Indonesian Journal of Biology Education

Vol. 4, No. 2, 2021, pp: 25-31

pISSN: 2654-5950, eISSN: 2654-9190 Email: <u>ijobe@untidar.ac.id</u>





The Use of Instagram Application as a Media Evaluation of Animal Excretion System Material in Biology Education Students

Nadia Dwi Cahyawati^{1*}, Ervina Rinka Oktarivada², Kartikasari Nurbaiti³, Zumrotul Salisa⁴, Ghina Tsalatsatunnisa⁵, Setiyo Prajoko⁶

1,2,3,4,5,6Biology Education Study Program, Universitas Tidar, Indonesia

Email: 1 nadiadwicahyawati39@gmail.com,

² kartikakartika781@gmail.com,

³ Oervinarinka@gmail.com,

⁴ zumrotulsalisa5@gmail.com,

⁵ ghina.tsal01@gmail.com

⁶setiyoprajoko@untidar.ac.id

Article History

Received : 04 - 09 - 2021 Revised : 15 - 10 - 2021 Accepted : 30 - 10 - 2021

Keywords:

Evaluation media, social media, Instagram, learning motivation

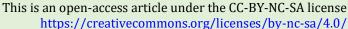
Article link



Abstract

The implementation of Education Policy in the Emergency Period of the Spread of Corona Virus Disease (COVID-19) greatly affects the condition of education in Indonesia, therefore, educators are expected to develop certain activities that use social media in learning. Educators can actively use Instagram to stay connected with students. The use of Instagram by students is used as an evaluation medium related to animal excretory system material in Biology Education Students. The data analysis method used is qualitative descriptive method. Based on the research that has been done, it can be concluded that the use of media in learning is a very important element, knowledge will be more abstract if only conveyed through verbal language. This can be seen in the aspect of the Instagram application which is able to become an evaluation media with a percentage of 84%.

©the authors







Introduction

Implementation of Education Policy in the Emergency Period of the Spread of Corona Virus Disease (COVID-19) is certainly very influential on the condition of education in Indonesia so that policy makers must make policy changes and reorganize the education order in Indonesia. One of them is the issuance of SE (Circular Letter) by the Minister of Education and Culture Nadiem Anwar Makarim. Where some of the contents of the Circular Letter are regarding the cancellation of the National Examination for each final level of school, the rules for implementing the School Examination and grade promotion, the admission of new students and the rules for learning from home during the pandemic. The implementation of learning activities at home by all levels of education in Indonesia utilizes various online learning media or commonly referred to as elearning. Media is an intermediary or introducer from the sender to the receiver. So that the media as a component of communication, especially in the field of education as a sender of information from teachers to students (Wahyu, 2021).

The rapid development of technology is directly proportional to the development of social media. This also has an impact on the learning process of students. Learning effectively and with the right type of technology is one of the best ways to ensure students succeed in the classroom, besides the focused attitude of students is also key (Belardi, 2013). The development of social media is seen as influencing students academically. Social media has become one of the alternative learning media. Learners spend more time using social media through their laptops and cellphones. Learners even have accounts that they manage themselves to interact with friends and even to have social interactions with new people around the world.



This can therefore be adapted by teachers or educators to develop specific activities that use social media in learning. Educators can actively use Instagram to stay connected with learners (Zhang, 2013).

The use of Instagram as an evaluation media has convenience because students are accustomed to using Instagram, especially educators do not require large costs to apply it because almost all students already have laptops and gadgets, besides the use of Instagram also does not require special training, so it is easy to apply at any level of education. Instagram social media has a simpler system and does not make students confused in operating it. Students can access the application through their respective gadgets or computer devices provided. Students are more familiar with using Instagram social media than existing online learning applications. This will support the learning process because it makes students not feel bored (Afrizal, 2020).

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 (Bexheti, 2014). In particular, Instagram has several features that can support online learning, including Live Streaming which is the same as a teleconference that facilitates teacher interaction in monitoring all student learning material needs. Also, the Post Feed feature that allows students to collect assignments or works that will be sent through Instagram in the form of Posts. Up to Instagram TV which makes it easy for students to submit assignments and works in the form of videos or animations related to learning with a maximum duration of 30 minutes and a minimum of 1 minute. Instagram Social Media also has an attendance feature, namely by following the teacher's account first and after that attendance can be continued in the form of face-to-face through the live streaming feature. By adapting the Instagram application as an online learning media application. Teachers can easily see the progress of student learning more concisely and up to date, because the Instagram application whose development is loved by many students in capturing moments and photos in the form of posts.

