

The Application Development of Various Types of Professionals for Android Based on Information Services Career Senior High School Students State 6 Bandar Lampung

By Syarifuddin Dahlan

The Application Development of Various Types of Professionals for Android Based on Information Services Career Senior High School Students State 6 Bandar Lampung

Muhammad Arifin Efendi, Riswandi, Syarifuddin Dahlan
Lampung University, Indonesia

Abstract: - This study aim is to produce products such as media android based applications for career information services on the learner SMAN 6 Bandar Lampung. This research is development. Subjects were taken in this study using the technique of random as many as 26 learners in SMAN 6 Bandar Lampung. Data collection using questionnaires and observation. Analysis of the data used to use conversion guidelines assessment scores into five categories to see the differences between the mean pretest and posttest mean then performed paired samples Test. Products that dihasil own validation subject matter experts, expert design, and media experts, each of which states that the product is eligible for ujicobakan after the revision. The results of the small group trial, limited testing and field trials produce products in very good criteria. Furthermore, the products produced in the form of Android-based applications have a significant efficacy for career information services. This is confirmed by the results of Test paired samples were obtained 38437 t count > t table 2086 thus then, Ho is rejected and Ha accepted, which means that there is an increasing before and after using android based applications for career information services.

Keywords: android-based applications, various types of professions, career information services

I. BACKGROUND

Service information guidance and counseling services that enable learners to receive and understand a variety of information that can be used as a material consideration and decision-making for the benefit of learners (ZainalAqib 2012: 80). Service information is a service of guidance for the provision of information, explanation and guidance. If seen from the explanation of the information service could mean that the services are all sources of information to get all the science and knowledge we need.

Infromasi service this part of the guidance counseling discount destination

1. The students can orient themselves to the information obtained, especially for his life, both during schooldays and after completing school;
2. students know the sources of information needed;
3. students can use the group's activities as a means of obtaining information; and

4. Students can choose exactly the opportunities that exist in the environment in accordance with the interests and his ability.

But the fact is the purpose of this information service has not been achieved since the presentation only use modules so that learners are less interesting in following information services so that the results of the post-test after being given information services tend to be low. The statement was corroborated with the data post-test results provided by the teacher BK last year with the same material the average values obtained knowledge of various professions and job prospects is below standard, namely 61.40. If the provision of career information services continue to use print media without any other media it is difficult learners to increase knowledge about the profession and job prospects.

Ada lot of creative ways to become a teacher in the learning process, one of them by using a medium of learning in the learning process. The use of instructional media is a part that can not be separated and it is an integration of the learning methods used. The position of instructional media has an important role because it can help the student learning process. The use of instructional media, abstract learning material can be concretized in learning JokoKuswanto & FeRRIRadiansah (2018: 1),

With the use of the media can improve achievement and student motivation. With the medium of learning will make the learning process more interesting, for example in terms of appearance, combined with a few pictures or animations. The attractiveness of the physical appearance greatly affect the learning process, the more compelling the media to see students more motivated to learn so affecthacyl student learning (Resiani: 2015)

Based on the problems that researcher wants to use other ways to provide career information service that is using android based applications. Application developed Researcher is expected dapanmengefesiensikan and streamline service career information on the learner in class XI SMAN 6 Bandar Lampung. I used this medium because of the current state of modern versatile as well as their rapidly developing

technology so fast. Apart from that teknologi and education has a close connection with one another, especially in the era of globalization. -Aktifitas education activities helped in penyelenggaraannya because of rapid technological advances, one of which is the ease of access to obtain information through the Internet with media *smartphone* (TotokKumiawan 2017: 1),

II. THEORITICAL REVIEW

Bimbingan counseling is an assistance provided by counselors to counseling so that counseling is able to resolve its problems and it develops their potential as optimally as possible independently. As a subsystem of schooling, guidance and counseling in motion and its implementation is never separated from careful planning and applying. It is intended that the achievement of results in the context of its contribution to the achievement of educational goals in school can be seen. To achieve planning counseling program that is effective and efficient, then there are some things you should do that; student needs analysis, goal setting guidance and counseling, school situation analysis, determining the types of activities to be implemented, the determination method of implementation of activities, the establishment of personnel activities,

Service informati¹¹ is guidance and counseling services that enable learners to receive and understand a variety of information that can be used as a material consideration and decision-making for the benefit of learners (ZainalAqib 2012: 80). Service information is a service of guidance for the provision of information, explanation and guidance.

According to Winkel, "the information service is a service that seeks to meet the shortage of people will the information they need. Service information is also significant efforts to equip learners with the knowledge and understanding of the environment and about the process of the development of young children".

