 4 below.

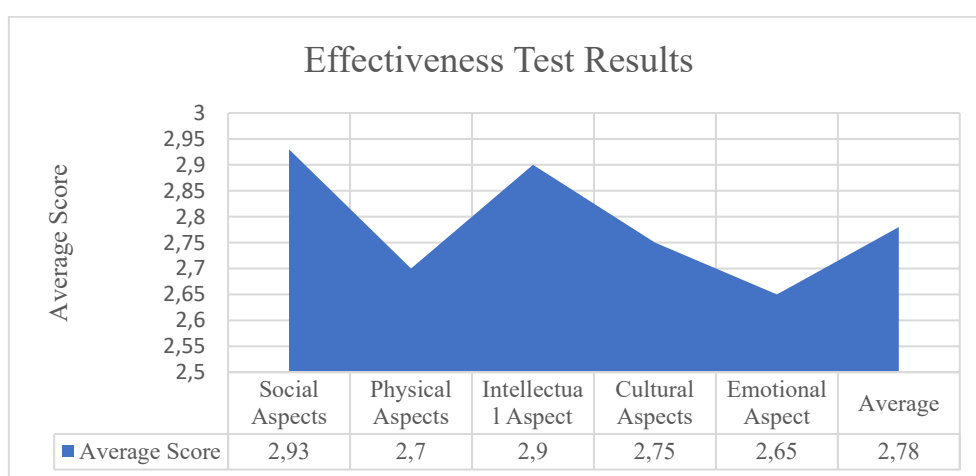


Fig. 4. Results of the Human Literacy Ability Test for the Community Education Study Program

Looking at the distribution of data in Table 3 and Figure 4, it is explained that the average result of the human literacy ability test for the social aspects of the Community Education study program is 2.93, which is included in the medium classification; the average physical aspect scored 2.70 (including medium classification); the average intellectual aspect is 2.90 (including medium classification); the average cultural aspect score is 2.75 (including medium classification); The average score for the emotional aspect is 2.65 in the medium category. Meanwhile, the average score for all aspects is 2.75 (including medium classification). These results conclude that the human literacy abilities of students in the Community Education study program are in the high category.

Based on the human literacy ability test from social aspects, physical aspects, intellectual aspects, cultural aspects and emotional aspects of students in the Early Childhood Education Teacher Education study program can be seen in Table 4 below.

Table 2. Results of the Human Literacy Ability Test for the Early Childhood Education Teacher Education Study Program

No	Rated Aspect	Score	Category
1	Social Aspects	2.83	Medium Category
2	Physical Aspects	2.60	Medium Category

3	Intellectual Aspect	2.50	Medium Category
4	Cultural Aspects	2.60	Medium Category
5	Emotional Aspect	2.80	Medium Category
	Average	2.66	Medium Category

A simple illustration of the results of the human literacy ability test for the Early Childhood Teacher Education study program can be seen in Figure 5 below.

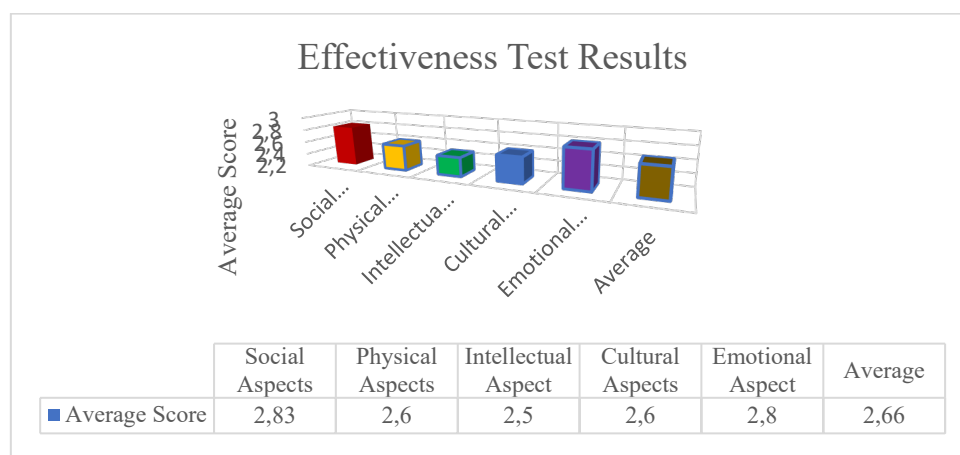


Fig. 5. Results of the Human Literacy Ability Test for the Early Childhood Education Teacher Education Study Program

Looking at the distribution of data in Table 3 and Figure 4, it is explained that the average result of the human literacy ability test for the social aspects of the Early Childhood Education Teacher Education study program is 2.83, which is included in the medium classification; the average physical aspect scored 2.60 (including medium classification); the average intellectual aspect is 2.50 (including medium classification); the average cultural aspect score is 2.60 (including medium classification); The average score for the emotional aspect is 2.80 in the medium category. Meanwhile, the average score for all aspects is 2.66 (including medium classification). These results conclude that the human literacy abilities of students in the Community Education study program are in the high category.

