

The Use of Instagram-Integrated Learning Media on Gender-Based Student Learning Motivation on Reaction Rate Material

Hayuni Retno Widarti^{*1}, Sri Yamtinah², Mawardi³, Deni Ainur Rokhim⁴, Afis Baghiz Syafruddin⁵, Elvira Risva Firda Amalia⁶

^{1,5,6} Chemistry Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Malang

² Chemistry Education, Faculty of Education, Universitas Sebelas Maret

³ Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang

⁴ Senior High School State 3 of Sidoarjo, Sidoarjo Regency, East Java

**Corresponding author: hayuni.retno.fmipa@um.ac.id*

Abstract. *This research aims to determine the effect of using integrated learning media Instagram in increasing students' learning motivation on reaction rate material and to analyze the results of female and male students' learning motivation on reaction rate material. The method used is qualitative descriptive research. The subjects in this research were students of one of the State High Schools in Malang City class XI MIPA 2, totaling 11 male students and 20 female students who used Instagram learning media. The class is heterogeneous because it has a gender distribution with more female students than male students. The research results show that 1) The use of integrated learning media Instagram can increase students' learning motivation. 2) There is no significant difference in the comparison of the increase in male students' learning motivation.*

Keywords: *Instagram, Reaction Rate, Learning Motivation, Gender*

INTRODUCTION

Education is an important process that must be fulfilled by every individual to improve intelligence, skills, enhance character, strengthen personality, and strengthen the spirit of togetherness in order to build themselves and together build the nation [1]. This field gets more attention because the quality of education from a country is used as a benchmark for the progress of a country. In this digitalization era, in fact, it brings many positive impacts to various sectors of human life, especially in the field of education. The field of education has experienced significant developments in its direction which is now not only limited to "education", but has led to "edutainment" [2]. These two approaches essentially do not change the nature of the process of teaching and learning activities in the classroom, but on the other hand there are differences in planning, strategies, techniques and teaching methods [3]. The easier search for information through the internet and from various electronic media makes a variety of learning resources that can be developed in learning. This will have an impact on teachers who are no longer the only

primary source of knowledge in teaching and learning activities. This change will also create a new paradigm for educators towards allocating time that must be as efficient as possible in their learning in order to facilitate students to achieve maximum learning outcomes. This can be achieved, if educators can make a teaching innovation that is balanced with the increasing quality of teachers [4].

Apart from the educators, this all-digital era will also have an impact on students who are born as the "digital native generation", a term for a generation that was born, grew up, grew up and interacted with various kinds of digital media. This condition will have a direct psychological impact that affects their cognitive map. Students' needs, changes and habits will tend to follow the things they see through the media they see and use most often [5]. Learners also have extensive opportunities to operate the digital world anywhere and anytime as long as there is an internet network and adequate hardware. The breadth of opportunities that learners get, allows for equal distribution of education because there is no time and space limit when accessing the

internet. This will create a paradigm shift in the process of teaching and learning activities that makes the teacher not only a teacher but also acts as a facilitator. Student learning activities in the digital era will find a structured pattern and can be sustainable with the predetermined curriculum flow.

The "digital native generation" gets the opportunity to explore their potential with the habit of learning independently. In this case, educators are still responsible for guiding and facilitating students in learning, but this is intended to stimulate responsibility, creativity and build logical and critical thinking skills. Learning independence itself is adopted from the concept of regulated learning, namely a person's ability to effectively manage his own learning experience in various ways so as to achieve optimal learning achievement [6]. As time goes by, learning media becomes more varied and developed, especially if the learning media is internet-based. The number of internet service users among teenagers also dominates currently. Based on research results from the Indonesian State Sandi College (STSN) with Yahoo, as many as 64% of total internet users from Indonesia are dominated by teenagers aged 15 to 19 years. The real implication of this research is that the use of social media as an online learning medium provides great attention to students; this can be seen from the high intensity of social media use during the pandemic at that time. The existence of innovations in the form of videos and images can encourage educators and students to become chemistry learning content writers who create content that is interesting and easy for students to understand [7]. Media creations created can be in the form of images, videos and writings that will become a whole content, and are disseminated through platforms and one of them is social media.

