

Google Site-Based Service and Trade Accounting Practice Learning Media for Grade XI Accounting Students

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ABSTRAK

Proses pembelajaran masih menggunakan metode pembelajaran konvensional. Guru menggunakan modul untuk menjelaskan materi ajar yang belum dipahami siswa dengan menggunakan media papan tulis. Penelitian ini bertujuan untuk mengembangkan Media Pembelajaran Praktek Akuntansi Dagang dan Jasa Berbasis Situs Google untuk mahasiswa akuntansi kelas XI. Penelitian ini merupakan penelitian pengembangan yang diadaptasi dari model pengembangan ADDIE. Pengumpulan data dilakukan melalui kuesioner. Data yang diperoleh dari kuesioner dianalisis secara deskriptif, kualitatif, dan kuantitatif. Hasil penelitian terdiri dari lima tahap pembuatan Layanan & scoping Service Berbasis Situs Google & media pembelajaran praktik akuntansi. Tingkat Kelayakan Media Pembelajaran Praktik Akuntansi Jasa & Dagang Berbasis Situs Google berdasarkan penilaian: Ahli Materi memperoleh persentase sebesar 92,61% yang termasuk dalam kategori Sangat Layak, dan Ahli Media memperoleh persentase sebesar 88,89% termasuk dalam kategori Sangat Layak. Penilaian kelayakan oleh siswa uji coba diperoleh persentase 88,61% yang termasuk dalam kategori Sangat Layak. Maka dari itu, Media Pembelajaran Praktik Akuntansi Jasa & Dagang Berbasis Situs Google ini sangat cocok untuk pembelajaran. Sementara itu, hasil skor pretest dan posttest menyatakan adanya peningkatan rata-rata setelah media pembelajaran akuntansi berbasis situs google diuji dari 65 menjadi 80.

ABSTRACT

The learning process is still using conventional learning methods. The teacher uses the module to explain the teaching material that the students have not understood by using the blackboard media. This study aims to develop Google Site-based Service and Trade Accounting Practice Learning Media for class XI accounting students. This research is development research adapted from the ADDIE development model. The Data was collected through questionnaires. The data obtained from the questionnaire were analyzed descriptively, qualitatively, and quantitatively. The study's results consisted of five stages of making a Google Site-based Service & scoping Service & accounting practice learning media. The eligibility level of Google Site-based Service & Trade Accounting Practice Learning Media based on assessments: Material Experts obtained a percentage of 92.61% which belongs to the Very Decent category, and Media Experts obtained a percentage of 88.89% belongs to the Very Decent category. The feasibility assessment by the trial students obtained a percentage of 88.61% which belonged to the Very Worthy category. Thus, the Google Site-based Service & Trade Accounting Practice Learning Media is very suitable for learning. Meanwhile, the results of the pre-test and post-test scores stated an increase in the average after the google site-based accounting learning media was tested from 65 to 80.

1. INTRODUCTION

Education in the 21st century has grown rapidly and progressed. The concept of 21st-century skills, according to the Raizen team, focuses on four categories: ways of thinking, ways of working, tools for working, and living in the world (Griffin et al., 2012). Globally, life can be affected by its development. Some of the main characteristics of globalization are (1) there is no world limit, (2) science and technology and their applications have progressed in human life; (3) human rights began to be fought for (4) cooperation and competence (Wulandari et al., 2014).

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The development of information technology influences the world of education, especially in the learning process. The learning process becomes easy and interesting. With the development of the use of information technology, there is a shift in the learning process, namely: 1) from training to appearances, 2) from classrooms to unlimited places, 3) from paper to paperless, 4) from physical facilities to network facilities, and 5) from cycle time to real-time (Gunawan, 2009; Kölling et al., 2003). Communication as an educational medium is carried out using communication media such as telephone, computer, internet, e-mail, etc. Teachers and students interact through face-to-face relationships using these media (Kölling et al., 2003).