Meanwhile, the results of the effectiveness test based on aspects of human literacy in each aspect at the Faculty of Education can be seen in Table 5 below.

Table 5. Human Literacy Ability Test Results for Faculty of Education Students

No	Rated Aspect	Score	Category
1	Social Aspects	2.92	Medium Category
2	Physical Aspects	2.83	Medium Category
3	Intellectual Aspect	2.93	Medium Category
4	Cultural Aspects	2.95	Medium Category
5	Emotional Aspect	2.88	Medium Category
	Average	2.90	Medium Category

Based on the data in Table 5 above it is explained that the average result of the human literacy ability test for the social aspects is 2.92, which is included in the medium classification; the average physical aspect scored 2.83 (including medium classification); the average intellectual aspect is 2.93 (including medium classification); the average cultural aspect score is 2.95 (including medium classification); The average score for the emotional aspect is 2.88 in the medium category. Meanwhile, the average score for all aspects is 2.90 (including medium classification). The result of the human literacy ability score for student at Faculty of Education arfe in the medium category.

A simple illustration of the results of the effectiveness test for human literacy abilities of students at the Faculty of Education can be seen in Figure 6 below.

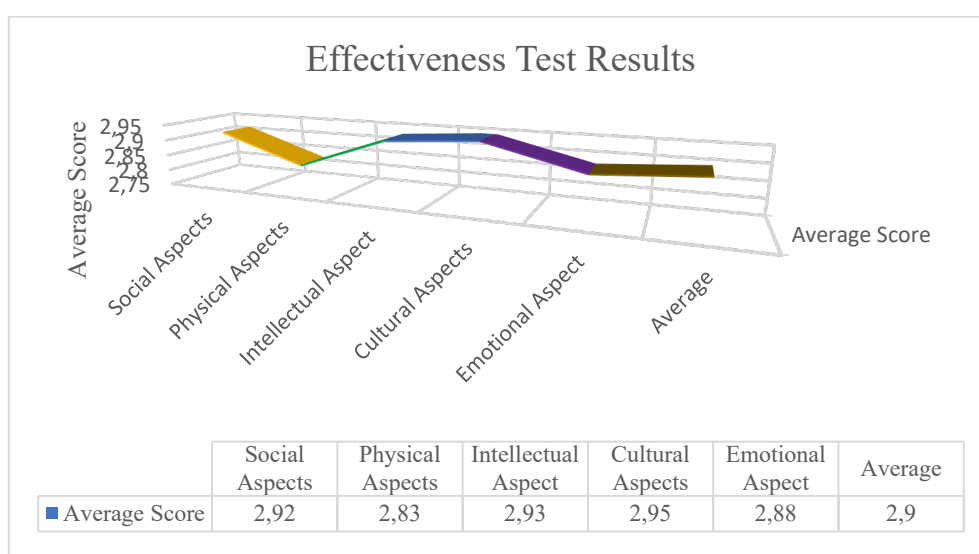


Fig. 6. Human Literacy Ability Test Results for Faculty of Education Students

3.2 Discussion

The success of a product development is marked by the following indicators: (a) success in delivering students to achieve learning goals, (b) providing meaningful learning experiences for students who are actively involved in achieving learning goals, and (c) product facilitation supports the learning process [9]. Furthermore, the minimum criteria for product success are said to be effective if they meet the minimum standards in the Good or Medium category [5].

The results of the human literacy ability test as an effort to prepare adaptive teacher candidates at the Faculty of Education are as follows: (1) The average value of the human literacy ability of students in the Primary School Teacher Education study program is 3.08 (high category); (2) The average human literacy ability score for students in the Guidance and Counseling study program is 3.06 (High category); (3) The average human literacy ability score for students in the Community Education study program is 2.78 (Medium category); (4) The average value of students' human literacy abilities in the Early Childhood Teacher Education study program is 2.66 (Medium category); and (5) The overall average human literacy ability score for Faculty of Education students is 2.90 (Medium category). It was

concluded that the human literacy ability of the Faculty of Education as a strategy for prospective adaptive educators is still in the Medium category.

Referring to the data presented above, it can be said that the effectiveness of developing a human literacy-based learning model when viewed from the human literacy ability test, both at the study program and faculty level, has been effective even though it is still in the Medium category. This means that the prerequisites for a product to be declared effective have been met even though it is still in the Medium category. In the future, efforts to prepare prospective adaptive educators at the Faculty of Education, especially in relation to human literacy abilities, still need to be improved in every aspect (social, physical, intellectual, cultural and emotional aspects) so that they are able to reach the High or even Very High categories in the future.

