



The Relationship of Infographic Learning Media and Instagram Media to Students' Digital Literacy Ability in Social Studies Learning at SMP Shidqia Islamic School Bekasi

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Abstrak

Penelitian ini bertujuan untuk menemukan hubungan penggunaan media pembelajaran infografis melalui instagram dengan kemampuan literasi digital pada pembelajaran IPS siswa di kelas IX SMP Shidqia Islamic School. Penelitian ini merupakan penelitian kuantitatif dan dilakukan di SMP Islam Shidqia Bekasi dengan jumlah populasi sebanyak 163 Siswa. Data pada penelitian ini diambil dengan menggunakan angket. Teknik analisis yang digunakan dalam menguji hipotesis adalah teknik analisis uji korelasi. Hasil penelitian menunjukkan bahwa: (1) terdapat hubungan yang positif dan signifikan antara media pembelajaran infografis dengan kemampuan literasi siswa digital pada pembelajaran IPS di Kelas IX SMP Islam Shidqia. Dari hasil uji korelasi hasilnya signifikan ($\text{sig } F < 0,05$) dengan nilai $R = 0,937$ (Kategori Sangat Kuat). (2) terdapat hubungan yang positif dan signifikan antara media instagram dengan kemampuan literasi siswa digital pada pembelajaran IPS di Kelas IX SMP Islam Shidqia. Dari hasil uji korelasi hasilnya signifikan ($\text{sig } F < 0,05$) dengan nilai $R = 0,952$ (Kategori Sangat Kuat). (3) terdapat hubungan yang positif dan signifikan antara media pembelajaran infografis dan media instagram terhadap kemampuan literasi siswa digital pada pembelajaran IPS di Kelas IX SMP Islam Shidqia. Dari hasil uji korelasi hasilnya signifikan ($\text{sig } F < 0,05$) dengan nilai $R = 1,000$ (Kategori Sangat Kuat).

Kata Kunci: Media Infografis, Media Instagram, Kemampuan Literasi Digital Siswa, Pembelajaran IPS

Abstract

This study aims to find a relationship between the use of infographic learning media through Instagram and digital literacy skills in social studies learning for students in class IX SMP Shidqia Islamic School. This quantitative research was conducted at Islamic Middle School Shidqia Bekasi with a total population of 163 students. The data in this study were taken using a questionnaire. The analytical technique used in testing the hypothesis is a correlation test analysis technique. The results showed that: (1) there was a positive and significant relationship between infographic learning media and students' digital literacy skills in social studies learning in Class IX of SMP Islam Shidqia. From the results of the correlation test the results are significant ($\text{sig } F < 0.05$) with a value of $R = 0.937$ (Very Strong Category). (2) there is a positive and significant relationship between Instagram media and students' digital literacy skills in social studies learning in Class IX of Islamic Middle School Shidqia. From the results of the correlation test the results are significant ($\text{sig } F < 0.05$) with a value of $R = 0.952$ (Very Strong Category). (3) there is a positive and significant relationship between infographic learning media and Instagram media on students' digital literacy skills in social studies learning in Class IX of SMP Islam Shidqia. From the results of the correlation test the results are significant ($\text{sig } F < 0.05$) with a value of $R = 1,000$ (Very Strong Category).

Keywords: Infographic Media, Instagram Media, Students' Digital Literacy Ability, Social Studies Learning

Background

Digital literacy skills are the most basic and crucial when facing current technological developments. Digital literacy will support the realization of the digital transformation agenda in the field of education. The 21st century requires an education system that promotes skills and competencies for students' future, including creativity, critical thinking, collaboration and communication. This becomes important because students will face a new world full of competition, especially in work.

The problem is that many students still do not even have digital literacy skills. Computers and the internet outside of school are still rarely used for learning purposes. This is due to a lack of knowledge about digital literacy, so existing technological developments are used for unimportant things such as social media and games. According to data from the Central Statistics Agency (BPS) in 2021, the percentage of children aged 5 years and over to access social media is 88.99% and for entertainment in the form of games 63.08%). In addition, the lack of control from parents in the use of technology for learning needs. What is often seen is that technological developments such as the internet and smartphones are not used for learning but for other things. This causes a lack of digital literacy skills in many students.