With the explanation above, the researcher intends to analyze the use of the Instagram application as a Media Evaluation of Animal Excretion System Material for Biology Education Students.

Methods

This type of research is descriptive qualitative research using ways of interpretation presented in the form of descriptions. The data source is the subject used to obtain data. This research was conducted in the second and third weeks of November. In this case, the research subjects were 45 students of the Biology Education Study Program of FKIP UNTIDAR semester V or class of 2019 who were respondents and had taken the Animal Physiology course in 2021. Respondents were selected based on the students taught by the researcher so that they could make an objective assessment of the questionnaire that had been distributed. The data collection technique uses a questionnaire technique. According to Arikunto (2021), a questionnaire is a written statement used to obtain information from respondents in the sense of reports about themselves or things they know, while according to Sugiyono (2013), a questionnaire or questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer. The questionnaire was distributed via google form media. Respondents were asked to affix the value that best suited what was most felt during learning according to the available statements.

The data analysis method used is descriptive method by revealing the facts that appear in the data by providing a description or analyzing it. The analysis technique used is the Miles &Huberman analysis technique with three stages, namely data collection, data processing, and conclusion giving. Data collection is done by selecting the main things, focusing on the important things. Data processing is presented in the form of a brief description or text in the form of a detailed narrative description. Finally, the data that has been obtained is categorized and then conclusions are drawn.

Results and Discussion

In the current era, the development of technology is very rapid, as well as the use of social media which is currently mandatory for people in all circles, especially for teenagers to adults. One of them is the Instagram application which is a social media used to share moments in the form of photos or videos that can be enjoyed by everyone who joins Instagram. (Afrizal, 2020). Instagram users are growing rapidly because of the advantages offered through various interesting features, such as effects to adjust the coloring of photos, and other complements available in the story feature. (Salbino, 2014).

Learning using the Instagram application can be applied to students at the junior or senior high school level, this is because this application is very familiar to generation Z. During this pandemic, as we know, the learning tools or media used are still around google classroom, WhatsApp, Google form and

Edmodo. This research was conducted on 45 Biology Education students through a Google form questionnaire who had previously tried to do quizzes with the Instagram Story feature. The results of this study are presented in 3 subchapters, namely knowledge about Instagram, its advantages and disadvantages as an evaluation media from the results of Likert scale calculations which are summarized into 4 choices, namely disagree, disagree, and agree, and strongly agree, as follows:

Table 1. Student Opinions about the Instagram Application

	Table 1. Student Opinions about the instagram Application							
No	Comprehension Aspects	TS	Total (SS				
		13	N3	S	33			
1	Instagram is a must-have app for college students	4,4%	11,1%	35,6%	48,9%			
2	Instagram application provides many benefits	0%	4,4%	44,4%	51,1%			
3	The features available in the Instagram application make it easier for users to convey information.	0%	6,7%	31,1%	62,2%			
4	Instagram application can be a learning evaluation media	0%	15,6%	57,8%	26,7%			
5	The use of Instagram as an evaluation media can make it easier for students to understand the material.	2,2%	31,1%	3,3%	33,3%			
6	The features used can facilitate the evaluation process	2,2%	15,6%	53,3%	28,9%			
7	The features used for evaluation are very interesting	0%	13,3%	44,4%	42,2%			
8	Ease of access to evaluation questions	2,2%	11,1%	48,9%	37,8%			
9	Presentation of evaluations that are easy to understand	0%	4,4%	51,1%	44,4%			
10	This evaluation process increases student learning motivation	2,2%	2,2%	46,7%	48,9%			

Since the day of filling out the Likert scale questionnaire conducted by respondents, the researcher found that the opinion of biology students about the Instagram application stated that this application is a mandatory application that must be installed on student devices with the number of respondents agreeing and strongly agreeing as many as 38 students with a total percentage of 84%, this is indeed common among students due to its function or benefit as an information provider. It can be seen in public servant accounts such as hospitals, government agencies, educational institutions using this application as a place to distribute information. Apart from this function, respondents also agreed that this application is useful in the field of education because basically learning is a communication process between teachers and students, to support this delivery process, a means called media is needed. (Assidik, 2018).

