

BLOG DEVELOPMENT AS A RESOURCE FOR GEOGRAPHIC LEARNING IN SMAN KECAMATAN PERCUT SEI TUAN

Annisa Hasri¹, Nurmala Berutu², M Taufik Rahmadi³

^{1,2,3} Study Program of Geography Education, Faculty of Social Sciences, Universitas Negeri Medan ¹annisahasri09@gmail.com, ²nurmala geo@yahoo.co.id, ³taufikrahmadi@unimed.ac.id

ABSTRACT

An effective learning process is a learning process that uses various forms of learning resources. This study aims to determine blogs' feasibility as a source of learning geography for material management of Indonesia's natural resources at SMAN Percut Sei Tuan District. This research was conducted in the odd semester of the 2019/2020 school year, with a population of all class XI IPS students at SMAN 1 Percut Sei Tuan consisting of 4 classes with a total of 139 students and class XI IPS at SMAN 2 Percut Sei Tuan which consisted of 2 courses with the number of 69 students. The study sample was class XI IPS 1 at SMAN 1 Percut Sei Tuan, totaling 35 students, and class XI IPS 1 at SMAN 2 Percut Sei Tuan amounted to 33 students. This research is development research using the Borg and Gall model with ten steps of research implementation. The data collection technique used was a questionnaire. The data analysis technique used is descriptive. The results showed that the validation of the feasibility of blogs as a source of learning geography carried out in 2 stages showed that in the first stage of verification, the acquisition of the feasibility of a blog as a source of learning geography was (87.27%) with criteria worthy of revision as needed. After making improvements according to the assessors' input, the results of the stage 2 validation obtained the feasibility of a blog as a source of learning geography (93.89%) with very feasible criteria without revision. The students' scores between class XI IPS 1 SMAN 1 and 2 Percut Sei Tuan show differences in assessing the indicators. In class XI IPS 1 SMAN 1, Percut Sei Tuan was lower on the menu clarity indicator. In contrast, class XI IPS 1 student at SMAN 2 Percut Sei Tuan rated more down on the accuracy of selecting the background color.

Keywords: Learning Resources, Validation, Indonesian Natural Resource Management, SMAN Percut Sei Tuan District

INTRODUCTION

The learning process must describe what teachers and students are doing by optimally utilizing learning resources so that students can access them to stimulate learning. Therefore, in designing learning, teachers need to determine what learning resources are and how to use them. The implementation of the use of learning resources in the learning process is listed in the curriculum. An effective learning process is a learning process that uses various forms of learning resources (Sanjaya, 2015), and one of the learning resources is the internet (Prastowo, 2012).

The development of the information and communication technology industry 4.0, which is increasingly fast and easily accessible, has affected all areas of life, including education, which can access learning resources on the internet. The development of information and communication technology can be seen from the invention of the smartphone, which is currently the lifestyle of most people in Indonesia. In addition, the availability of an internet network that is increasingly widespread and can be obtained at affordable costs makes it easier for various groups to access it. The internet has a

significant role, especially in the world of education. The use of internet technology in the world of education creates optimal student learning flexibility; students can access learning resources and allow students to communicate with teachers at any time (Wena, 2014).

Efforts to improve the quality of learning are following the statement in PP No. 19 of 2005 Chapter IV Article 19 paragraph 1 that the learning process in academic units is interactively, is inspiring, challenging, motivates students to participate actively, and provides sufficient space for initiatives, creativity, and independence according to the talents, interests and physical and psychological development of students. Therefore. utilizing technology information can make the learning process interactive, inspiring, fun, and students can participate actively. The advancement of information technology allows the subject matter to be stored in textbooks and stored in various forms of technology that are more effective and efficient, for example, on the internet, one of which is a blog site. A blog is a website or internet page that contains reports (Andi, 2015). A blog that is developed as a learning resource will have easy access for students. Students can access it with various gadgets such as smartphones.