The development of technology and information has not been fully mastered by teachers, according to data from the Ministry of Education and Culture in 2021 there are still 60% of teachers whose ICT mastery is still limited, so teachers need to improve their understanding and mastery of ICT, especially in the development of learning media in schools.

Media is an alternative in the learning process because students will get not only material from one source but material from various sources selected through the stages of analyzing student needs. The importance of the media in facilitating students, the presentation is adjusted to the set learning objectives. Media presence in the learning process helps students better understand what they are learning (Miftah, 2013).

Therefore, teachers are expected to be able to make appropriate media selections, develop media, and apply these media in the learning process. The learning process in which there are interactive activities between teachers and students in an educational environment and reciprocal communication that takes place in an educational atmosphere will make it easier to achieve learning objectives.

Based on the results of observations in class IX of SMP Shidqia Islamic School Bekasi, the learning media used by teachers are quite varied, ranging from PowerPoint media, learning videos, and supporting

applications such as google classroom. However, in facing the Industrial Revolution 4.0 era, teachers need to develop and optimize existing learning media so that they are more varied and adapted to current technological developments and are not limited to existing learning facilities. The use of social media among students has not been used for learning activities, especially in social studies learning. Learning media that follows developments in the digital era can be useful for improving digital literacy skills in students. The use of infographic media and Instagram media is a solution provided by researchers as a form of contribution in providing a variety of learning media to improve digital literacy skills, especially social studies learning at SMP Shidqia Islamic School Bekasi.

Infographic media is suitable for learning that requires a high interest in reading. High interest in reading can be obtained with interesting data visualization. One of the widely used data visualization media is infographic media. Infographics are the most effective form of communicating information in the digital era (Mufti, 2016). Therefore, infographic media is very effective for presenting information in a visual form. Infographic media contains illustrations that present information coherently and systematically. The illustration clarifies the material with a combination of pictures to make it easier for the reader to learn the manuscript's contents. The illustration is the art of making images that clarify and explain texts (Puspita, 2017).

Infographic media can be created with design applications such as Adobe Photoshop, Adobe Illustrator, Corel Draw, Powerpoint, and Canva. Infographic media is widely used by online news portals on social media such as Instagram. Instagram can load infographic media to provide information to its users. So infographic media via Instagram can help attract interest in reading from internet users.

According to data from the Central Statistics Agency (BPS), Internet users for learning activities among students are 59.33%. In addition to learning activities, students also use the internet for their social media. Students' most frequently used social media are Instagram, Tiktok, Youtube, and Whatsapp. The features provided are being able to see the latest information from around the world, but not about learning but to view funny videos, add friends on Instagram, see friends' activities uploaded on Instagram to exchange messages in the Instagram comments column.

According to the Good News From Indonesia survey, most Instagram users are between the ages of 13 and 24. In a survey by Hootsuite on social trends in 2021, Instagram is the most popular and efficient social

media platform. Instagram can inspire its users and increase creativity (Atmoko, 2021). Instagram was chosen as a means for posting social studies learning material infographics because it is more effective, the average junior high school student has an Instagram account, which is more flexible and can be accessed anytime and anywhere.

The use of Instagram as a learning medium is due to its easy use, especially for all people, the appearance of the application is very attractive and easy to understand, it can be opened on a smartphone or tablet.

Personal Computer (PC) and features capable of supporting learning processes or activities. In addition, Instagram also provides opportunities for students to explore making their own products and uploading them to Instagram, lifelong learning activities, and collaboration between educators and students in terms of teaching and learning (Ahmad V, 2020). The Instagram application has a post feed feature that can be useful for posting all information related to subject matter, especially infographic learning media. Students will easily access material from the infographic media via Instagram because it is very easy to use.