The use of media in learning is a very important element, it is explained that knowledge will be increasingly abstract if only conveyed through verbal language (Sanjaya, 2010). This can be seen in the aspect of the Instagram application which is able to become an evaluation media with the number of respondents agreeing and strongly agreeing as many as 38 students with a total percentage of 84% which is equipped with attractive features so that it is easy to access and easy for students to understand. It is hoped that later the use of Instagram evaluation media will be able to increase students' learning motivation.

Researchers are interested in conducting research on learning evaluation media by utilizing the Instagram application. As is known, learning evaluation according to Zaenal (2009) serves to determine the position of students, determine the level of readiness of students to take the program, help educators provide guidance, and provide reports on the progress of students. In every learning process that has been carried out, educators have an obligation to evaluate learning.

From the results of this learning evaluation, it is then known for sure about the extent to which students progress in the learning process, besides that it can also be used as a mapping material regarding the difficulties experienced by students. Through the information that has been obtained, educators can then make adjustments and design a way to overcome these obstacles. Evaluation results can be used as a benchmark for the success of learning that has been carried out as well as a consideration for determining

the next learning. Based on this, this research can identify the advantages and disadvantages of Instagram as a learning evaluation media.

Table 2 Advantages of Using Instagram as an Evaluation Media

No	Adfantages	Total (n=45)				
NO		TS	KS	S	SS	
1	Completeness of features on Instagram	0%	2,2%	40%	57,8%	
2	The evaluation process is more time efficient	2,2%	20%	40%	37,8%	
3	The evaluation process is practical	0%	6,7%	46,7%	46,7%	
4	The appearance of the evaluation media is attractive	0%	2,2%	40%	57,8%	
5	Questions can be repeated	11,1%	11,1%	42,2%	35,6%	

The results showed some positive responses from students based on the results of a questionnaire that had been filled out by 45 Biology Education students as respondents which showed that there were several advantages to using Instagram as a learning evaluation media, which can be seen in Table 2. Instagram has a feature to send photos and videos using a unique design so that it is interesting if used as a learning media. Instagram features that can be used as learning media are feeds and instastory. Of course, in sharing the subject matter, images must be displayed that make students interested and take part in the learning process (Ambarsari, 2021).

Instagram has complete features ranging from backgrounds, music, stickers and gifs that can be utilized by students to make it easier to work on evaluation questions. Students can apply learning anywhere and anytime because use is not limited to time and place, which means that the evaluation process using Instagram is more time efficient (Fujiawati et al., 2021). The evaluation process is practical, so students will learn slowly through the responses of followers who justify and make students more active, creative and innovative not only in the classroom but also outside the classroom. Instagram is also easy to operate and has an attractive and varied evaluation media display by targeting the tendency of students today to be different from conventional evaluation media usually so that students easily realize that Instagram can be used as an online learning media (Sesriyani, 2019). This is an advantage of Instagram as an easy social media for the context of social education and the promotion of critical thinking of learners (Mason, 2006).

The advantages of features that can facilitate access to repeat and review material questions by students. How to use Instagram as a learning evaluation media can be made on Instagram feeds, IG stories, and live. If you want to provide a lot of material, the teacher can upload the material through the Instagram feed. If the teacher wants to provide less material and a few exercises to train children's skills, they can use the IG story feature, while if the teacher wants to deliver directly or wants to provide additional material related to the uploaded material, the teacher can use the live feature on Instagram. These features can make it easier for teachers to communicate through Instagram. So learning evaluation is not only done at school, but teachers can also communicate with students through social media. Technology has made it easier for us to interact and convey knowledge to students by not having to meet face to face and sit in class but the interaction can be done wherever we are.