For the preparation of a good and attractive blog, it can be developed through WordPress. WordPress is easy to create and also has a varied and beautiful appearance for users. With these conditions, it is good to use for learning resources in various subjects, one of which is geography. The development of a blog as a geography learning resource can make geography material good, innovative, informative, and rich in reference sources. It can be accessed easily by students and teachers. Geography is one of several sciences that both study the earth (Banowati, 2013).

Kecamatan Percut Sei Tuan has two public high school schools, SMAN 1 and SMAN 2 Percut Sei Tuan. The preliminary research results indicate that the school has not developed a suitable blog for use as a learning resource in Geography lessons. This can be seen from the learning resources used by the geography teacher are still in the form of

Geography textbooks, including the material for managing Indonesia's natural resources. Material Management of Indonesian Natural Resources is material learned in class XI IPS Odd Semester listed in the 2013 SMA / MA Curriculum on Basic Competencies 3.3 Analyzing the distribution and management of forestry, mining, marine, and tourism resources according to the principles of development sustainable and Competencies 4.3 Creating a map of the distribution of forestry, mining, marine and tourism resources in Indonesia. With a discussion of the classification, potential and distribution, analysis, and utilization Indonesia's natural resources.

Indonesian Natural Resources Management materials can be presented in explanations, pictures, and videos that allow students to access it more easily through blogs than through textbooks alone.

With the availability of internet network access with an average speed of 3.4 Mbps and free Wireless Fidelity (Wifi) at SMAN Percut Sei Tuan District, it should facilitate the learning process in schools if these facilities can be used optimally by designing geography-based teachers in learning resources. The internet is included in the management of Indonesia's resources. Design can be done by creating the content of the subject matter, which consists of material explanations, pictures, and videos to make it more innovative to attract students' interest in learning. Especially with the information and communication technology industry 4.0, which continues to develop, students will tend to be more interested in digital-oriented learning.

RESEARCH METHOD

This research was conducted in the odd semester of the 2019/2020 school year, with all class XI IPS students at SMAN 1 Percut Sei Tuan consisting of 4 classes and class XI IPS students at SMAN 2 Percut Sei Tuan composed of 2 categories. The sample in the study was taken by simple random sampling and obtained class XI IPS 1 student at SMAN 1 Percut Sei Tuan consisting of 35 students and class XI IPS 1 student at SMAN 2 Percut Sei

Tuan composed of 33 students. This research is a research and development (R & D) which uses the Borg and Gall model with ten steps of research implementation. The data collection technique used is an assessment sheet regarding the feasibility of a blog as a source of geography learning material for Indonesian natural resource management in the form of a list of written statements, namely a closed questionnaire adapted through the qualitybased learning software criteria approach from Walker & Hess in Arsyad (2013) which was later developed. It includes several aspects, namely aspects of learning, aspects of language, aspects of appearance, aspects of media completeness, aspects of programming, aspects of the totality of learning resources, and aspects of implementation.

The research instrument in the form of an assessment sheet was arranged using a Likert scale. The research instrument consisted of (6) six instruments, namely (1) the material expert assessment instrument consisting of the aspect, (2) the media expert learning assessment instrument consisting of the programming aspect, and the learning resource completeness aspect, (3) the expert assessment instrument. Language which consists of linguistic aspects, and (4) graphic expert assessment instruments consisting of display aspects, (5) geography teacher assessment instruments at Percut Sei Tuan Senior High School, which consists of learning aspects, linguistic aspects, aspects of completeness of learning resources and aspects implementation, and (6) assessment instruments for class XI IPS 1 SMAN Percut Sei Tuan District after the implementation trial consisting of learning aspects, display aspects, programming aspects, and implementation aspects.

Material experts carried out instrument validation, media experts, linguists, graphic experts, geography teachers, and class XI IPS 1 student of SMAN Percut Sei Tuan subdistrict. The assessment is carried out by putting a checklist ($\sqrt{}$) on the answers that match the criteria. If the weight is checked 4, it means that all the requirements are met. If the weight is checked three, only three criteria are met; if the weight

is checked 2, only two criteria are met, and if the weight is checked 1, only 1 criterion is met.