Effective learning activities require a medium that supports absorbing as much information as possible. With the learning media, the learning process will be more effective and efficient in achieving the teaching goals (Atika et al., 2022; Sahida et al., 2020). Learning media can enhance students' teaching-learning process, which is expected to enhance the learning outcomes achieved (Lawrence & Tar, 2018; Nana Sudjana, 2016; Udin By Arifin et al., 2021). Students can learn independently by accessing and obtaining learning information, while the teacher's role in the learning process is to become a facilitator and evaluator (Tarihoran, 2019). However, in reality, in schools, some still have not used learning media optimally in the learning process. This situation also occurs in SMA Negeri 1 Kendari. The results of teacher observations and interviews at SMKN 1 Kendari show that the learning process still uses conventional learning methods. The teacher uses the module to explain the teaching material that the students have not understood by using the blackboard media. The use of these teaching methods makes student responses less than optimal. Students look unenthusiastic about participating in the learning process, resulting in a lack of students grasping power to understand the material. The unsatisfactory learning achievement in learning outcomes reflects a lack of learning capture power (Saidillah, 2018).

The existence of such a situation needs to be improved through learning. So that the learning carried out by the teacher is not monotonous and boring, the researchers utilize interactive learning media that can create an interesting and conducive learning atmosphere, namely the web, using the Google site. Google Site is an application for creating online publications that can create and insert various images, videos, and animations (Jubaidah & Zulkarnain, 2020). We can also add text, pictures, sounds, links, and videos to the worksheet from this Google site (Hidayatullah & Rakhmawati, 2016). The development of Google Site Media is supported by the availability of good school facilities in the form of an accounting laboratory and LCD projector, as well as an internet connection (WIFI) that can support the learning process in the network.

The development of the World Wide Web is very rapid. It has been used for various purposes resulting in changes in interactions between people or groups in various fields such as economics, politics, socio-culture, and education. (Wakil & N.A.Jawawi, 2019). The use of websites in learning can create a conducive learning environment for students while at the same time increasing student motivation in learning as well as providing opportunities for teachers and students to manage and guide learning activities inside and outside the classroom (Aljraiwi, 2017). The use of Google Sites is positively correlated with and affects learning outcomes using Google Sites for students at Rangsi University (Udomsil & Pankham, 2016). This research aligns with Puzzle learning media's significant effect on the learning outcomes of fourth-grade students at SDN 2 Sukomulyo Pujon Malang with t counts $>$ t tables, namely $4.35 > 2.080$ (Kusuma et al., 2018). Google site-based learning media is valid, practical, and effective for learning in distance education and training (Abarca, 2021). There are differences in students before and after using the media. In contrast to the research that the use of google-site as a material and media for learning the structure and function of plants proved to be influential in SMP PGRI Karang Tengah, the use of Google Site as a learning material and media was less effective (Broto et al., 2021). The weakness in previous research is that the learning assessment is carried out using a Google Form, which does not allow practical learning assessments.

The choice of web-based learning media cannot be separated. Web media at the educational level can provide better support for students with less ability, increase the response of students' involvement in the teaching and learning process, provide opportunities for accelerated learning for smart and talented students, and develop students' learning abilities effectively through individual learning experiences independently (Boulton, 2008). Websites in learning can provide learning resources in the form of electronic files accessed through navigation features on websites that provide learning needs for students such as sign this, sign out, curriculum, glossary, materials, quizzes, and so on (Nurhayati et al., 2020). Further research shows that developing classical guidance web media based on Google sites is very feasible, as evidenced by students' active participation rate in classical guidance activities based on Google sites reaching 97.72 % (Setyawan, 2019). Research on the subject of sociology, the results showed that interactive media was in the appropriate category with an average score of 4.62 to help students learn concretely, which in this media consisted of the main page, competencies, materials, evaluations, games,

announcements, and credits (Cahyo Nugroho & Hendrastomo, 2021). Thus, this Google site's web-based learning medium suits class XI accounting learning. By using the web-based Google site, it is also expected to be able to improve student accounting learning achievement. In this case, the Google site is used as a medium to make it easier for students to find information and become engaged in accounting practice questions. Students who actively open and complete evaluations on the Google site link are expected to be easier to understand and have more skills than other students, increasing their accounting learning achievement.

Based on the description above, the authors are interested in following up in the form of research activities, especially regarding "Development of Learning Media for Service and Trade Accounting Practices Based on Google Sites for Class XI Accounting Students at SMK Negeri 1 Kendari." The aims of this research are: 1) To develop Google site-based learning media for service and trade accounting practices for Class XI Accounting students at SMK Negeri 1 Kendari; and 2) To know the feasibility of the Google site-based service and trade accounting practice learning media based on the assessment of material experts, media experts, and students from the aspects of material, learning, display, language, and programming. (3) Knowing the increase in student learning outcomes after using the Google site-based service and trade accounting practice learning media.