One of the social media applications that can be developed is *Instagram*. This application was first launched in October 2010 and experienced a very significant growth in the number of users after its official launch. As of April 2015, the number of users has reached 300 million active users [8]. The popularity of *Instagram* reached Indonesia, recorded in 2019 Indonesia has the most active *Instagram* users. Based on data from We Are Social, *Instagram's* monthly active users (MAU) worldwide reached 1.45

billion people in April 2022. Indonesia ranks fourth with 99.9 million monthly active *Instagram* users. Based on age, 31.6% of *Instagram* users in the world are in the 25-34 age group. As many as 30.1% of *Instagram* users are 18-24 years old. Meanwhile, the proportion of *Instagram* users aged 65 years and over is only 2.1%. Above them are users from the 55-64 age range with a percentage of 3.7%.

Based on the We Are Social report, *Instagram* is most widely used by female users around 52.4% and the remaining 47.6% of *Instagram* users come from the male gender. This shows that in the utilization of technology, there is a difference in the percentage of gender in its use where women are more dominant in the role as users of technology products than men [9].

The total number of active users is 56 million or 20.97 percent of the total population. *Instagram* provides tremendous opportunities for learning for teachers and students [10]. *Instagram* facilitates various features that can be developed for learners to learn critically, and reflect on the process of meaningful learning [11]. *Instagram* has several features that can help teachers and students in conducting learning interactions. The live streaming and post-feed features can make it easier for students to submit assignments or upload assignments. Then, video reels can show content in the form of videos and clear explanations, as well as *Instagram TV*, which can make it easier for students to collect work in the form of videos or learning animations with a minimum duration of 1 minute and a maximum of 30 minutes. This application is perfect for keeping teachers or educators connected with students. In this case, of course, it will also have an impact on the motivation of students to learn. The existence of learning motivation is one of the keys to success in the learning process for students in teaching and learning activities. Learning motivation is within each individual who is issued in the form of efforts to achieve learning goals [12]. The higher the motivation of students to learn, the higher the learning goals will be achieved. The existence of high learning motivation in students can be characterized by the emergence of perseverance, tenacity, independence, not easily shaken and happy to solve or solve a problem. Conversely, when students have low

learning motivation, the attitude that arises is not confident and feels stupid, does not have clear dreams.

On the other hand, many studies have looked at the relationship between gender, learning motivation and social media use. Gender has a definition that refers to the roles and responsibilities of men and women that develop in society. Gender can also be referred to as social sex or societal connotations to define social roles based on sex. In the use of technology, men and women have significant differences in the habit of using a technology [13]. Kusuma's previous research refuted this statement. Regarding internet usage habits, gender factors cannot influence them; rather, it is differences in generational levels that tend to influence them [14]. But in the implementation of learning, gender factors can be taken into account due to a significant influence on learning motivation, which is one of the main factors of learning success. However, gender indirectly affects the formation of learning attitudes and motivation. Differences in characteristics possessed by men and women will affect aspects of student motivation. Research conducted by Saragi and Surayni conducted on 150 students of one of Bandung's private vocational schools showed results in the form of a significant difference between the learning motivation of students who are female and male [15]. The study shows the results of male students' learning motivation is higher than female students' learning motivation. However, between the two genders showed a fairly high increase in learning motivation. This is what encourages this research to be held with the aim of describing the effect of *Instagram* integrated learning media on student learning motivation and analyzing the results of learning motivation of female and male students on reaction rate material.

METHODS

The research was conducted on students' learning motivation using Instagram media in terms of gender. This research was conducted at one of the state high schools in Malang City in the odd semester of the 2022/2023 academic year. The subjects were 31 students including 20 female students and 11 male students in class XI MIPA 2. Data collection began by taking data on students'

learning motivation. The instrument used is a questionnaire (Likert scale) which has been validated by experts. In class XI IPA 2 learning activities, learning is carried out with the help of the Instagram account @chemsquad.kimia. At the end of the lesson, motivation questionnaires will be distributed to students. This was done to obtain data related to the influence of using Instagram learning media on student learning motivation on reaction rate material.

Data collection was used using non-test instruments in the form of student learning motivation questionnaires. The motivation questionnaire data processing technique was analyzed using qualitative tests of student learning motivation. This scale is structured in the form of a statement and is followed by four responses. The research measurement scale was modified from Afiz. For quantitative analysis purposes, the answers can be scored as in Table 1.