Table 3 Disadvantages of Using Instagram as Evaluation Media

No	Disadvantages		Total (n=45)			
		TS	KS	S	SS	
1	Answers cannot be changed	4,4%	4,4%	33,3%	57,8%	
2	The longest processing time is only 15 seconds	8,9%	17,8%	37,8%	35,6%	
3	Requires a stable internet network	0%	6.7%	17.8%	75,6%	
4	Instagram app consumes a large quota	0%	8,9%	24,4%	66,7%	
5	Instagram app takes up a lot of storage	0%	6,7%	33,3%	60%	

Based on the results of the data that has been obtained, it can be seen that there are shortcomings in the use of Instagram as a medium for evaluating animal excretory system material in Biology Education Students. Because basically all types of media have advantages and disadvantages, especially internet-based media. The first aspect is "Answers cannot be changed". There were 15 people or 33% of the respondents chose to agree and there were 26 people or 57% of the respondents chose strongly agree. The instagram stories feature is a feature that is the most popular compared to other features, because in the instagram stories feature there are supporting features that can make users interested and always come

back to use this stories feature when using the instagram application. Features used to collect opinions from followers (Nabil, 2021). Interest in reading from Instastory also affects learning outcomes. The results of Goleman's (1995 and 1998) and some research in America (Rachmi, 2010) show that 80 percent of a person's success is in his emotional intelligence, social intelligence and spiritual intelligence. This can be related to student learning outcomes. Students who are happy will be more interested in reading so that they will know the material presented. From here it is clear that reading plays a very important role in helping a person to improve their understanding of the material being studied (Aditya, 2010). However, one Instagram account can only take the poll once and cannot change the choices that have been made.

The longest processing time is only 15 seconds. There were 17 people or 37.8% of the respondents chose to agree and 16 people or 35.6% of the respondents chose to strongly agree. y. The Instastory feature began to appear as one of the additional features added on Instagram. This feature has many components such as photos, videos, quizzes, polls and others with an attractive appearance that can be shared within the user's Instagram account and last for 24 hours (Fernandasyah, 2019). Instagram has a timeline that runs very fast. Instagram stories is a feature used to share uploads in the form of photos and short videos with a duration of 15 seconds to 1 minute which can be divided into several uploads and only last on Instagram for 24 hours (Nabil, 2021).

Aspects require a stable internet network. There were 8 people or 16.8% of the respondents chose to agree and 34 people or 75.6% of the respondents chose strongly agree. And there are only 3 people or 6.7% who choose to disagree. The use of the Instastory feature on Instagram has very high accessibility, the majority of students who have smartphones are connected to the internet network. However, the use of this feature sometimes experiences problems with the internet network. According to Kosasi (2011), sending and receiving data that often experiences interference (slow), or commonly called bandwidth overload, especially the amount of internet usage during working hours. This can result in several problems such as decreasing the speed of network connectivity, delay, data loss in transmission / packet loss. students need capital for internet connection services to access the features on Instagram. If it is not connected or connected to the internet network, this is a difficulty in not being able to apply the use of Instagram as a learning medium (Audina, 2020).

The Instagram application takes up a large quota. There were 11 people or 24.4% of the respondents chose to agree and 30 people or 66.7% of the respondents chose strongly agree. And there were only 4 people or 8.9% of the respondents chose to disagree. The disadvantage of using Instagram social media is about the use of data which is fairly expensive. Evaluating using Instagram, of course, must spend quite a lot of quota to be able to access it. Not all students have sufficient internet quota and stable wifi facilities. Therefore, considerations need to be made regarding the problem of internet quotas in this learning evaluation. According to Mukhlisian (2018), Instagram is one of the favorite applications for sharing photos and videos. Unfortunately, the more Instagram is used, the more data quota is consumed to load photos or videos. However, video playback consumes the most internet data compared to other content such as text and photos. In addition, Instagram social media services play videos automatically, aka autoplay, when users open the application. According to Kiranasari (2014), not all videos shared by friends are interesting to watch. This mechanism is arguably inefficient. Instagram has not provided an option to stop autoplay as a whole. However, there is a way to save data, which is to choose the "Use Less Data" option. This option will stop the video pre-loading mechanism when opening the application. So, the video will only play automatically when scrolling the screen and arriving at certain content. Therefore, in its use, Instagram consumes quite a lot of quota (Vira, 2020).