This analysis technique is used to process data obtained through questionnaires that material experts have assessed, media experts, linguists, graphic experts, geography teachers at SMAN Percut Sei Tuan District, namely SMAN 1 and SMAN 2 Percut Sei Tuan, and class XI IPS in SMAN Percut Sei Tuan Subdistrict, namely SMAN 1 and SMAN 2 Percut Sei Tuan in percentage descriptive form. To calculate the rate of each subject is to compare the total acquisition score of each issue with the ideal maximum score multiplied by one hundred percent while calculating the percentage of the entire matter is done by comparing the complete acquisition of problems with the number of issues multiplied by one hundred. Determination of eligibility criteria for decision-making refers to the requirements put forward by Tegeh et al. (2014).

RESULTS AND DISCUSSION

The results of this study are the compilation of blogs as a source of learning geography using WordPress sites by following the procedures for research and development (R&D) according to Borg and Gall, namely.

Research and Data Collection Stage

The research stage shows that the learning process has not used various learning sources, one of which is internet learning sources in blogs, even though internet access can be developed into a learning resource. This is what is used as a guide at the data collection stage in compiling the concept of a blog as a source of learning geography. Furthermore, to collect the blog concept is done by making a Learning Implementation Plan (RPP) material for Indonesian natural resource management based on the 2019 Geography High School curriculum and 2019 Geography High School Syllabus, which consists of Core Competencies (KI), Basic Competencies (KD), and Achievement Indicators.

Planning Stage

At the planning stage, the determination and arrangement of the instrument for assessing the feasibility of a

blog are carried out as a source of learning geography. The grid consists of aspects of assessment, namely parts of learning, language, appearance, completeness of media, programming, completeness of learning resources, and implementation. This grid will be developed to be assessed by material experts, media experts, linguists, graphic experts, Geography teachers, and student trials of class XI IPS SMAN Percut Sei Tuan District.

Product Draft Development Stage

The development of the product draft is carried out in 3 stages. The first stage is the name of the learning account with the results of the SMA Geography Learning account name and the process of creating a blog link with the results www.pendidikangeografi.school.blog. The second stage is writing Indonesian natural resource management materials on blogs in writings, photos, and videos. The final stage is making a blog design starting from the display layout, color, selecting the website font type, theme. and menu from the website www.wordpress.com.

Material, Media, Language, and Graphic Expert Validation Stage

This validation stage is a product assessment by material, media, linguistic, and graphic experts. The evaluation was carried out in 2 steps with several comments and suggestions for improvement. The material expert validation stage consists of a learning aspect that has seven indicator assessments. The results of the validation of the material expert stage 1 were 24 (85.71%) with the criteria worthy of being revised as needed with a maximum score of 28 (100%), after that it was corrected according to the material expert's advice to be assessed in stage 2 experiencing an increase in the quality of the feasibility of the blog by 26 (92.85) %) very feasible without revision with a maximum score of 28 (100%).

The media expert validation stage consists of a programming aspect with four indicators and a learning resource completeness aspect with four hands. Overall, the media expert validation has eight

indicators. The results of the verification of the stage 1 media expert were 27 (84.37%) with the criteria worthy of being revised as needed with a maximum score of 32 (100%), after that it was corrected according to the advice of media experts to be assessed in stage 2 to experience an increase in the quality of the feasibility of the blog by 30 (93.75). %) very feasible without revision with a maximum score of 32 (100%).

The linguist validation stage consists of linguistic aspects, which have six indicators. The results of the validation of the linguist stage 1 were 20 (83.33%) with the criteria worthy of being revised as needed with a score of 24 (100%), after that it was corrected according to the advice of linguists to be assessed in stage 2, experiencing an increase in the quality of the feasibility of the blog by 22 (91.66). %) very feasible without revision with a maximum score of 24 (100%).

