

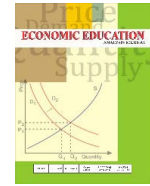


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Digital Book Development as Teaching Material for Computer Accounting Practicum Using Accurate Software

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Abstract

Accurate is an alternative accounting software besides MYOB that can be used to support the learning and teaching in the accounting computer. This research aims to develop an Accurate digital book. This study adopted research and development model and Borg and Gall, which consists of research and initial data collection, planning and development, expert and user validation, revision, field testing, and finished product. The findings indicate that the Accurate digital book developed by the researcher was considered very feasible by material experts, media experts, and limited users. In addition, the Accurate digital book is also considered effective in increasing user understanding of the application of Accurate. Therefore, it is suggested to involve this digital book for accounting computer.

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INTRODUCTION

The improvement of education quality has been a central issue for government and educational institutions. Some scholars remarked that the enhancement educational quality can be focused on the learning process (Kim et al., 2019; Correia et al., 2020), while other consensus take a degree on the elaboration of technology in education (Siron et al., 2020). For, instance, Wardoyo et al. (2021) suggested to use game-based learning in enhancing students' critical thinking skills. In addition, the educational institutions need to provide knowledge and skills to enable students have high competitiveness in the workplace. In doing so, a prior study mentioned that it requires to fulfilling teaching and learning facilities in the classroom. It includes the availability of books that support students' understanding of the material in classroom learning (Pratiwi & Rochmawati, 2019).

In regard with the technological developments, educational institutions have responded by renewing in the teaching and learning process utilizing technology. Concerning Indonesia, most universities have involved e-learning to support the teaching and learning process. With these facilities, teachers can develop digital-based teaching materials that can be accessed by students through their respective e-learning anywhere and anytime. Teaching materials are compiled from various reliable sources to assist the learning process of students (Prastowo, 2015). Furthermore, the development of digital teaching materials is also a solution to the limitations of printed books provided in the library, because every student need teaching material to support understanding the material that has been given (Saputri & Susilowibowo, 2020).

As example, in accounting computer practicum learning, MYOB Accounting application is the most used by students and educators due to many materials and learning media available. Meanwhile, in 1999 the release of an accounting application, or well-known as Accurate which provided by CPSoft app-

lied using accounting standards in Indonesia. In addition, it has reliable and reliable quality, with a recommendation of 80% to fellow businessmen because of the ease of operation as well. Another feature that adds value to this application is the feature of calculating depreciation on fixed assets and tax invoices following current regulations (CPSoft, 2015). However, the main problem is the limited resources or teaching materials from the Accurate application provided by the university. Mastery of Accurate, especially for accounting students, has great benefits for developing their skills in the world of work.

A previous study by Putra and Susilowibowo (2021) remarked that the development of Android-based e-module teaching materials for accounting computer subjects proved effective and has been validated by experts as very suitable for use in independent learning by students. Similarly, Saputri and Susilowibowo (2020) noted that the development of e-book teaching materials on accounting practicum subjects for manufacturing companies was validated as very feasible for students. Furthermore, Lestari and Listiadi (2021) mentioned that is in the form of developing e-book teaching materials based on a scientific approach to manufacturing company accounting practicum subjects that have been validated as very feasible. It indicates that the use of e-book is effective to be used among students, primarily for accounting computer program.

Since the matter of the use of e-module, there is no study that use accurate software for accounting program. Therefore, this research aims to develop accurate digital book-based accounting computer teaching materials as a support for accounting student learning resources that can be accessed through e-learning. The digital book that will be developed for accurate accounting computer practicum will contain material accompanied by illustrations of the stages of accounting practice using the accurate application. This is because the accurate accounting computer learning process is designed with a blended learning system. Learning can be done anywhere and

anytime by utilizing existing technology. This study will provide contribution on the literature on how to enhance teaching and learning of accounting computer using e-module based accurate software.

METHODS

This study followed the research and development adapting from Borg and Gall development stages. The model development model was chosen because it has systematic and complete stages (Personal, 2017). The product developed is in the form of accurate accounting computer practicum teaching materials that are packaged in the form of an Android-based digital book. This development research only adapts the six stages of the Borg & Gall development model. However, this research stages are adjusted based on development needs and limitations.