The fifth aspect is "Instagram takes up a lot of storage". There were 15 people or 33% of the respondents chose to agree and 27 people or 60% of the respondents chose strongly agree. And there are only 3 people or 6.7% of respondents choosing to disagree. Based on the main concept of media as digital media, there are two important elements in it, namely digitization and interactivity. According to Wuryantai (2004), digitization is an element that enables new media to carry out the functions of production, distribution, display, and message storage. The production function is the function of new media in creating and processing information which can then be disseminated (distribution function) via the internet network. Meanwhile, according to Setyadi (2020), the display function is the function of new media in displaying information or messages (content) created by communicators to their publics online through the help of internet network connections. The storage function enables new media for all messages or information that has been created into available electronic or digital formats. So that the message is always stored and can be used again at a future time by its users (Nantingkase, 2020). Therefore, the Instagram application in its use consumes a large enough storage (Prabowo and Arofah, 2017).

Conclusions

Based on the research that has been done, it can be concluded that the use of media in learning is a very important element, knowledge will be more abstract if only conveyed through verbal language. This can be seen in the aspect of Instagram application which is able to become an evaluation media with a percentage of 84%. Learning evaluation serves to determine the position of students, determine the level of readiness of students to take the program, help educators provide guidance, and provide reports on the progress of students to further measure the success of learning.

Instagram has complete features ranging from backgrounds, music, stickers and gifs. Instagram can be applied anywhere and anytime because use is not limited to time and place, the evaluation process is practical. Instagram is also easy to operate and features that can facilitate access to repeat and review material. But in its use, Instagram also has disadvantages, namely that answers cannot be changed, the longest processing time is only 15 seconds, requires a stable internet network, consumes a large quota, and consumes a lot of storage. It is hoped that the use of Instagram evaluation media can increase students' learning motivation.

References

- Afrizal, D. Y. (2020). Media Sosial Instagram sebagai Sarana Pembelajaran Menulis Teks Deskripsi. *PROSIDING SAMASTA*.
- Ambarsari, Z. (2021). Penggunaan Instagram Sebagai Media Pembelajaran Bahasa dan Sastra Indonesia Pada Era 4.0. In *Prosiding Seminar Nasional Pembelajaran Bahasa dan Sastra Indonesia* (SemNas PBSI)-3 (pp. 81-86). FBS Unimed Press.
- Assidik, G.K. (2018). Pemanfaatan Media Sosial Sebagai Alternatif Media Pembelajaran Berbasis Literasi Digital yang Interaktif dan Kekinian. *Prosiding asaga*.
- Audina, N. A., & Muassomah, M. (2020). Instagram: Alternatif Media dalam Pengembangan Maharah Al-Kitabah. *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya*, 8(1), 77-90.
- Fernandasyah, M. K., Wati, B. M., Ardipeni, W., & Setiawan, D. (2019). Penggunaan Media Instagram: Instastory Sebagai Pemberdaya Hasil Belajar Kognitif Mahasiswa Biologi Universitas Negeri Malang. In *Prosiding Seminar Nasional dan Workshop Biologi-IPA dan Pembelajarannya* ke (Vol. 4, p. 119).
- Fujiawati, F. S., & Raharja, R. M. (2021). Pemanfaatan Media Sosial (Instagram) Sebagai Media Penyajian Kreasi Seni Dalam Pembelajaran. *JPKS (Jurnal Pendidikan dan Kajian Seni)*, 6(1).
- Ghullam, H., Lisa A. (2011). Pengaruh Motivasi Belajar Siswa terhadap Pestasi Belajar Ipa di Sekolah Dasar. Jurnal Penelitian Pendidikan Vol. 12(1). 90-96.
- Kiranasari, B. (2014). Faktor-Faktor Yang Menentukan Online Seller Memilih Situs Jejaring Instagram Sebagai Media Promosi Online Shop (Studi Deskriptif Kualitatif Mengenai Faktor-Faktor yang Menentukan Toko Online di Yogyakarta Memilih Media Promosi Instagram) (*Doctoral dissertation*, UAIY).
- Kosasi, S. (2011). Analisis penerapan arsitektur wireless lan menggunakan top down approach pada pt. Telkom pontianak. *SISFOTENIKA*, 1(2), 26-42.
- Mason, R. (2006). Learning Technologies for adult Continuing Education. *Studies incontinuing Education* 28.2. 121-133.
- Muhlisian, A. A. (2018). Penggunaan media sosial instagram dalam praktik pemahaman lintas budaya. Bookmark not defined., 55.
- Nabil, M., & Sugandi, G. (2021). Penggunaan Fitur Instagram Stories Sebagai Media Komunikasi Pemasaran Online (Studi Pada Akun Instagram@ Griizelle. Id).
- Nantingkaseh, A. H. (2020). Peran Media Sosial Instagram dalam Mendukung Program Komunikasi Pemasaran Samakta Guest House. Jurnal InterAct, 9(1).
- Prabowo, A., & Arofah, K. (2017). Media Sosial Instagram Sebagai Sarana Sosialisasi Kebijakan Penyiaran Digital. *Jurnal Aspikom*, 3(2), 256-269.
- Rachmi, Filia. (2010). Pengaruh Kecerdasan Emosional, Kecerdasan Spiritual, dan Prilaku Belajar Terhadap Tingkat Pemahaman Akuntansi. Skripsi tidak diterbitkan. Fakultas Ekonomi Universitas Diponogoro.
- Salbino, Sherief. (2014). Buku Pintar Gadget Android Untuk Pemula. Jakarta: Kunci Komunikasi.
- Sandjaja, Soejanto. (2009). Pengaruh Keterlibatan Orang Tua terhadap Minat Membaca Anak Ditinjau dari Pendekatan Stress Lingkungan.
- Sanjaya, W. (2010). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Prenada Media Group.
- Sesriyani, L., & Sukmawati, N. N. (2019). Analisis Penggunaan Instagram Sebagai Media Pembelajaran Bahasa Inggris Pada Program Studi Pendidikan Ekonomi. *Eduka: Jurnal Pendidikan, Hukum, Dan Bisnis*, 4(1).