Table 1. Assessment Score for Questionnaire Answer Options

No.	Quantitative Analysis	Score
1	Very good	4
2	Good	3
3	Less Good	2
4	Not Good	1

The values given are based on the explanation in the table above. The scale measurement level in this study uses intervals. Interval data can be analyzed by calculating the average answer based on the assessment of each answer from the respondent.

Respondent Answer Percentage =

$$\frac{\text{Total Score Obtained}}{\text{Total Highest or Ideal Score}} \times 100 \%$$

The results of the assessment score are then sought for the average of a number of trial sample subjects and converted to an assessment statement. The questionnaire used consists of 20 questions in which it is arranged in accordance with the indicators of learning motivation used including the thrust of students' enthusiasm in learning, desire to succeed in

learning, and students' interest in using learning media. The data obtained were analyzed descriptively qualitatively on whether or not there was an increase in learning motivation in terms of gender.

The calculations used in this analysis are as follows and refer to Table 1.

$$P = \frac{F}{N} \times 100\%$$

Description:

P = Percentage

F = number of responses from respondents

N = number of respondents

RESULT AND DISCUSSION

Learning motivation is the main supporting factor in students' success in achieving their learning goals. These factors come from each individual's motivation to learn. Each individual has their own learning goals, and of course, the ways to achieve them are also different, so the level of student learning motivation can be personal in. The existence of internal and external factors that influence learning motivation is very large, and several things influence its origin. Factors that can be controlled come from within the individual himself. There are various kinds of motives for students to be motivated to learn. If learning motivation is high, the effort expended to achieve learning goals will be higher. However, it is different if learning motivation is low; then efforts to achieve learning goals will also be low. Meanwhile, environmental factors will be very influential if learning motivation is high.

Analysis of Learner Characteristics

The selected learners come from one of the public high schools in Malang City. The characteristics of learners based on gender can be seen in Table 2. The data obtained on the distribution of gender types of learners in Class XI MIPA 2 are dominated by female learners. A total of 20 female students and 11 male students in class XI IPA 2.

Table 2. Gender Characteristics

Class Type	Male	Female
Heterogeneous Class	11	20

The comparison of the number of learners with male and female gender in the class using Instagram learning media is presented as a graph in Figure 1.

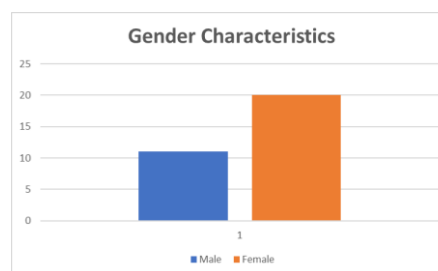


Figure 1: Gender Characteristics

The absence of gender-specific class divisions in this class indicates that it is a heterogeneous class. Both female and male learners have the opportunity to get the same learning experience in one class. In addition, the existence of gender diversity in the classroom provides benefits in maintaining students' learning motivation, because the interaction between each other in the form of exchanging information, experiences will train cooperation to achieve maximum learning goals. This is supported by research conducted by Muhammad Agung Firidho (2019); in his study, the results showed that heterogeneous classes had higher learning motivation than homogeneous classes, with heterogeneous classes getting 79% and homogeneous classes getting 77%. In this research, external factors such as family, economic, and environmental factors were also found to be learning motivation factors for the two classes [16].

Analysis of Motivation Questionnaire Results

Based on the research data, a motivational questionnaire was given to 31 students to determine their treatment of using Instagram as a learning medium. The learning motivation questionnaire data is learning motivation data before and after using

Instagram-based media. This data is obtained by distributing motivation questionnaires that have been previously validated by expert lecturers. *Instagram* media can be influential if there is an increase in results between before and after using *Instagram* as a learning medium. Learning outcomes motivation data is qualitative data which is then analyzed descriptively. Qualitative data for each indicator done by all respondents were averaged to find the average value of each indicator. The average of each indicator is then compared between the results of motivation before and after the use of *Instagram-based* learning media.

1. Analysis of Average Motivation Questionnaire Score by Gender Type

The results of the motivation questionnaire given before and after the provision of media in both classes showed an increase in the class that used *Instagram* learning media. The increase in results is presented as a graph in Figure 2.