Technological development in this research is the application software specified in the android based smartphone. In general, the software is closely associated with the use of computers, because every software created especially dahulu will be processed by computer. Computer software is a general term used to describe a collection of programs, procedures and documentation computer perform multiple tasks on a computer system⁶ wimatra, et al., 2008).softwarejugA can be defined as a set of electronic data is stored and managed by computers, electronic data can be either programs or instructions that are⁵ed to run the computer (Vicky, 2012). Globlasisasi in the era of information and communication technology developments have an impact on the world of education. The use of software-based media Dapa used in the provision of guidance and counseling services. The type of software that will be developed are the type of user applica¹¹ based on Android. In line with the development of Information and Communication Technology (ICT). The development of the

software using the app is not only focused on the field of computerization, but also extended to the field of mobile (Mobile phones, PDAs, laptops, etc.). Therefore,

III. RESEARCH METHODS

In this paper, the researcher applied research and development developed by Borg and Gall (1983). It has ten (10) stages of the conduction strategy in education society. Khoiriyah(2017) in generally those stages folloed to create the product explained as bellow:

1. A preliminary investigation (pre-survey) and the initial data collection, including literature, classroom observation, identification of problems, and summarizes the problems
2. Planning, planning is important in the statement of goals to be achieved product to be developed
3. Develop type / shape of the initial products include: preparation of teaching materials, preparation of handbooks, and evaluation tools.
4. To test the initial stage, ie the evaluation of experts in instructional design, information technology, and multimedia.
5. Revise its main products, based on feedback and suggestions from the initial field test results
6. Conduct field trials, is used to obtain an evaluation of the product. Questionnaires were made to get feedback from students who become object of Trial research.
7. To revise the operational product, based on input and suggestions on field test results and practitioners.
8. Operational field test
9. Make improvements to the final product, based on the field test
10. Doing the dissemination and implementation of the product, and distribute the product.

In this study, the procedure used is a modification of the model of development Borg & Gall. This development procedure includes five stages:

a. Needs Analysis Phase

Pada stage is conducted a needs analysis to determine poduk objectives that will be developed in the form of media monopoly-based career simulation game.

b. Planning phase

1) Assign material

Pada stage was stated basis for choosing a career as a follow-up study after school focused on the kinds, types and various departments at the college. Career field chosen because according to competence and background of the researcher as a teacher BK. In addition, when the researchers were in the field as a teacher BK, many teachers and learners who have difficulties and the lack of use of

the media in career planning (advanced studies) preparation after school.

- 2) Assessing the subjects according to the curriculum
Service career fields assessed in accordance with the curriculum guides are current
- 3) Develop instructional media quality assessment instrument

Instrument is used to assess the quality of learning media in the form of android-based application is a questionnaire that contains an assessment of the medium.

c. Early Stage Product Development

- 1) Designing the initial product design format
Format initial products are designed according to the needs and the material that has been studied.
- 2) Creating media products careers app
PaThis stage da instructional media products made according to a predefined format.

d. Evaluation and validation phase

Proses validation is performed by expert media and subject matter experts. The result is a suggestion, comment, criticism and feedback that can be used as a basis to revise the media are developed and as a basis for testing the product on the learner. The test is done in three stages of testing an individual (one to one trying out), the small group trial (small group tryout), and field trials (field tryout). Of these trials, analysis and revision if it is still necessary for the improvement of the product.

e. The end product stage

At this stage the product has been produced in the form of android-based application which has been revised based on field trials

In the assessment phase of validation, on some models of the validation test will measure the acceptability criteria on product development by experts in the respective fields with minimal education S2. As for the small group test, limited testing and field trials are the students of class XI SMAN 6 Bandar Lampung.

In this development empirically, the analysis of the data used is content analysis and descriptive analysis of the percentage which the content analysis is used to menganalisis qualitative data obtained from the suggestions, criticisms, feedback from reviewer media, expert validation and field trials. The results of these analyzes are used to refine and revise the products developed. While the presentation of descriptive analysis obtained from the questionnaire given to the subject matter experts, design, media and the courts.

IV. RESULTS AND DISCUSSION

A. The conditions and the potential for android-based application development for career information service

The initial condition of career information services conducted by BK teachers are less effective and less attractive due to the implementation BK teachers using only the print media it makes the learners feel bored bored that is less interested in following a career informai services. From the pre-test conducted by the researchers to determine the learners' awareness and knowledge about the profession and job prospects there are an average score of 61.40. This value is still far from where the graduation standards graduation at the current value of 75.00. Moving on from this issue the researcher wants to make a change in the conduct of an exciting career information services effective and not boring. Konsidi see today that an all-digital, the researchers developed the media for information services, namely career android based applications. On the development of Android-based media services are expected to ease learners to understand and learn about the services provided by the teacher BK and may increase the motivation of learners.