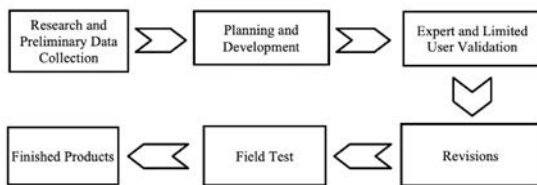


Figure 1. The Flow of Module Development

The product feasibility test is performed by material experts, media experts, and users to assess the attractiveness and accuracy of media content. Subjects This field trial is carried out after the product is declared valid and feasible by material and media experts (S. Akbar, 2015). This field trial will involve partners in this research. In the field trial, the researcher explained the instructions for using learning media and operating the application. The results of the feasibility test of this development product were analyzed using a percentage descriptive analysis technique. The descriptive percentage is converting quantitative data into percentages (Sugiyono, 2013). The results of expert validation and limited users are calculated using the formula and in

Table 1.

$$\text{Validity} = (\text{TSe}/\text{TSh}) \times 100\%$$

Table 1. The Percentage Analysis of Eligibility Criteria

Percentage	Criteria	Decision
81 – 100	Strongly valid	It can be used without revision
61 – 80	Valid	It can be used with minor revision
41 – 60	Moderate	It is recommended not to use
21 – 40	Invalid	It cannot be used
0 – 20	Strongly invalid	It absolutely cannot be used

Source: Akbar (2015)

RESULTS AND DISCUSSION

Research and initial data collection were carried out by researchers to obtain data that would be used as the basis for the process of developing learning innovations. The initial stage of this research was carried out by collecting information and literature studies from books, journals, and information on the internet. The results obtained from this initial stage consist of several things. First, Accurate can be used as alternative accounting software in the learning process of Computer Accounting. Second, sources or teaching materials that discuss the use of Accurate are still minimal and need to be developed further. Third, teaching materials can be developed by utilizing technological advances in the form of digital books to support the Accurate Accounting Computer learning process. Planning and development aim to produce teaching materials in the form of digital books that are ready to be validated by experts and limited users. The digital book Accurate developed consists of several menus and features, including the following figures.



Figure 2. Opening Screen



Figure 3. Opening Screen (Welcome)



Figure 8. Display of Question Bank



Figure 9. Tutorial Module Display

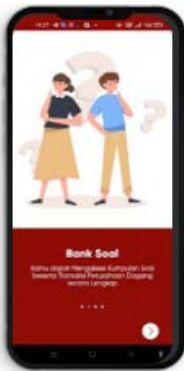


Figure 4. Opening Screen (Question Bank)



Figure 5. Opening Screen (Module)



Figure 10. Tutorial Video Display



Figure 11. Display of Instructions for Use

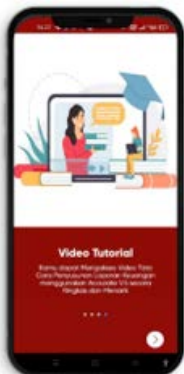


Figure 6. Opening Screen (Video)



Figure 7. Menu Display

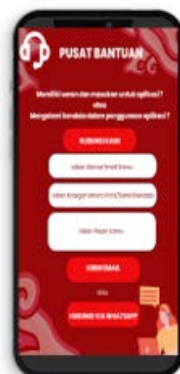


Figure 12. Helpdesk Display



Figure 13. Logout

The validity of experts and limited users aims to get an assessment from experts and some limited users regarding the level of validity of the digital book developed by the researcher. The results of the expert and limited user validity test were obtained by filling out a questionnaire distributed through a google

form. Result from research is that the Accurate digital book developed by the researcher obtained a validity level of 91% from material experts with very feasible indicators. The validity level of media experts regarding the Accurate digital book developed by the researcher is 89% with a very feasible indicator.

The level of validity from some limited users regarding the Accurate digital book developed by the researcher is 90% with very decent indicators. Criticisms and suggestions obtained by researchers to proceed to the revision stage consist of several things. First, the Accurate digital book should be further developed to be accessible via a laptop. Second, the Question and Material Bank menu should add pages and scroll down or up. Finally, the log-out button is less effective in its use and should be improved to make it easier for users.

Improvements or revisions are made to the input provided by creating an Accurate Book website version to make it easier for laptop users. The application has made improvements by paying attention to the addition of the scroll button up and down and the logout button. Applications that have been perfected are then tested on a wider range of users or also called field tests. The field test stage is carried out by testing the application on users (students) to determine the effectiveness of its use (Amirullah & Hardinata, 2019). Learning media can be said to be effective if they can actively improve student achievement which can be measured through learning outcomes (van Alten et al., 2020). The effectiveness is carried out through an experimental test with a one-group pretest-posttest model to determine changes before and after using the application.