The graphic expert validation stage consists of display aspects having eight indicator assessments. The results of the stage 1 graphic expert validation were 21 (65.62%) with sufficient criteria to be revised quite a lot with a maximum score of 32 (100%), after that it was corrected according to the advice of linguists to be assessed in stage 2 to experience an increase in the quality of the feasibility of the blog by 30 (93, 75%) with a maximum score of 32 (100%).

Teacher Validation Stage for Geography in Senior High School Subjects

Geography subject teacher validation was carried out by two geography subject teachers of Class XI IPS 1 at SMAN Percut Sei Tuan District: SMAN 1 Percut Sei Tuan and SMAN 2 Percut Sei Tuan. The teacher validation questionnaire consists of learning, language, completeness of learning resources, and implementation. The teacher validation indicators have 23 indicators in total.

The validation of the geography teacher at SMAN 1 Percut Sei Tuan obtained a score of 21 (92.39%) with very feasible criteria without revision with a maximum score of 24 (100%). Because the geography teacher's assessment of SMAN 1 Percut Sei Tuan is possible without correction, only stage 1 validation will be carried out. However, even

so, suggestions from geography are still being corrected.

The validation of the geography teacher at SMAN 2 Percut Sei Tuan obtained a score of 21 (92.39%) with very feasible criteria without revision with a maximum score of 24 (100%). Because the geography teacher's assessment of SMAN 2 Percut Sei Tuan has very decent standards without correction, only stage 1 validation will be carried out. Still, even so, the suggestions from the teacher are fixed.

High School Student Field Trials

Student trials consisted of learning aspects, display aspects, programming aspects, and implementation aspects. Overall, the indicators amount to 16. The assessments of students are the conclusion and improvement of the feasibility of blogs as a learning resource. The field trial stage was carried out at SMAN Percut Sei Tuan District, SMAN 1 and 2 Percut Sei Tuan. As for the test, the subjects were students of Class XI IPS 1.

Assessment of Class XI IPS 1 student of SMAN 1 Percut Sei Tuan consisting of 35 students obtained a score of 2,187 (97.63%) with very feasible criteria without revision with a maximum score of 2,240 (100%).

Assessment of Class XI IPS 1 student of SMAN 2 Percut Sei Tuan consisting of 33 students obtained a score of 2,043 (96.73%) with very feasible criteria without revision with a maximum score of 2,112 (100%).

Final Product Completion

After everything has been revised and the assessment of the student trial at the Percut Sei Tuan District High School becomes the conclusion of the product refinement stage, the final product refinement stage is carried out. The summary of the feasibility value of the blog as a source of learning geography from all subjects starting from the first stage of validation (87.27%) has the criteria that it deserves to be revised as needed, so

the improvements are made. After improvements were made, it was assessed in stage 2 validation to obtain an overall score (93.89%) with very feasible criteria without revision. In the assessment of teachers of SMAN Percut Sei Tuan District and class XI IPS 1 student of SMAN Percut Sei Tuan District, it was carried out in one step because overall, the scores had said they were very feasible without revision. The following Table 3 Feasibility Values of the blog as a Learning Source and Figure 1 Diagram of the Feasibility Value of the blog as a Learning Source.

The results showed the overall value of the feasibility of blogs as a source of learning geography at SMAN Percut Sei Tuan District. 2 validation stages were carried out, namely stage 1 before improving the quality of the blog (87.27%), the criteria were worthy of being revised as needed, so improvements were made to achieve very feasible standards. Without revision. Then the second stage of validation was then carried out after improving the blog's quality for (93.89%) very possible criteria without correction. Although the overall feasibility value of blogs as a source of learning geography has increased to a very feasible standard without revision, several indicators need to be improved for blog development due to the low scores obtained. These indicators need to be done continuously to get optimal results in blog products as a source of learning geography. Material experts assess indicators that need to be improved, media experts, linguists, graphic experts, geography teachers at SMAN Percut Sei Tuan District, and class XI IPS 1 student at SMAN Percut Sei Tuan District.