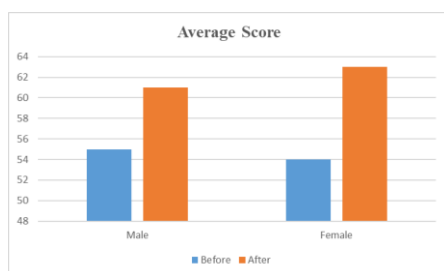


Figure 2: Average Results of Motivation Questionnaire Scores based on Gender

In classes that use *Instagram* learning media, the average results of male students' learning motivation have increased by 6 points from 55 to 61. Likewise, female students in classes that use *Instagram* learning media have increased average results by 9 points from 54 to 63. From these data, it can be analyzed that the use of *Instagram* media can increase motivation, compared to conventional learning media. The use of *Instagram-based* learning media as a source of independent learning can also increase interest in learning as shown in previous studies with results in the form of an increase in the standard gain of 0.40 in the medium criterion [17]. *Instagram* social media which has various features can be used as an alternative learning media innovation that is

more meaningful to students in chemistry learning.

2. Analysis of Factors Affecting Learner Motivation

Learner motivation can come from internal and external factors. In this study, three indicators of learning motivation were used to show students' learning motivation.

Indicators of encouragement of learners' enthusiasm for learning

In this indicator, the results of the learning motivation questionnaire on the aspect of students' interest in learning the reaction rate are presented in Figure 3.

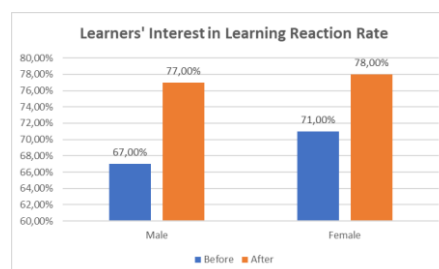


Figure 3: Learners' Interest in Learning Reaction Rate

The results of learning motivation of female and male students before and after giving *Instagram* showed an increase. The average interest in learning reaction rate material for female students before being given *Instagram* learning media shows higher results than male students, with 67% and 77% respectively. The percentage comparison of interest in reaction rate material among female students is only about 10%. This shows that the interest of female and male students is included in the high enough category. Providing *Instagram* media used to deliver reaction rate material can increase the interest of students. In female students there was an increase in the percentage of results by 1% to 78. The same thing happened to the interest of male students in the reaction rate material which increased by 4% to 71%.

Based on this description, it can be said that the learning motivation of students who use *Instagram* media as a means of learning media shows an increase in the aspect of students' interest in the learning process of reaction rate

material. Instagram can increase students' interest in reaction rate material, because there are many interesting features such as the use of quiz features on *Instagram stories*, *Instagram feeds* that can present material in the form of images and videos. The difference in the results of the interest of female students looks more dominant than male students in the results before and after, but the percentage increase between the two genders does not look significant. Students' interest in reaction rate material is shown by their activeness during the course of discussion in learning. The use of *Instagram* as a learning media makes an increase in enthusiasm, active from students and more motivated in learning [18]. On the aspect of student activeness during the learning process is presented in the form of a graph in Figure 4.

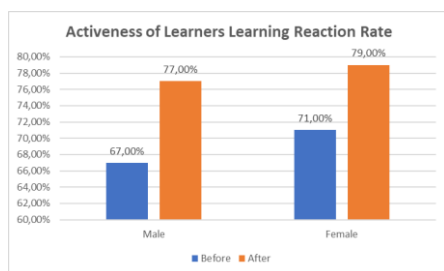


Figure 4: Activeness of Learners Learning Reaction Rate

Based on this graph, it can be seen that Instagram learning media can improve the results of learning motivation before and after between male and female students in the aspect of student activeness in reaction rate material. When before being given learning media, the average activeness of female students was higher than male students, with a percentage of 77% and 67% respectively. Learning conducted with Instagram media can increase student activeness in reaction rate material. This is indicated by the increase in the percentage of activeness of male and female students. There was an increase in the results of learning motivation in the aspect of activeness in female students by 2% to 79%, and male students increased by 4% to 71%. Based on this description, it can be said that the learning motivation of students who use *Instagram* media as a means of learning media shows an increase in the activeness aspect of students in

the learning process. The difference in the results of the activeness of female students looks more dominant than male students in the results before and after, but the percentage increase between the two genders does not look significant. It was also shown during teaching and learning activities, where female students showed higher activeness by asking more questions when they did not understand and many asked questions during the discussion so that learning was more meaningful. The curiosity aspect of students in learning is presented in the form of a graph in Figure 5.