2. METHODS

This type of research is research and development (Research and Development). This research was conducted in February-April 2022 at SMK Negeri 1 Kendari. The procedure used in this study is the ADDIE model, which stands for Analysis, Design, Development, Implementation, and Evaluation. The first stage consists of two steps: an analysis of student needs and an analysis of the curriculum. The analysis results become a reference and consideration in making learning media. The second stage is the design which includes 1) compiling materials, questions, and answer keys, 2) designing flowcharts, 3) formulating storyboards, 4) compiling instrument grids, and 5) providing tools. The third stage is developing learning media products that experts will validate to get advice and input from material and learning media experts. The fourth stage is the implementation of products that have been developed in real situations in the classroom to determine student responses to learning media. The last stage is the evaluation stage to measure the achievement of product development goals by increasing student learning outcomes by doing pre-test and post-test questions. The data collection instrument in this study was a questionnaire given to material experts, media experts, and field trials by calculating percentages based on the results of each questionnaire. The subjects of this study were two material experts, one learning media expert, and 27 students of class XI Accounting 4 at SMKN 1 Kendari. Table 1 shows the achievement percentage of the media and the interpretation of the media. Table 1 shows the decision on the eligibility criteria.

Table 1. Achievement Level and Eligibility Quality

Achievement Percentage	Interpretation
76-100%	Very Worthy
56-75%	Worthy
40-55%	Enough
0-39%	Less Worthy

3. RESULTS AND DISCUSSIONS

Results

In this development research, the results are: (1) google site-based accounting learning media for special journal materials; (2) validation results from material experts and media experts on google site-based accounting learning media that have been created; (3) results of analysis of student opinions on the use of google site-based accounting learning media; and (4) student learning outcomes (post-test) on the use of google site-based accounting learning media. The analysis stage is the first stage of the media development process. In the analysis of student needs, observations, and interviews were conducted. The results showed that students at SMKN 1 Kendari needed interactive and varied media following the subject matter of special journals. The design Stage is the second stage of the media development process. At this stage, the researcher collects information that supports the development of the Google site-based accounting learning media. The first step is to make a flowchart as shown in Figure 1.

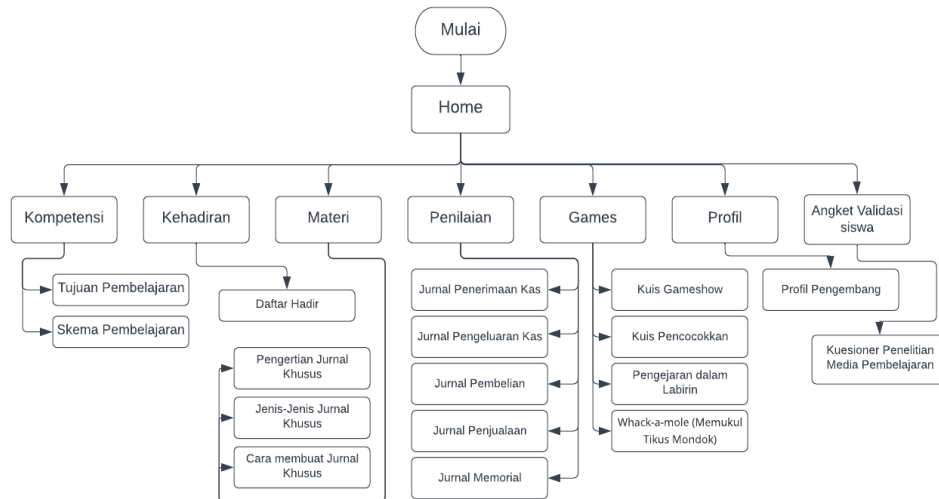


Figure 1. Flowchart of Google Site-Based Accounting Learning Media

After the flowchart is complete, the next step is to create a media design (storyboard). Figure 2 and Figure 3 is a storyboard design from the Google site-based accounting learning media.