Field user testing was conducted on 25 participants of the Accurate training activity consisting of teachers and students. Questions were distributed in the form of a pretest and posttest. These results were tested using a paired sample t-test through SPSS. The results of the normality test showed that the normal distribution with sig. > 0.05 which can be seen in Table 2.

Table 2. Results of the Data Normality Test

Test	Results	Explanation
Pre-test	0.282	Normal
Post-test	0.965	Normal

Source: Processed Primary Data, 2023

Table 3. The Effectiveness Test

Test	Results	Explanation
Pretest-Posttest	0.040	There is a difference (effective)

Source: Processed Primary Data, 2023

From Table 3, it can be seen that data that is normally distributed is a requirement for paired sample t-test to determine the effectiveness with sig. < 0.05. The results of the effectiveness test on the ability of the trainees to operate Accurate indicate that these teaching materials have been prepared effectively. Changes in the pretest and posttest scores indicate that there is a progressive increase in the ability to operate the Accurate V5 software program using digital book-based teaching materials as a companion. The results of the effectiveness test above can be displayed in Figure 14.

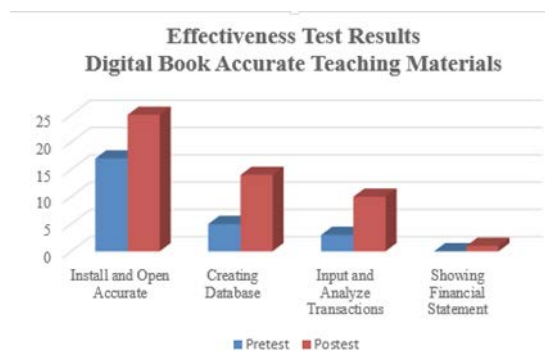


Figure 14. Diagram of Digital Book Accurate Effectiveness Test Results

The results of the Digital Book Accurate effectiveness test show that there is a significant change in its utilization. The results of the assessment of all aspects of the field test are shown in Table 4.

The finished product is produced after going through the stages. The digital book accurate teaching materials are designed according to the use of accounting technology in schools, namely Accurate so that the material presented is related to the program used. The media developed using a coded website and

Table 4. Results of Field Test

No.	Assessment Aspect	Percentage
1	Technical Quality	86%
2	Material Presentation	88%
3	Display Quality	89%
4	Interactivity	89%
5	Overall Rating	92%
Validity		89%
Decision		Very Feasible

Source: Processed Primary Data, 2023

visual code software is intended to improve the ability of teachers and students to solve problems related to the process of preparing financial reports. This application is intended to improve learning activities by utilizing the use of technology in it (Cheng & Ding, 2021). The goal is that teachers and students have qualified competencies in the use of technology in the accounting field so that they can increase their competence as teachers and for students to be able to face the demands of the current global era.

CONCLUSION

Digital Book Accurate is packaged in the form of an android application with a focus on the discussion on corporate accounting computers. This application is intended for users, teachers, students, students, and accounting practitioners who want to explore the preparation of financial reports using Accurate V5. The results of the feasibility test carried out by experts and limited trials have shown that the application has met the assessment indicators on the material and technical aspects. Expert recommendations have been followed up through improvements and refinements to the development product so that it is ready to be implemented. The results of the effectiveness test also show that this application can improve the user's ability to operate an ac-

counting computer so this application can be said to be effective. In the implementation of learning, the application has been self-instructional so that it can be used independently, however, there is a need for the teacher's role as a facilitator and mentor for students if they have difficulty understanding and solving cases on an accounting computer. This application is also considered practical by users through field trials so it is suitable for use in the process of accounting computer learning activities by paying attention to students' self-pacing. This study has not been able to carry out experimental activities using the control class and the experimental class, to determine the differences in learning outcomes in the treated and not treated classes. Based on input from the limited user trial, it was suggested that the application could be accessed via a laptop. Suggestions for further researchers can compile these teaching materials that can be accessed via a laptop or computer.