The use of digital media in learning after the covid-19 pandemic also needs to be increased, because digital media that teachers have used during the pandemic such as Zoom, Google Meet, Google Classroom, Infographic Media and Social Media such as Instagram need to be further developed in the framework of the learning recovery process in the new normal era.

Based on the results of this description, the author is interested in conducting more in-depth research by presenting the research title: "Relationship of Infographic and Instagram Learning Media to Digital Literacy Ability in Social Studies Learning in Class IX of SMP Shidqia Islamic School". This is because the researcher chose infographic media as one of the most appropriate media to overcome these problems. After all, infographic learning media can simplify the information on long learning material by converting it into visual material information. Students often use Instagram social media to update the latest information from around the world. This shows that using media in the learning process greatly improves students' digital literacy skills.

Method

The research method used by researchers is quantitative research, with a research design that is correlational quantitative, which examines the relationship of two variables. This research was conducted at Shidqia Islamic School Middle School,

Jalan Suryadarma 1A Bumi Dirgantara Permai Housing, Jatisari, Jatiasih, Bekasi City 17246. The research time was from February to March 2022. The study population was all students in class IX at SMP Shidqia Islamic School.

The research instrument technique used in this study for data (X1) is the use of infographic learning media, data (X2) Instagram media and for data (Y) digital literacy skills is to use a questionnaire instrument. The test results of the questionnaire instrument using infographic media were analyzed using Pearson's Correlation Coefficients in the SPSS 27 program for windows with the results obtained from the Question Items there were 19 valid and 11 invalid items. In contrast, the questionnaire instrument using Instagram media used Pearson's Correlation Coefficients in the SPSS 27 program for windows with the results obtained from the Question Items, there are 21 valid items and 9 invalid items. After knowing the valid instrument items, the reliability analysis of the instrument was analyzed using the Reliability Analysis model Alpha analysis technique in the SPSS 27.00 for windows program.

Results and Discussion

1. Data Normalization Test

The normality test used the Kolmogorov-Smirnov test at $\alpha = 0.05$ with the SPSS version 27.0 program. The results obtained on the infographic media variable and digital literacy ability showed a significance level of 0.200 while the results obtained on the Instagram media variable and digital literacy ability showed a significance level of 0.200. Based on these data, the significance level obtained is greater than 0.05 so the data for both variables are normally distributed.

2. Linearity Test

The linearity test was conducted to investigate whether the independent variable, namely the use of infographic media (X1) and Instagram media (X2) had a linear relationship with the dependent variable, namely students' digital literacy ability (Y). The linearity test of the relationship can be determined by using the deviation from linearity of the linear F test. Based on the analysis with the help of the computer program SPSS 27 for windows, it can be seen that the value indicates the linearity of the data.

The relationship between the independent and dependent variables can be linear if it is significant F count > 0.05 . The results obtained on the infographic media variables and students' digital

literacy skills showed a significance level of 0.957, while the Instagram media variables and students' digital literacy skills showed a significance level of 0.213. Based on these data, the significant value of the relationship between the variables of using Instagram media (X1) and infographic media (X2) with the variable of students' digital literacy ability (Y) is greater than 0.05 so it can be concluded that the variables of using Instagram media (X1) and infographic media (X2) with the variable of students' digital literacy ability (Y) has a linear relationship.

3. Relationship between infographic learning media (X1) and students' digital literacy skills (Y) in social studies learning in Class IX SMP Shidqia Islamic School

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.937 ^a	.878	.877	2.858	.878	823.362	1	114	<.001

a. Predictors: (Constant), Media Pembelajaran Infografis

Based on the table the results are significant (sig F < 0.05) with a value of R = 0.937 (Very Strong Category).

Based on the results of research that has been conducted on class IX students of SMP Shidqia Islamic School, Hypothesis Testing (Correlation X1 to Y), there is a positive and significant relationship between infographic media and students' digital literacy skills in social studies learning in class IX SMP Shidqia Islamic School. From the results of the correlation test the results are significant (sig F < 0.05) with a value of R = 0.937 (Very Strong Category).