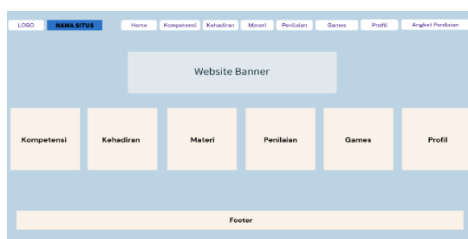


Figure 2. Home View Storyboards



Figure 3. Material Display Storyboard

The next stage is preparing material, questions, and answer keys. The material that has been collected is divided into several more detailed parts. The material starts from understanding special journals and progresses to how to make special journals. The materials, questions, and answer keys are made in word, excel, and PDF formats to make it easier to copy and paste into the learning media of the Google Site website. The last stage is hardware and software consisting of Windows 10, Microsoft Office Word, Microsoft Excel, and Google Chrome and developing instruments for validating media experts, material experts, and student trials.

The third stage is called Development Stage. At this stage, the product that has been designed is made into a physical form and undergoes the product validation process. The first step is to create a learning medium for service and trade accounting practices based on the Google site. Figure 4, Figure 5, Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, and Figure 11 are the results of making learning media based on the Google site.



Figure 4. Home Page

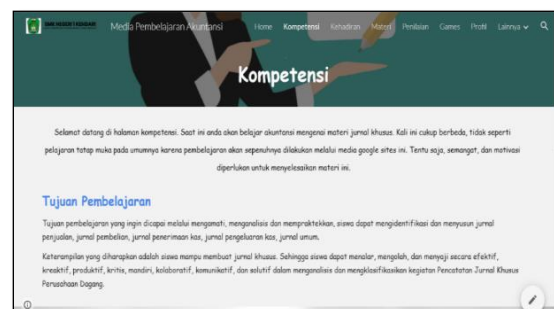


Figure 5. Competency



Figure 6. Attendance



Figure 7. Material

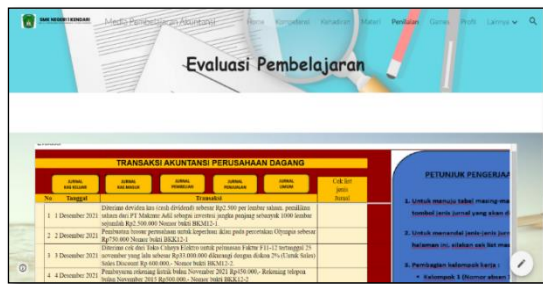


Figure 8. Rating

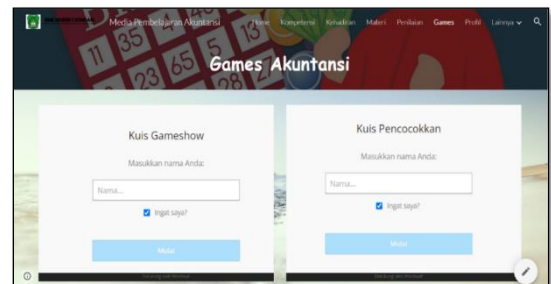


Figure 9. Games



Figure 10. Profile



Figure 11. Student Validation Questionnaire

After the learning media has been created, validation is carried out by material experts and media experts for validation using a questionnaire with an assessment of each indicator. The validation results from material experts and media experts are shown in Table 2 and Table 3.

Table 2. Material Expert Validation Results

Assessment Aspect	First Validator	Second Validator	Average	Percentage
Theory	3.70	3.60	3.65	91.25%
language	4.00	3.40	3.70	92.50%
Presentation	4.00	3.67	3.83	95.83%
Media Effects on Learning Strategies	4.00	3.50	3.75	93.75%
Average Total Validation (RTV)			3.71	92.61%
Criteria			Very Worthy	

Table 3. Media Expert Validation Results

Assessment Aspect	Score	Percentage
Cover Design and Layout/Layout	3.33	83.33%
Text	3.67	91.67%
Pictures and Videos	3.50	87.50%
Language	3.33	83.33%
Use	3.80	95.00 %
Average Total Validation (RTV)		3.56
Criteria		Very Worthy

From Table 2, it can be seen that the validity assessment by material experts gets an average percentage of 92.61%. It shows that the *Google Site-based Accounting Learning Media* developed by Material Experts can be used as accounting learning media. Meanwhile, from Table 3, the validity assessment by media experts had an average percentage of 88.89%. It shows that the *Google site-based* accounting learning media selected by media experts can be used as accounting learning media. Then after evaluating the questionnaire, the validator provides criticism and suggestions so that the developed product can be effectively used in schools. The revision made by material expert 1 is that there needs to be more practice questions related to special journal transaction documents, such as original invoices, copy invoices, original Kantan notes, etc. Meanwhile, the revision of media experts is adding material in PDF form and student profiles according to the name of the absence.