4 Conclusions

Efforts to prepare prospective adaptive educators at the Faculty of Education are carried out by developing a learning model based on human literacy by integrating 6 main aspects, namely social aspects, physical aspects, intellectual aspects, cultural aspects and emotional aspects. To see the effectiveness of its use, a test was carried out on the human literacy abilities of students at the Faculty of Education. The results of trials on the 6 aspects developed showed that the overall human literacy abilities of students at the Faculty of Education were at an average score of 2.90 in the Medium category. It can be concluded that the human literacy capabilities of the Faculty of Education as an effort to prepare prospective adaptive educators are still in the Medium category. Thus, it is still necessary to improve the human literacy abilities of students at the Faculty of Education so that they reach the High and Very High categories in the future.

References

- [1] Ahmadi, F., & Ibda, H. (2019). Konsep dan aplikasi literasi baru di era revolusi industri 4.0 dan society 5.0. CV. Pilar Nusantara.
- [2] Anggaira, A. S. (2019, February). Literasi Terkini Dalam Pembelajaran BIPA Pada Era Revolusi Digital. In *Prosiding Seminar Nasional Program Pascasarjana Universitas Pgris Palembang* (Vol. 12, No. 01).
- [3] Anggresta, V. (2019). LITERASI MANUSIA UNTUK MENYIAPKAN MAHASISWA YANG KOMPETITIF DI ERA INDUSTRI 4,0. *Faktor Jurnal Ilmiah Kependidikan*, 6(3), 217-222.
- [4] Dinata, K. B. (2021). Analisis kemampuan literasi digital mahasiswa. *Edukasi: Jurnal Pendidikan*, 19(1), 105-119.
- [5] Faisal, F., Ananda, L., Sembiring, M., & Nasution, Y. (2023, June). Good Practices of Case Method-Based Learning in Elementary Schools. In *Proceedings of the 4th International Conference on Science Education in The Industrial Revolution 4.0, ICONSEIR 2022, November 24th, 2022, Medan, Indonesia*.
- [6] Fitriani, Y., & Aziz, I. A. (2019, March). Literasi era revolusi industri 4.0. In *Prosiding Seminar Nasional Bahasa dan Sastra Indonesia (SENASBASA)* (Vol. 3, No. 1).
- [7] Hastini, L. Y., Fahmi, R., & Lukito, H. (2020). Apakah Pembelajaran Menggunakan Teknologi dapat Meningkatkan Literasi Manusia pada Generasi Z di Indonesia?. *Jurnal Manajemen*

Informatika (JAMIKA), 10(1), 12-28.

- [8] Mailani, E. (2018). Potret Implementasi Pembelajaran Berbasis High Order Thinking Skills (HOTS) di Sekolah Dasar Kota Medan. *Jurnal Pembangunan Perkotaan*, 6(2), 102-111.
- [9] Mansyur, A., & Firdaus, M. (2023, January). IMPRECI: Guiding Model Innovation Produces Reflective Teachers in Elementary Schools. In *Unima International Conference on Social Sciences and Humanities (UNICSSH 2022)* (pp. 455-464). Atlantis Press.
- [10] Mardina, R. (2017, May). Literasi digital bagi generasi digital natives. In *Prosiding Conference Paper*. May.
- [11] Muliastri, N. K. E. (2019). Penguatan Literasi Baru (Literasi Data, Teknologi, Dan SDM/Humanisme) Pada Guru-Guru Sekolah Dasar Dalam Menjawab Tantangan Era Revolusi Industri 4.0. *Ganaya: Jurnal Ilmu Sosial dan Humaniora*, 2(2-1), 88-102.
- [12] Nikensari, S. I., Suparno, & Eka, Y. (2022). PEMETAAN LITERASI DATA, LITERASI TEKNOLOGI, DAN LITERASI MANUSIA PADA MAHASISWA PENDIDIKAN EKONOMI KOPERASI DI ERA REVOLUSI INDUSTRI 4.0. Jakarta: Universitas Negei Jakarta.
- [13] PUTRI, Y. E. (2022). PEMETAAN LITERASI DATA, LITERASI TEKNOLOGI, DAN LITERASI MANUSIA PADA MAHASISWA PENDIDIKAN EKONOMI KOPERASI DI ERA REVOLUSI INDUSTRI 4.0 (Doctoral dissertation, Universitas Negeri Jakarta).
- [14] Suyatmini, S., Ulfatun, T., Kardiyem, K., Setiyawan, Y. A., & Kusumaningtyas, A. (2021). EDUKASI LITERASI MANUSIA DAN MODEL PEMBELAJARAN. *SELAPARANG Jurnal Pengabdian Masyarakat Berkemajuan*, 5(1), 410-414.
- [15] Widayana, G. (2022). Peningkatan Kemampuan Kompetensi Guru Adaptif Melalui Program Keahlian Ganda Di Sekolah Menengah Kejuruan. *Jurnal Pendidikan Teknik Mesin*