Lankow, Ritchie, Crooks (2012) in their journal stated that Infographics provide a format that utilizes visual ways that not only captivate an information-hungry audience, but also help them perceive and retain that information. This is in line with digital literacy skills put forward by Paul Gilster that digital literacy is an ability to understand and use information in various forms from a very broad variety of sources, in this case, infographic media. Infographic media can help students appreciate and retain the information they get from various digital devices such as cellphones, tablets and laptops. Infographic media can also help students in terms of students' digital literacy skills, especially in social studies learning

The hypothesis that will be tested in this section is: there is a positive and significant relationship between infographic media and students' digital literacy skills in social studies learning in Class IX SMP Shidqia Islamic School. The hypothesis is an alternative hypothesis, to test the hypothesis, it is converted into a null hypothesis so that it reads: "There is no positive and significant relationship between infographic media and students' digital literacy skills in social studies learning in Class IX SMP Shidqia Islamic School".

The first hypothesis test was carried out using correlation analysis using the SPSS 27 program, which can be seen in Figure 1.

Figure 1

which can contain material in one infographic view to clearly understand social studies material. This is in line with this study which showed that the results of the use of infographic media by class IX students of SMP Shidqia Islamic School based on the data showed that students were in the high category with a percentage of 79.3%, which means that respondents have very good answer criteria for the use of learning media. infographics in terms of students' digital literacy skills in social studies learning.

4. The relationship between Instagram learning media (X1) and students' digital literacy skills (Y) in social studies learning in Class IX at SMP Shidqia Islamic School

The hypothesis that will be tested in this section is: there is a positive and significant relationship between Instagram media and students' digital literacy skills in social studies learning in Class IX at SMP Shidqia Islamic School. This hypothesis is an alternative hypothesis, to test the hypothesis it is changed to a null hypothesis, so that it reads: "There is no positive and significant relationship between Instagram media and students' digital literacy skills in social studies learning in Class IX at SMP Shidqia Islamic School".

The second hypothesis test was carried out using correlation analysis using the SPSS 27 program, which can be seen in Figure 2.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. F Change	
					R Square Change	F Change	df1		df2
1	.952 ^a	.906	.905	2.515	.906	1096.848	1	114	<.001

a. Predictors: (Constant), Media Instagram

Based on the table, the results are significant (sig F <0.05) with a value of R = 0.952 (Very Strong Category).

Based on the results of research that has been conducted on class IX students of SMP Shidqia Islamic School, Hypothesis Testing (Correlation X2 to Y), there is a positive and significant relationship

between Instagram media and students' digital literacy abilities in social studies learning in class IX SMP Shidqia Islamic School. From the results of the correlation test the results are significant (sig F <0.05) with a value of R = 0.952 (Very Strong Category).

The use of Instagram media in learning can make a different experience than before. Teachers can share subject matter through features on Instagram such as feeds, stories, and reels so that students can capture lesson information and collaborate and communicate with teachers on a digital platform. This is in line with what was stated by Hague that digital literacy is the ability to create and share in different modes and forms; to create, collaborate, and communicate more effectively, as well as to understand how and when to use good digital technology to support the process, in this case, is the social studies learning process.

Instagram media also has a relationship with the digital literacy skills proposed by Paul Gilster, namely the ability to understand and use information in various forms from various sources. Instagram media can help students in their learning activities, namely in finding new information related to materials in social studies

Figure 2

lessons by accessing Instagram accounts belonging to online news portals, communities, and learning services such as teacher rooms, Zenius, Quipper and Instagram account belonging to teachers who have been prepared for social studies learning. Thus Instagram media can help students in terms of digital literacy skills. This is in line with this study which shows that the results based on the data show students are in the high category with a percentage of 88.8%, which means that respondents have very good answer criteria for using Instagram learning media in terms of students' digital literacy abilities in social studies learning.