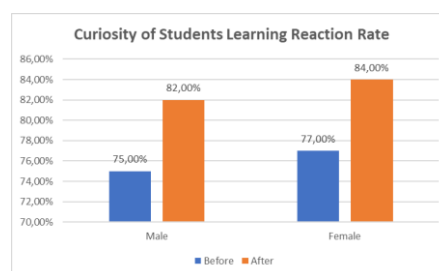


Figure 5: Curiosity of Students Learning Reaction Rate

Based on the graph presented in Figure 5, the results of the learning motivation of female and male students before and after giving Instagram show an increase. Female students show higher curiosity than male students when learning reaction rate material. Before being given Instagram learning media, female students showed their curiosity in reaction rate material up to 82%. The percentage of male students before being given Instagram learning media only shows a percentage of up to 75%, which shows a difference range of 7%. After using Instagram learning media in learning the results of the curiosity of male and female students each increased by 2%.

Providing Instagram media used to deliver reaction rate material can increase the interest of students. In female students, there was an increase in the percentage of results by 1% to 78. The same thing happened to male students' interest in reaction rate material which increased by 4% to 71%. Based on this description, it can be said that the curiosity between female and male students after using Instagram learning media has increased, but not significantly.

The use of *Instagram* media that can display images and videos on the *reels* and *feeds* feature is able to increase students' curiosity about the exposure and content of the material. In addition, the comment column can provide a very wide platform for learners who want to ask questions about material that they do not understand. In addition, other learners who have more knowledge can also answer questions, thus creating an open discussion space between one learner and another.

Indicator of desire to succeed in learning

The indicator of desire to succeed in learning is shown in the results of the self-confidence aspect in graph form in Figure 6.

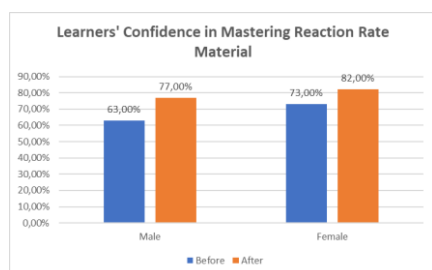


Figure 6: Learners' Confidence in Mastering Reaction Rate Material

The results of the learning motivation of female and male students before and after giving *Instagram* showed an increase in the aspect of self-confidence in mastering the reaction rate material. The percentage of self-confidence of female and male students before being given *Instagram* media shows 77% and 63% respectively. This shows that the level of confidence of female and male students is included in the high enough category. *Instagram* media used to deliver reaction rate material, shows that it can increase self-confidence during learning. In female students there was an increase in the percentage of results by 5% to 82%. The same thing happened to male students' interest in reaction rate material which increased by 10% to 73%. Based on this description, it can be said that the learning motivation of students who use *Instagram* media as a means of learning media shows an increase in self-confidence in reaction rate material. This increase shows the confidence felt by students in the reaction rate material indicates that the use of learning media

used also contributes to the success of doing the exam shown in Figure 7.

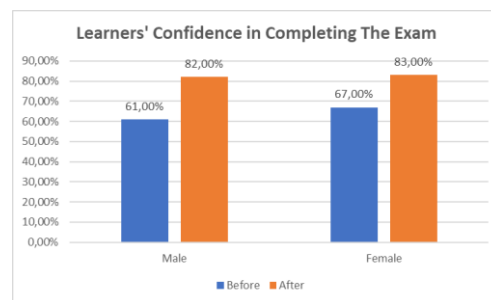


Figure 7: Learners' Confidence in Completing The Exam

In the aspect of self-confidence in completing the exam work, it seems to increase after the use of *Instagram* learning media. Female learners have a higher sense of confidence in completing the exam than male learners from before the provision of *Instagram* media. The average percentage of learners' self-confidence is higher than male learners. The difference in comparison of the results of the percentage of self-confidence between the two genders before the use of media is 20%. Female learners have a sense of confidence reaching 82%, while men are 62%. *Instagram* media that can be used anytime and anywhere can be a source of independent learning information for students. The use of *Instagram*, which can be accessed for 24 hours, makes the self-confidence of female students and male students increase by 1% and 6% respectively. Based on this description, it can be seen that learners have confidence when the exam will create a happy desire when successful in doing the exam. Learners who have high self-confidence will also expend all their energy to be able to complete the exam at hand.