B. The application development process different types of Android-based professions for career information service,

In produce applications that are expected to have gone through various processes. The process is the first among planning. In the plan include the establishment of material and reviewing career information service material according to curriculum.

Produk media career information service that is android based application that was developed as a whole discusses the profession orientation which includes the information about the various professions and job prospects, and descriptions about the visual appearance of the components contained in the product with the topic BST of professions and media outlook for android application works can be found in the appendix.

Furthermore, to generate the quality application then tested validation by several experts including subject matter experts, expert design, and media experts. Following validation of the results of the experts:

	expert Content	expert Design	expert Media
overall Score	50.00	36.00	40.00
The average score	4:16	4:00	4:50
Criteria	Very good	Very good	Very good

The data is clear that from each expert got a very good criteria, this shows that the applications developed ready for uijcobakan.

After validation by experts, the next stage is a trial of the product. These trials include testing of small group / one-on-one, limited testing and field trials. Here are the results of product testing.

	Test A-One	Trial Small Group	Field Trial
total Score	8.30	8.80	8.80
mean Score	4.15	8.40	4.40
Criteria	Very good	Very good	Very good

The data from the trial menjelaskan that one-on-one, small group testing and field trials obtain excellent criteria. Thus it can be concluded that the resulting application can be used for career information services on the learner in class XI SMAN 6 Bandar Lampung.

C. Effectiveness

The resulting application is then tested its effectiveness. Effectiveness test is done to determine how much influence this application for career information services. Menggunakan effectiveness test paired samples test with the following results:

3 Paired Samples Test									
		paired Differences					t	Df	Sig. (2-tailed)
		mean	Std. deviation	Std. error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
pair 1	Pre Test - Post Test	-17.1923E1	2.28069	.44728	-18.11350	-16.27112	-38.437	25	.000

From 4:16 table also contains information about the value of "mean paired differences" amounted -17.192 2 This value indicates the difference between the average results of the service pre-test and post-test or 69,0385-86.2308 = 17.1923 2 selisi the difference between -18.11350 until -16.27112 (95% confidence interval 5 the difference of lower and 7 per), The hypothesis of Paired Sample T-Test This test is by comparing the value of t arith 4-tic with t table. The basic guideline or decision making are as follows:

- 1) If the value of $t > t$ table, then H_0 is rejected and H_a diteima. 4
- 2) Conversely, if the value of $t < t$ table, then H_0 is accepted and H_a rejected.

4:16 From t 9 table it is known that the value is 38 437 $t > t$ table 2.086 it can be concluded that H_0 is rejected and H_a accepted. With Test description Paired Sample T-test above it can be concluded that the media developed Android-based researchers is highly effective application for career information services.

D. Efficiency

Efficiency is used to determine yabg used in the service using android-based application is more efficient in terms of both time and cost. From the results of the implementation of information services using print media with the theme of the profession and job prospects takes time 6x45 minutes learners to understand the material presented by the teacher BK, while service career information using applications based on Android takes 4x45 minutes learners are already able to understand and menjelaskna various types profession

and job prospects. There is a time difference of 2x45 minute or two meetings after a career information service using android based applications. Thus, the android-based application is more efficient in terms of time.

E. The Attractiveness

In his book Nyoman S. Degeng (2013: 200), states that the important variables that can be used as an indicator of the attractiveness of learning is more appreciation and desire shown by learners. Therefore, the starting point of the appeal must be placed on the topics to be discussed and the media to be used. Based on these conditions, the researchers emphasize that the attractiveness of the learning process can be achieved by taking a topic according to the needs of learners using instructional media that is fun for the learners. This research theme in the profession recognize the different types of career information services on the learner in class XI.

Android-based application is made possible sekomunikatif so easy to understand and use the language properly, correctly and effectively. Media android-based application is simple in design with a selection of colors and images are interesting, creative and innovative, newest, unique and be flexible. The layout and arrangement of the letters made serapih may make it more legible text on the media to produce an android-based application media that are effective, efficient and attractive. Based on the analysis results obtained from the questionnaire to students resulted in the average score is 4.56 product appeal and categorized excellent / very interesting.