- Setyadi, A. (2020). Analisis Fungsi Flight Information Display System (Fids) Terhadap Kelancaran Operasional Di Bandar Udara Internasional Kertajati Jawa Barat (*Doctoral Dissertation*, Sekolah Tinggi Teknologi Kedirgantaraan Yogyakarta).
- Vira, Puspa, D. E. W. I. (2020). Analisis Fotografi Iklan Sebagai Gaya Fotografi Untuk Strategi Pemasaran Di Sosial Media Instagram (*Doctoral Dissertation*, Sekolah Tinggi Teknologi Bandung).
- Wuryantai, A. E. W. (2004). Digitalisasi masyarakat: Menilik kekuatan dan kelemahan dinamika era informasi digital dan masyarakat informasi.
- Zaenal, Arifin. (2009). Evaluasi Pembelajaran: Prinsip, Teknik, Prosedur. Bandung: Remaja Rosdakarya.
- Zulkhaerani, Z. (2010). Peningkatan Kemampuan Membaca Cerpen Dengan Menggunakan Metode Snowball Drilling Pada Siswa Kelas Xa Sman 1 Gangga Tahun Pelajaran 2009-2010 (*Doctoral dissertation*, Universitas Mataram).
- Wahyu, S., Malabay, M., & Asri, J. S. (2021). Perancangan Konsep Dan Evaluasi Desain User Experience Pada Aplikasi Mobile Penyedia Tempat Layanan Fitness Dengan Pendekatan User-Centered Design. *Proceeding KONIK (Konferensi Nasional Ilmu Komputer*), 5, 446-451.
- Belardi (2013). Texting While Studying: New Study from McGraw-Hill Education RevealsThat Technology Can Be Students' Best Friend and Worst Enemy. McGraw-Hill Education. Retrieved from: https://www.mheducation.com/about/news-room/texting-while-studying-new-study-mcgrawhill-education-reveals-technology-can-be
- Bexheti, L. A., Ismaili, B. E., & Cico, B. H. (2014). An analysis of social media usagein teaching and learning: The case of SEEU. In *Proceedings of the 2014 International Conference on Circuits, Systems, Signal Processing, Communications and Computers* (pp.90-94).
- Arikunto, S. (2021). Dasar-dasar evaluasi pendidikan edisi 3. Bnadung: Bumi Aksara.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.* Bandung: Alfabeta.