The fourth stage is implementation. The implementation stage is carried out by distributing learning media to 27 students of Class XI Accounting 4 SMKN 1 Kendari, which is located at Jalan Jend, Ahmad Yani Kendari No. 17. Before the media is used, students are asked to get ready to take part in learning in the Accounting computer lab. After that, learning is carried out in the lab with the help of the *Google Site-Based Accounting Learning Media* by accessing the address <http://sites.google.com/view/jurnal-special/home> through the internet network facilities provided by the school. At the end of the lesson, students are asked for their responses or opinions by filling out the questionnaire that has been given.

Table 4. Student Assessment Results on Learning Media

Assessment Aspect	Observation score	Expected score	Appropriateness
language	203	216	93.98%
Programming	97	108	89.81%
Appearance	183	216	84.72%
Execution	116	135	85.93%
Amount	599	675	88.61%

Based on Table 4, the student's assessment of the *Google Site-based Accounting Learning Media* shows an average percentage of 88.61%. It shows that the *Google site-based accounting learning media* selected by media experts can be used as accounting learning media. The fifth stage is Evaluation Stage. The evaluation stage uses field trial respondents and measures the effectiveness of the *Google Site-based Accounting Learning Media*. The researchers gave a *pre-test* to the students before they were given treatment or applied the product and a *post-test* after the students had received the treatment or applied the product to determine the effectiveness of the learning media.

Table 5. Results of Pre-Test and Post-Test

	Pre-Test Score	Post-Test Score
Amount	1756	2152
Average	65	80
KKM		75

Table 5 shows a change in student learning outcomes before and after using the *Google Site-based Accounting Learning Media*. The average after learning using the *Google site-based accounting learning media* was 80 from the previous 65, which showed that most students had exceeded the KKM score of 75. Learning after using the *Google site-based accounting learning media* designed by the developer could improve student learning outcomes.

Discussion

Based on the results of the above analysis, the discussion can be described as follows. The research and development procedure was adapted and modified from the R&D steps of ADDIE Dick and Carey (1996) as revealed, consisting of several stages: analysis, design, development, implementation, and evaluation (Drljača et al., 2017; Mulyatiningsih, 2014). *Google site-based Accounting Learning Media* starts from the stage of analyzing the needs of students. Observations were carried out in February 2022. The number of students who attended was 27 students. The observations show that the teacher still uses the lecture method using a module with whiteboard media. Students are not enthusiastic about participating in the learning process. Students think the learning process will be more interesting with the existence of varied learning media by utilizing the facilities available at the school (Sudarsana et al., 2019).

After getting information about the problems faced by students and considering the existing potential, the researchers conducted a curriculum analysis by discussing with the teacher related subjects and basic competencies that would be taken as material on the Google site-based Accounting Learning Media by identifying the syllabus used, thus deciding on Accounting subjects on the basic competencies of Applying Transaction Recording into Special Journals. This basic competency is a basic competency that must be achieved by students, and consists of various kinds of material and is considered difficult because students must be careful in compiling each date in the transaction, distinguishing each type of transaction, and classifying each number or the code in the transaction. The second stage is the design stage. At this stage, the researcher first designs the initial media design by making a flowchart and storyboard. Flowchart determines the learning flow and plans the content in the presentation of the material (Dalle et al., 2017; Frey & Sutton, 2010). Then create a Storyboard, which is an outline of media content in general. After that, arrange the materials, questions, and answer keys using Microsoft Word, Excel, and PDF. For the manufacturing process, through the google site platform.

The next stage is development. At this stage, the researcher creates media, such as collecting materials, determining the material with KD, taking pictures, and determining the videos and games that will be included in the media. In general, the components contained in the media consist of the home menu, competence, attendance, materials, assessments, games, and profiles. After developing the media, the researchers validated the media to the experts to obtain criticism and suggestions from the validator. Validation by experts was carried out to know the product's quality and the feasibility of the google site-based accounting learning media to be used in the school. The research instrument used in media development is a checklist questionnaire for material experts, media experts, and students. Accounting Learning Media Based on google Sites is implemented directly to the subject of field trials. The number of research subjects was 27 students of class XI Accounting 4 SMK Negeri 1 Kendari. Students seemed enthusiastic when learning Accounting took place at this field test stage. It can be seen from their interest when they start accessing the google site in the laboratory. Students feel challenged to work on quiz questions on the google site page because they have never worked on accounting questions packaged in games like this google site-based learning media.