In stage 2 validation, the number of obtained scores has increased, which affects the feasibility of the blog as a whole to become a very feasible criterion without revision with a total of 751.15 (93.89%). This means that there is an increase in the blog's quality after improvements have been made to the indicators that received low scores.

Table 1. The Feasibility Value of the blog as a Learning Source

No.	Component	Stage 1 Score	Stage 1 Criteria	Stage 2 Score	Stage 2 Criteria
1.	Theory	85,71	well worth it	92,85	very worthy
2.	Media	84,37	well worth it	93,75	very worthy
3.	Language	83,33	well worth it	91,66	very worthy
4.	Graphic	65,62	decent enough	93,75	very worthy
5.	Geography teacher at SMAN 1 Percut Sei Tuan	92,39	very worthy	92,39	very worthy
6.	Geography teacher at SMAN 2 Percut Sei Tuan	92,39	very worthy	92,39	very worthy
7.	XI IPS 1 student of SMAN 1 Percut Sei Tuan	97,63	very worthy	97,63	very worthy
8.	XI IPS 1 student of SMAN 2 Percut Sei Tuan	96,73	very worthy	96,73	very worthy
	Amount	698,17	well	751,15	very
	Percentage (%)	87,27	worth it	93,89	worthy

Source: Processed Research Data (2020)

Although the overall feasibility value as a source of learning geography is said to be very feasible without revision, there are still some deficiencies in the indicators that still get the same value as before in stage 1 validation. Learning is caused by not achieving the criteria.

First, in stage 2 validation of material experts, some indicators need to be improved, namely indicator two about up-to-datedness and four clarity of examples of natural resource management material images, because they still get a score of 3, which has the same criteria as before. According to the SMA/MA level, making blog content requires many reference sources to create attractive and latest material packaging. In contrast, the availability of book sources with the publication year of 2019 on natural resource management material for class XI IPS for the SMA / MA level is quite limited. This is what needs to be done to improve the content of the blog content, so readers must look for references other than those on the blog. Furthermore, regarding the clarity of examples of images of natural resource management materials, it is also necessary to improve in developing blogs as a source of learning geography, this is because

in downloading sample images, every element of its beauty must be considered, namely color, size, pixels, and not someone's copyright (plagiarism). Whereas in making examples of images that explain difficult sub-material such as images of fig, nickel, iron, and others that must be downloaded on the Google site, the limitation is that on the Google Image site, which has beautiful elements, there are more watermarks (copyright) so that it cannot Free to download it because later it will be plagiarism. considered There communication access to the copyright owner for permission to use the image, making sample images available for certain submaterial on the Google site limited. For this reason, examples of pictures from several submaterials such as coal, nickel, iron, and others need to be improved continuously so that the feasibility of the blog product is optimal.

Second, in stage 2 validation of media experts, some indicators need to be improved, namely three hands of writing efficiency and six completeness presentations on blogs. Indicators 3 and 6 still get a total score of 3 with criteria that deserve to be revised as necessary as the previous criteria. In developing a draft of a blog product, the

WordPress site is used because many features are available free of charge, which is sufficient to create a blog as a learning resource, but the WordPress site also has weaknesses. It cannot change the standard features that have been provided (Koeshariatmo, 2010). This means that users cannot be free to be creative in designing draft blog products because that is the limited management of efficiency of writing and blog presentation. As for the features of high draft products that can be changed freely according to creativity are costly. Therefore, developing draft blog products is a WordPress site that is free of cost, although the features of a standard blog product draft cannot be changed according to creativity. Itself and has been determined by WordPress.

Third, in stage 2 validation of linguists, some indicators need to be improved, grammar including three indicators of accuracy and six accuracies in choosing word terms. Indicators 3 and 6 still get a total score of 3, with the criteria worthy of being revised as necessary as the previous criteria. This is due to less varied language in blogs because in preparing the correct grammar, it must be following PUEBI rules. In contrast, the limitations in choosing various terms of the maker blogs in composing sentences need continuous improvement efforts to produce optimal blog products.