Discussion

This research aims to develop applications of various types of android-based profession for career information services on the learner in class XI SMAN 6 Bandar Lampung. Researchers would like to develop this application because the information services previously BK teachers only use print media such as books and modules so that in practice the students have not been able to master the material submitted materials to the maximum because the media digunaka not have its own charm that makes learners bored and tired ,

From the results of the application development through beberpa process have very good criteria so that the application can be used in career information services. Supported by the effectiveness of the product that has a pretty good influence for career information services so that the application is effective for career information services. On the efficiency of the application has two efficiency that is efficient in the time needed to understand the material in career information services and efficient in cost. Where the time required in a career information service 6 times the next meeting to make use of applications only require 4 meetings learners are already able to understand and explain the material presented by the teacher BK. Furthermore, in terms of cost for a printed book costs Rp50.

V. CONCLUSION

Based on data analysis and research process conducted from the beginning to the field tests, the researchers to conclude that the previous discussion, it can be concluded that:

1. Implementation requires information service career as a media application to optimize these services

2. The application development process different types of professions after being validated by experts obtain decent used categories of information services and in testing products gained very good category
3. This application Bawasannya effective for career information service
4. Have a good efficiency in terms of time and cost
5. Applications developed has an appeal that is high enough

REFERENCES

- [1]. AzibZainal, 2012. Guidance And Counseling In Schools, YramaWidya, Bandung, Page 81
- [2]. Budiyanto, Multimedia Development on Speaking Learning Skill Students of the College of Buddha (STIAB) Jinarakkhita Semester 3 Bandar Lampung, Bandar Lampung in 2019
- [3]. Degeng, NS 2013. pembelajaran Sciences: clarification variable for *development theory and research*. Bandung: Kalam Life
- [4]. Herpratiwi. 2009. Theory of teaching and learning. University of Lampung, Lampung
- [5]. KuswantoJoko, et al. Android-Based Learning Media On Currency Lesson XI Class Network Operating System. *Education journal vol 14, no 1 thing 15, 2018*.University Baturaja
- [6]. Prayitno, ErmanAmti, Fundamentals of Guidance and Counseling, Jakarta, RinekaCopyright, 2004, p. 259
- [7]. Resiani et al, 2015. Development of Interactive Educational Games At Subjects IPS Student Class VII Semester At SMP N 7 Singaraja Academic Year 2014/2015. *E-Journal EdutechtGanesha Education University Department of Educational Technology, Vol 3 No. 1*
- [8]. RizkyDhanta. Introduction to Computer Science. Surabaya: BEAUTIFUL. 2009. Page 33
- [9]. Wimatra, Job ett All. 2008. Computer Basics: Guidance For Cadet, *CivilSafety And Academy Of Medan Flight Technics Technics Training Division*. Medan, Indonesia
- [10]. Zhanghongling, R. 2015. Teaching by principles: An interactive approach to language pedagogy. *Journal of Educational Technology. 7 (2). pp 134-147*

The Application Development of Various Types of Professionals for Android Based on Information Services Career Senior High School Students State 6 Bandar Lampung

ORIGINALITY REPORT

6%

SIMILARITY INDEX

PRIMARY SOURCES

1	www.scribd.com Internet	38 words — 1%
2	mjltm.org Internet	37 words — 1%
3	eprints.walisongo.ac.id Internet	31 words — 1%
4	"ERP Performance Measurement AT PT Hero Supermarket using the IT Balanced Scorecard Method", International Journal of Recent Technology and Engineering, 2019 Crossref	22 words — 1%
5	"Education Innovation and Mental Health in Industrial Era 4.0", Walter de Gruyter GmbH, 2019 Crossref	14 words — < 1%
6	ninja-proxy.info Internet	13 words — < 1%
7	Bambang Sudaryana, Puji Pramesti. "The Strategy of Welfare Improvement for Salt Farmers in Indonesia", MATEC Web of Conferences, 2018 Crossref	10 words — < 1%
8	Sulaiman Zuhdi, Elly Nielwaty, Prihati. "Innovations on Monitoring System: Exploring Dept. of Industry and Trade Performance in Riau", IOP Conference Series: Earth	10 words — < 1%

9 eprints.uny.ac.id 9 words — < 1%
Internet

10 Dina Pratiwi Dwi Santi, Setiyani Setiyani. "MEDIA PEMBELAJARAN DENGAN MACROMEDIA FLASH UNTUK MAHASISWA TINGKAT I PADA MATA KULIAH KAPITA SELEKTA MATEMATIKA DASAR", Eduma : Mathematics Education Learning and Teaching, 2018 8 words — < 1%
Crossref

11 www.icem.education 8 words — < 1%
Internet

EXCLUDE QUOTES OFF

EXCLUDE MATCHES OFF

EXCLUDE BIBLIOGRAPHY OFF