The feasibility of learning media for service and trade accounting practices based on the google site is seen based on the feasibility of the assessment of material experts and media experts, student responses, and the effectiveness of learning media. The validation results concluded that the learning media developed had met the criteria for proper use, as evidenced by the material expert's assessment getting a percentage of 92.61% and the media expert's assessment getting a percentage of 88.89%. It is in line with previous research, which states in their research results that material expert product assessments get an average percentage of 96.57%, design expert product assessments get an average percentage of 94%, and media expert product assessments get an average percentage of 98%, and all meet the very good category (K.A. Nalasari et al., 2021). However, in this study, the development design was limited to the analysis, design, and development processes.

The product specifications that students can use are that students can: 1) know the learning objectives to be studied, 2) fill out attendance at each meeting, 3) learn learning materials about the meaning of special journals, types of special journals, and how to make special journals at the same time can accessing learning videos, 4) working on independent practicum questions through google sheets contained in the learning media, as well as being able to see the scores directly, 5) understanding the subject matter through the games provided, such as matching quizzes, gameshow quizzes, chasing in a maze, and whack-a-mole (hitting the mouse in the hole), and 6) knowing the developer profile of the learning media product. While the product specifications that teachers can use our teachers can: 1) explain the learning objectives to be studied, 2) monitor student attendance at each meeting, 3) present material related to the meaning of special journals, types of special journals, and how to make journals special and learning videos, 4) developing assessments through google sheets by replacing transaction questions in the form of cash in, cash out, original invoices, copy invoices, original cash notes, copy cash notes, original credit notes, and copy credit notes, 5) presenting games in teaching and learning activities to help students understand the subject matter, such as matching quizzes, gameshow quizzes, chasing in a maze, and whack-a-mole (hitting a mouse in a hole), and 6) inserting a developer profile of instructional media products.

The results of student responses get a percentage of 88.61% which is included in the feasible category. It can be interpreted that the accounting learning media based on the google site is very well received by students due to the clear material presented and the presence of games or games in the google site learning media so that students can easily read and understand the material presented on the google site based learning media. This statement aligns with what was said about the games related to learning materials so that students can play and learn simultaneously (Cahyo Nugroho & Hendrastomo, 2021).

Something is said to be effective if it can describe a person's success in achieving the goals or objectives to be achieved (Sobarna, 2014). In this study, the target or goal to be achieved is the google site-based accounting learning media which can improve student learning outcomes seen from the pre-test and post-test scores. The pre-test and post-test results showed increased student learning outcomes after learning to use the google site-based accounting learning media. The average score of students before using the google site-based accounting learning media was 65. These results indicate that the average student score is still below the KKM. At the same time, the average value of students after using the google site-based accounting learning media is 80, where 22 students get scores above the KKM. From these results, it can be concluded that the google site-based accounting learning media effectively improves student learning outcomes. It is in line with previous research where in their research, the developed media using google-site as learning materials and media in science subjects can improve students' cognitive learning outcomes (Broto et al., 2021).

4. CONCLUSION

Based on the research and development data that have been described, it can be concluded that: 1) the development of Google-based learning media for service and trade accounting practice using the ADDIE development model, namely analysis, design, development, implementation, and evaluation (evaluation), 2) The results of the material expert assessment obtained a percentage of 92.61%, so the product in the form of learning media for service and trade accounting practices based on the Google site meets the very feasible category. After that, the results of the validation by media experts obtained a percentage of 88.89%. The product in the form of learning media for service and trade accounting practices based on Google's site met the feasible category. Students' assessment of learning media showed a positive response because the overall assessment aspect showed a percentage of 88.61%. The effectiveness of learning media can be seen by comparing the value of learning outcomes before and after using the developed learning media. There was an increase in the average student score after using the Google site-based service and trade accounting practice learning media, from 65 to 80. So it can be said that the Google site-based service and trade accounting practice learning medium is effective because it can improve student learning outcomes. Based on the assessment results, the learning medium for service and trade accounting practices based on the Google site's special journal material is very suitable for learning.

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