Fourth, in the stage 2 validation of graphic experts, several indicators need to be improved. Although the overall number of scores with criteria is very feasible without revision, several indicators need to be improved because the scores for these indicators are eligible for modification as necessary as in the previous stages. Indicators that need to be enhanced are seven accuracy indicators using spacing, paragraph lines, and eight indicators for letter variations. The limitations of users in changing the standard design are the shortcomings of WordPress sites so that users cannot freely use their creativity in managing blogs. The WordPress site is still used in drafting blog product products because on the WordPress site, and many blog design features are free of cost while being able to change the standard design according to one's wishes requires a prohibitive cost to buy the

desired additional features. Cost limitations that keep using the WordPress site, especially the availability of standard design features on the free WordPress site, are sufficient for blog development.

The five validations carried out by the geography teacher at SMAN 1, and 2 Percut Sei Tuan were carried out in only 1 stage because the acquisition of very feasible criteria had been achieved without revision. Some need to be improved because getting the acquisition value with standards deserves to be revised as needed, namely the implementation aspect. In implementing the two geography teachers at the two schools, they gave a similarly low assessment. This is because there has never been direct digital-oriented learning during the learning process that made teachers worry. The Geography teacher of SMAN 1, Percut Sei Tuan, has a low rate on 19 aspects of inspiring students. Digital orientation learning, which is being practiced for the first time, is concerned that it will not encourage students to learn in the teaching and learning process, while the Geography Teacher of SMAN 2 Percut Sei Tuan. His assessment is on indicators of 18 aspects implementation regarding the influence of blogs on students. Digital orientation learning by using various learning sources, one of which is a blog, is feared that teachers will not affect student interest in learning. Even in the current technological era, students who are more concerned with digital orientation should not be worried, especially since there is an industrial era 4.0. All areas of life cannot be separated from the internet access network.

The six assessments by class XI IPS 1 at SMAN 1 and 2 Percut Sei Tuan conclude the quality of the feasibility of blogs as a source of learning geography. The assessment by students is carried out only in 1 stage because the total number obtained is very feasible without revision, so there is no need to do stage 2. There are several different scores in the student assessment, including for class XI IPS 1 student at SMAN 1 Percut Sei Tuan get the total number value with criteria is very feasible without revision. Although all indicators are possible without correction, some indicators need to be improved, namely indicator number 13 regarding menu clarity. Students think that

the menu clarity indicator is not easily accessible and needs to be improved so that the blog's quality is better.

Meanwhile, the assessment of class XI IPS 1 student at SMAN 2 Percut Sei Tuan as a whole obtained very feasible criteria without revision. Still, some indicators need to be improved, namely indicator number regarding the accuracy of selecting colors on the background, which must be corrected because it turns out that the color selection also influences the reader's interest to access the blog. Therefore, initially plain white and black, the background color was replaced with blue and put some front images to make the blog look even more attractive. In the assessment of SMAN Percut Sei Tuan District students, all aspects were considered to be very feasible without revision, one of which was the aspect of implementation. Students provide a very workable criterion assessment without modifications to the indicators of the implementation aspect. This is evident in the implementation aspect of internet-based learning. The blog site is excellent when applied to direct knowledge and does not show the teacher's concern in previous assessments.

Overall it can be argued that the feasibility of blogs as a source of learning material for Indonesian natural resource management at SMAN Percut Sei Tuan Subdistrict is very feasible without revision, this is based on the results of obtaining the total value in stage 2 after improvements are made according to the assessors' suggestions with very feasible criteria revision. However, several indicators of getting low scores need to be improved continuously so that the feasibility of blogging is optimal. Therefore, it is necessary to increase in developing improved blogs for further research because blogs created but are not produced in learning will not benefit many people, especially students (Nugroho, 2018).