REFERENCES

- Akbar, S. (2015). *Instrumen Perangkat Pembelajaran*. Bandung, Rosda
- Amirullah, G., & Hardinata, R. (2019). Pengembangan Mobile Learning Bagi Pembelajaran. <https://doi.org/10.21009/Jkkp>
- Astuti, M., Sudira, P., Mutohari, F., & Nurtanto, M. (2021). Competency of Digital Technology: The Maturity Levels of Teachers and Students in Vocational Education in Indonesia. *Journal of Education Technology*, 5(2), 254–262.
- Bello-Bravo, J., Brooks, I., Lutomia, A. N., Bohonos, J., Medendorp, J., & Pittendrigh, B. (2021). Breaking out: the turning point in learning using mobile technology. *Heliyon*, 7(3), e06595. <https://doi.org/10.1016/J.HELIYON.2021.E06595>
- Chen, C. H., & Tsai, C. C. (2021). In-service teachers' conceptions of mobile technology-integrated instruction: Tendency towards student-centered learning. *Computers & Education*, 170, 104224. <https://doi.org/10.1016/J.COMPEDU.2021.104224>

- Cheng, P., & Ding, R. (2021). The effect of on-line review exercises on student course engagement and learning performance: A case study of an introductory financial accounting course at an international joint venture university. *Journal of Accounting Education*, 54. <https://doi.org/10.1016/j.jaccedu.2020.100699>
- Correia, A. P., Liu, C., & Xu, F. (2020). Evaluating videoconferencing systems for the quality of the educational experience. *Distance Education*, 41(4), 429-452.
- Hasyim, A. R., Syarif, S., Ahmad, M., Niswar, M., Stang, & Nasrudin, A. M. (2021). Enhance midwifery student skills about active management third stage labor via learning media. *Gaceta Sanitaria*, 35, S284-S287. <https://doi.org/10.1016/J.GACETA.2021.10.035>
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21st-century learners. *Research in Comparative and International Education*, 14(1), 99-117.
- Lai, C., & Jin, T. (2021). Teacher professional identity and the nature of technology integration. *Computers & Education*, 175, 104314. <https://doi.org/10.1016/J.COMPEDU.2021.104314>
- Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behavior prediction. *Computers & Education*, 179, 104413. <https://doi.org/10.1016/J.COMPEDU.2021.104413>
- Putra, A. P., & Susilowibowo, J. (2021). E-Modul Berbasis Android Mata Pelajaran Komputer Akuntansi Program Aplikasi Accurate Accounting V5 untuk Siswa Kelas XI. *Jurnal Penelitian dan Pengembangan Pendidikan*, 5(2), 250-256.
- Putra, P. A., & Susilowibowo, J. (2021). E-Modul Berbasis Android Mata Pelajaran Komputer Akuntansi Program Aplikasi Accurate Accounting V5 untuk Siswa Kelas XI. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 5(2), 250-256.
- Rahmawati, S. (2019). Pengembangan Bahan Ajar E-book pada Mata Pelajaran Prktikum Akuntansi Lembaga Berbasis Kontekstual untuk SMK.
- Salleh, S. Md., Tasir, Z., & Shukor, N. A. (2012). Web-Based Simulation Learning Framework to Enhance Students' Critical Thinking Skills. *Procedia - Social and Behavioral Sciences*, 64, 372-381. <https://doi.org/10.1016/J.SBSPRO.2012.11.044>
- Santi, E., Mustika, R., Endrawati, D., Akuntansi, J., & Padang, P. N. (2020). Peningkatan Kompetensi guru Akuntansi dalam Pengajaran Komputer Akuntansi. *Jurnal Akuntansi Dan Manajemen*, 15(2), 133-140.
- Saputri, A. E., & Susilowibowo, J. (2020). Pengembangan Bahan Ajar E-Book pada Mata Pelajaran Praktikum Akuntansi Perusahaan Manufaktur. *Jurnal Penelitian Pendidikan*, 20(2), 154-162.
- Sayibu, M., Jianxun, C., Akintunde, T. Y., Olayemi Hafeez, R., Koroma, J., Amosun, T. S., & Shahani, R. (2021). Nexus between students' attitude towards self-learning, Tencent APP usability, mobile-learning, and innovative performance. *Social Sciences & Humanities Open*, 4(1), 100217. <https://doi.org/10.1016/J.SSAHO.2021.100217>
- Siron, Y., Wibowo, A., & Narmaditya, B. S. (2020). Factors affecting the adoption of e-learning in Indonesia: Lesson from Covid-19. *JOTSE: Journal of Technology and Science Education*, 10(2), 282-295.
- Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif Dan R & D. Alfabeta, Cv.
- van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2020). Self-regulated learning support in flipped learning videos enhances learning outcomes. *Computers and Education*, 158. <https://doi.org/10.1016/j.compedu.2020.104000>
- Wardoyo, C., Satrio, Y. D., Narmaditya, B. S., & Wibowo, A. (2021). Do technological knowledge and game-based learning promote students' achievement: lesson from Indonesia. *Heliyon*, 7(11), e08467.