Indicators of students' interest in using learning media

Besides the internal factors of learners, there are also external factors that can increase learning motivation, in this case the use of learning media. Learners' interest in learning media is presented in Figure 8.

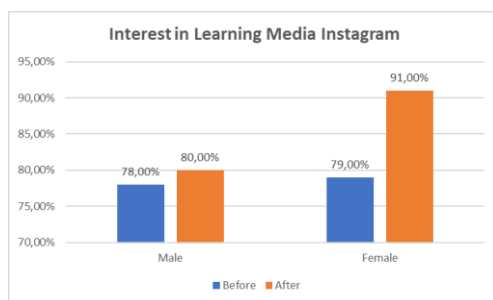


Figure 8: Interest in Learning Media Instagram

Based on the graph, it can be seen that before being given learning media, the interest of students in the class in the use of learning media in teaching and learning activities shows quite high results. Female students who felt interested in learning media were 80%, and male students were 78%. The percentage difference between the two is only 2%, which indicates that the interest in using learning media is not much different. Providing Instagram learning media, provides improved results in the aspect of interest of female students and male students. This is indicated by an increase in the percentage of female students who reached 11%, while male students only increased by 1%. The difference in the results of the interest of female and male students after the use of Instagram media reached 12%.

Instagram-integrated learning media makes its own appeal in helping students understand reaction rate material. In addition to the presentation of material in the form of images and videos contained in the feeds and reels feature, there is also a caption feature that contains a written explanation of the material presented. The combination of writing makes the presentation of material more varied and attracts the attention of students. This is what distinguishes *Instagram* learning media from other conventional learning media and can be an alternative learning innovation that is creative and environmentally friendly as well because it does not use paper at all and in terms of technology can also be displayed.

3. Comparative Analysis of Learning Motivation Before and After Giving Instagram Learning Media Based on Gender

Based on Table 5 related to the number of students, 3 types of improvement criteria are obtained in the form of increasing, remaining,

or decreasing criteria which are then compared between the total results of the questionnaire before and the motivation questionnaire after the provision of learning media. Overall, the criteria for increasing motivation learning are more dominant than the fixed criteria, or the criteria for decreasing. In classes that use Instagram media, male students who experience an increase in results are 10 students. Meanwhile, those who did not experience an increase or included fixed criteria were 1 male student, and none of them experienced a decrease. The same thing was obtained by female students in the Instagram learning media class who experienced an increase in before and after results as many as 19 students, and 1 other student was included in the fixed criteria.

Table 5. Total Increase in Before and After Learning Motivation Questionnaire Results by Gender

Gender Type	Improvement Criteria		
	Up	Stay	Down
Male	10	1	0
Female	19	1	0

When analyzed from Table 5, the percentage of results obtained by female learners who experienced an increase in the class using Instagram learning media was 48%, and as many as 39% of male learners experienced an increase, and each male and female learner who got the results of the fixed criteria was 3% of the total of 33 learners. It can be seen that a significant percentage difference is not seen in the increase in learning motivation between male and female students among classes that use Instagram learning media. This contradicts the results of previous research which stated that the motivation of female and male students between the two showed results in the overall high category [19]. Previous studies also analyzed the differences in learning motivation and learning achievement between the male sexes, stating that there was no significant relationship or difference between the male and female genders [20].

CONCLUSIONS AND SUGGESTIONS

Based on the results and discussion of the research, the following conclusions were obtained:

1. The use of *Instagram* integrated learning media can increase students' learning motivation.
2. Significant differences were not seen in the increase in learning motivation between male and female learners among the classes that used *Instagram* learning media.