CONCLUSIONS

Validation of the feasibility of blogs as a source of learning geography is carried out in 2 stages, namely validation stage 1 before revision and validation stage 2 after being revised. In stage 1 validation, the acquisition of the feasibility value of a blog as a source of

learning geography was (87.27%) with the criteria worthy of being revised as needed. After making improvements according to the appraiser's suggestion, then stage 2 validation was carried out, which increased the acquisition of the feasibility of a blog as a source of learning geography by (93.89%) with very feasible criteria without revision. In addition to grade XI IPS 1 students at SMAN 1 and 2 Percut Sei Tuan, they have different assessment indicators. Class XI IPS 1 student. of SMAN 1 Percut Sei Tuan rated lower on the menu clarity indicator. In contrast, class XI IPS 1 student at SMAN 2 Percut Sei Tuan ranked more down on the accuracy of selecting the background color. However, overall the blog is suitable for use as a learning resource and can accessed www.pendidikangeografi.school.blog.

REFERENCES

- Andi. (2015). Bikin Sendiri Blog Dengan Blogger Untuk Pemula. Yogyakarta: C.V Andi Offset.
- Arsyad, Azhar. (2013). Media Pembelajaran. Jakarta: PT. Raja Grafindo Persada.
- Borg, W., & Gall, M. (1983). Educational Research: An Introduction 4th edition Longman Inc. *New York*.
- Izza, N. A. (2012). Pengambangan Blog Sebagai Sumber Belajar Geografi Pokok Bahasan Biosfer Untuk Siswa SMA Kelas X1 IPS. *Ejournal Universitas Negeri Yogyakarta*, 1(2), 1-10.
- Kemendikbud. (2013). Kurikulum 2013. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Koeshariatmo. (2010). Belajar Membuat Blog & Website Berbasis Cms Dengan Wordpress 3.0. Jakarta: Karya Guru Publisher.
- Agusta, I., & Sukarana, I. M. (2016).

 Pengembangan Media Pembelajaran
 Website Bilingual" Close to
 Radioactivity" Sebagai Sumber Belajar
 Mandiri Untuk Siswa
 SMA/MA. Jurnal Pembelajaran
 Kimia, 5(1).
- Komalasari, K. (2013). Pembelajaran Kontekstual Konsep dan Aplikasi, Bandung: PT. *Rafika Aditama*.

- Kristanto, P. (2010). *Blog Gospel*. BPK Gunung Mulia.
- Nugroho, A. A. (2017). Pengembangan Media Pembelajaran Berbantuan Blog Pada Materi Trigonometri (Doctoral dissertation, UIN Raden Intan Lampung).
- Nugroho, Y. A. (2018). Pemanfaatan Dan Pengembangan Blog Sebagai Media Dan Sumber Belajar Pada Mata Pelajaran Fiqih Tingkat Madrasah Tsanawiyah. *Paramurobi: Jurnal Pendidikan Agama Islam, 1*(1), 15-28.
- Purnama, B. E. (2014). Cara Mudah Membuat Web Dengan CMS Wordpress Pada Domain dan Hosting Gratisan. *Graha Ilmu, Yogyakarta*.
- Sanjaya, W. (2015). Perencanaan dan desain sistem pembelajaran. Kencana.
- Sugiyono, P. D. (2017). Metode Penelitian Pendidikan: Pendekatan Kuantitatif,

- Kualitatif, R&D (Cetakan Ke). *Bandung: CV Alfabeta*.
- Sumarmi. 2015. Model-Model Pembelajaran Geografi. Malang: Aditya Media.
- Sumaatmadja, N. (1997). Metodologi pengajaran geografi. *Jakarta: Bumi Aksara*.
- Tegeh, I. M., Jampel, I. N., & Pudjawan, K. (2014). Model penelitian pengembangan. *Yogyakarta: Graha Ilmu*.
- Tri Bambang dan Cahyono. (1983).
 Pengelolaan Sumber Daya.
 Yogyakarta: Liberty.
- Wena, M. (2014). Strategi Pembelajaran Inovatif Kontemporer, Jakarta Timur: PT. *Bumi Aksara*.
- Widoyoko, E. P. (2009). Evaluasi program pembelajaran. *Yogyakarta: pustaka pelajar*, 238