5. The relationship between infographic learning media (X1) and Instagram media (X2) on students' digital literacy skills (Y) in social studies learning in Class IX SMP Shidqia Islamic School

The hypothesis that will be tested in this section is: there is a positive and significant relationship between infographic media and Instagram media on students' literacy skills in social studies learning in Class IX SMP Shidqia Islamic School. This hypothesis is an alternative hypothesis, to test the hypothesis, it is changed to a null hypothesis so that it reads: "There is no positive and significant relationship between infographic media and Instagram media on students' digital literacy abilities in social studies learning in Class IX at SMP Shidqia Islamic School".

The third hypothesis test was carried out using correlation analysis using the SPSS 27 program, which can be seen in Figure 3.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	1.000 ^a	.999	.999	.252	.999	60246.796	2	113	<.001

a. Predictors: (Constant), Media Instagram, Media Pembelajaran Infografis

Figure 3

Thus, infographics and Instagram media can help students in terms of digital literacy skills. This is in line with this study which shows that the results of the use of infographic media and Instagram media by class IX students of SMP Shidqia Islamic School based on the data show that students are in the high category with a percentage of 90.5%, which means that respondents have very good answer criteria for the use of infographic learning media and Instagram media in terms of students' digital literacy skills in social studies learning.

Conclusion

Based on the results of the study it can be concluded that the first, from the results of the correlation test between infographic media variables (X1) on students' digital literacy abilities (Y) the results are significant (sig F <0.05) with a value of R = 0.937 (Very Strong Category) meaning that media Infographics have a positive and significant relationship to students' digital literacy skills in social studies learning in Class IX at SMP Shidqia Islamic School. Second, from the results of the correlation test between Instagram media variables (X2) on students' digital literacy abilities (Y) the results are significant (sig F <0.05) with an R value = 0.952 (Very Strong Category) meaning that Instagram media has a positive and significant relationship on students' digital literacy abilities in social studies learning in Class IX at SMP Shidqia Islamic School. And third, there is a positive and significant relationship between infographic learning media and Instagram media on students' digital literacy skills in social studies learning in Class IX at SMP Shidqia Islamic School. From the results of the correlation test the results are significant (sig F <0.05) with a value of R = 1.000 (Very Strong Category).

One of the efforts that can be made to improve digital literacy is to wisely use the internet to find information in the form of data, especially infographics through Instagram, Google and YouTube to gain new knowledge and experience, the desire to solve problems, accept new situations, and be curious. About complex matters.

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Based on the table, the results are significant (sig F <0.05) with a value of R = 1.000 (Very Strong Category).

Based on the results of research that has been conducted on class IX students of SMP Shidqia Islamic School, Hypothesis Testing (Correlation X1 and X2 to Y), there is

a positive and significant relationship between infographic media and Instagram media on students' digital literacy skills in social studies learning in class IX SMP Shidqia Islamic School. From the results of the correlation test the results are significant (sig F <0.05) with a value of R = 1.000 (Very Strong Category).

The use of infographic media and Instagram media in social studies learning by students in Class IX at SMP Shidqia Islamic School positively contributes to students' digital literacy abilities. Paul Gilster divides four areas of digital literacy skills, namely: Internet Searching, students are able and skilled to find information on the internet using search engines such as google.com, yahoo.com to find infographic data and Instagram social media applications related to social studies subject matter and perform other activities in it. Guide to Hypertext Directions (Hypertextual Navigation), students are able and skilled at reading and dynamic understanding of navigation, how it works and the features contained in a search engine application, website, blog, YouTube and Instagram social media application. Evaluation of Information Content (Content Evaluation) students can think critically and provide an assessment of what is found online accompanied by the ability to identify the validity and completeness of the information contained in infographic data presented by certain websites or information contained in Instagram social media. Because at this time there is a lot of information that contains fake news (hoaxes) that students need to anticipate by checking the validity of the news by seeing where the source of information comes from and students can assess this information objectively. Knowledge Assembly, students can build new knowledge through information obtained from the latest infographic data and information from Instagram and discuss it in the classroom with the teacher to analyze information and to draw conclusions about the information that has been obtained.

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