REFERENCES

- [1] Saptono, A. 2016. Pengaruh Kreativitas Guru Dalam Pembelajaran Dan Kecerdasan Emosional Siswa Terhadap Prestasi Belajar Ekonomi Pada Siswa Kelas X Di Sma Negeri 89 Jakarta. *Econosains Jurnal Online Ekonomi Dan Pendidikan*, 14(1), (h. 105–112).
- [2] Fadlillah, M. Dkk. (2016). *Edutainment Pendidikan Anak Usia Dini, Menciptakan Pembelajaran Menarik, Kreatif Dan Menyenangkan*. Jakarta: Kencana.
- [3] Afif, Nur. 2019. Pengajaran Dan Pembelajaran Di Era Digital. *Jurnal Pendidikan Islam*. (h. 117-129).
- [4] Harsanto, Budi. 2014. *Inovasi Pembelajaran Di Era Digital*. Bandung: Unpad Press.
- [5] Ida, Widianingsih. 2019. Strategi Dan Inovasi Pembelajaran Bahasa Di Era Revolusi Industri 4.0. Ponorogo: Uwais Inspirasi Indonesia
- [6] Zimmerman & Schunk. 2004. *Self-Regulated Learning And Academic Achievement: Theoretical Persepctives*. New York: Springer-Verlag.
- [7] Maeskina, Mutia Mega, dan Dasrun Hidayat. 2022. Adaptasi Kerja Content Creator di Era Digital. *Jurnal Jurusan Ilmu Komunikasi*
- [8] Sesriyani, L & Sukmawati, N. 2019. ANALISIS PENGGUNAAN INSTAGRAM SEBAGAI MEDIA PEMBELAJARAN BAHASA INGGRIS PADA PROGRAM STUDI PENDIDIKAN EKONOMI. *Jurnal Pendidikan Hukum dan Bisnis* (h. 11-19)
- [9] Hermawati, W. (2018). *Gender Dalam Ilmu Pengetahuan Dan Teknologi: Perkembangan, Kebijakan, & Tantangannya Di Indonesia*. <http://penerbit.lipi.go.id/data/naskah1521570363.pdf>, diakses pada tanggal 19 Oktober 2022.
- [10] Aydin, S. 2014. Foreign language learners' interactions with their teachers on Facebook. *System*. (h. 155–163)
- [11] Chun, D., Smith, B., & Kern, R. 2016. Technology in language use, language teaching, and language learning. *Modern Language Journal*. (h. 64-80)
- [12] Sardiman. (2018). *Interaksi dan Motivasi Belajar Mengajar*. Depok: PT. Rajagrafindo Persada
- [13] Thanuskodi, S, "Gender Differences in Internet Usage among College Students: A Comparative Study" 2013. *Library Philosophy and Practice* (e-journal). 1052. <http://digitalcommons.unl.edu/libphilprac/1052>, diakses tanggal 21 Oktober 2022
- [14] Kusuma, R. Sari. 2016. Penggunaan Internet Oleh Dosen Berdasar Gender dan Generasi. *Jurnal Komunikasi dan Teknologi Informasi*. (h. 56-63)
- [15] Saragi, M & Suryani, R. 2018. PERBEDAAN MOTIVASI BELAJAR SISWA BERJENIS KELAMIN PEREMPUAN DAN LAKI-LAKI SMK SWASTA BANDUNG. *Jurnal Penelitian Bimbingan dan Konseling*. (h. 60-68)
- [16] Firidho, M. 2019. Studi Komparasi Penerapan Kelas Homogen dan Heterogen Terhadap Motivasi Belajar di MA Al-Fatih Surabaya. http://digilib.uinsby.ac.id/31200/3/Muhammad%20Agung%20Firidho_D91215068.pdf, diakses tanggal 21 Oktober 2022.
- [17] Afis. 2021. PEMANFAATAN INSTAGRAM UNTUK MENINGKATKAN MINAT BELAJAR SISWA PADA MATERI ASAM BASA DALAM KEHIDUPAN SEHARI-HARI DENGAN PENDEKATAN MULTIREPRESENTASI. <http://repository.um.ac.id/200745/>, diakses tanggal 19 Oktober 2022.
- [18] Fidianm A. 2017. Pengaruh Penggunaan Instagram sebagai Media Pembelajaran terhadap Peningkatan Motivasi Menulis Mahasiswa. *Jurnal Perspektif Pendidikan*. (h. 8-14).
- [19] Fitri, M & Chairael. L. 2019.

- PENGGUNAAN MEDIA SOSIAL BERDASARKAN GENDER TERHADAP PRESTASI BELAJAR MAHASISWA. Jurnal Benefita. (h. 162-181).
- [20] Samuel, O., Yahya, A., Olalekan, S., & Abiola, A. (2013). Online Social Networking and the Academic Achievement of University Students – The experience of selected Nigerian Universities. *Jurnal Benefita* 4(1) Februari 2019 (162-181) LLDIKTI Wilayah X 180 Universities. *Information and Knowledge Management*, 3(5), 109–116.