A Study on the Need of The Development of U-Career Application for Major Selection in Vocational High School

[1]Farida Aryani, [2]Muhammad Rais, [3]Hamdan Arfandy
[1]Guidance and Counseling Program, Universitas Negeri Makassar, Indonesia
Email: Farida.aryani@unm.ac.id
[2]Agricultural Technology Education, Universitas Negeri Makassar, Indonesia
Email: m.rais@ac.id
[3]Computer Engineering, STIMIK Dipanegara, Indonesia
Email: harmanarfandy@gmail.com

Abstract: The purposes of this study are (1) to determine the level of need for guidance and counseling teachers in developing U Career applications for students in Vocational High School, and (2) To determine the validity and practicality of U Career applications to help students to choose majors in Vocational High School. The study used Research and Development (R & D) approach which to produce an Android-based U-career application for students in Vocational High School. The targets in this study were 13 guidance and counseling teachers from 5 districts/cities in South Sulawesi. Data were collected using questionnaires (to assess the validity and acceptability of the product by the guidance and ICT experts and prospective users of the product / Guidance and Counselling teachers) and focus group discussions (FGD). The data were analyzed through the descriptive percentage analysis technique. The results of this study indicated that (1) Guidance and counseling teachers considered the use of the U Career application as very important for vocational students to help them to choose majors in Vocational High School (2) the U Career application was categorized as valid and practical to be used by students in choosing majors in Vocational High School. Thus, the U Career Application product can assist Guidance and Counseling teachers in implementing career guidance services based on vocational students' talents, interests, and potential.

Keywords: U-Career Applications, Selection of Majors at Vocational High Schools

INTRODUCTION

Presenting guidance and counseling programs as an integrated part of education aims to assist students in developing optimally. One of the strategies to optimally develop is implementing the individual planning service program. According to Afdal, Suya, Syamsu, & Uman (2014); Gysbers & Henderson (2012), basic and responsive programs and individual planning aim to help students develop independently and optimally by planning their future. Individual planning support students to decide their future. Maturely determining choices and making decisions are certainly based on students' understanding of their potential and social environment that can be trained through specialization services.

Specialization is a continuous learning process to facilitate students achieving educational goals. Putri, Nurdin, & Bustamam (2017) stated that specialization is a continuous

service that aims to assist students in achieving national education goals. According to Makrifah & Nuryono (2014); Syamsudin & Supriyanto (2019), the specialization program aims to develop the students' talent, interest, attitude, and potential in the areas of learning and career guidance. While Melmambessy (2017) mentioned that the specialization service could facilitate students to choose a program at an educational level, understand a career they are interested in, and prepare themselves to select a program based on their talent and interest.

Therefore, the synergism between all school members, including the headmaster, staff, teachers, parents, and students, is important so that teachers can work well and achieve the maximum output. In specialization service, the synergism of all school personnel, especially the headmasters, guidance, and counseling teachers, subject teachers, students, and parents to work according to their role to achieve the best results (Setiyati & Mariah, 2019) ; (Afdal, Suya, Syamsu, & Uman, 2014) ; (Ozkayran, Yetis, & Abali, 2020). While according to Prasetiawan & Supriyanto (2016), the counselor should provide comprehensive guidance and counseling programs, including individual planning services, by involving school personnel, parents, and communities.

In reality, many Junior High School graduates are confused in selecting a major in Vocational High School because there are more majors provided and there is no information about them from guidance and counseling teachers and parents. Most students choose a major because of the influence from their friends or motivation from their parents. Many parents believe that Vocational High School is the best destination for their children because the graduates can directly work. They sometimes do not consider their children's skills, interests, or potential. The study conducted by Zamroni (2016) showed that the graduates of Junior High School who decided to enter the Vocational High School were not totally based on their interest or potential. As a result, students generally face problems following the lessons, and it can increase the rate of unemployment among vocational high school graduates. Vocational High School students with relatively low self-confidence tend to have negative perceptions of themselves, leading to difficulties knowing themselves and choosing a suitable job, which results in a problem in career selection (Simamora, Menanti, & Mutia, 2015). The study

conducted by Pribadi, Martiningsih, & Suhartadi (2013) shows that Vocational High School graduates have low soft skills causing them difficulty performing a job.

Based on those problems, there should be a service to guide students in deciding the program they want to take in the Vocational High School in the form of technology-based media to have a successful future career. Many Guidance and Counseling teachers still face barriers in facilitating students to decide their further education based on their skill and interest. Thus, there should be a solutive strategy to implement the program, which is information and technology base. The study aims to evaluate the U career application that has the potential to ease Guidance and Counseling teachers to perform their tasks and to facilitate students in selecting a major according to their skill, interest, and potential.

The earlier study conducted by Krismona, Purwaningrum, & Surur (2021) investigated an application named KAWAN SMK, which is a media for assisting vocational high school students to easily get information about a further study and for easing Guidance and Counseling teachers to provide assistance without meeting face to face with students. However, the study only focused on Vocational High School students who wanted to continue their study at the university, while the current researchers wanted to assist prospective students of Vocational High School in selecting a program so that Vocational High School students have determine their career plan since they are still in the High School or before they continue their study in the higher level. The U Career application integrates four aspects: life skills, psychology test results to determine a career option (RIASEC), students' scores based on the report, and nonacademic achievement so that the U Career can more comprehensively facilitate students in selecting a program in the Vocational High School.

METHOD

The study was carried out in some Vocational High Schools in South Sulawesi. It used Research and Development (RnD) to result in a product or a prototype. The product is Android-based application named U career which aims to assist Guidance and Counseling teachers and to facilitate students of Vocational High Schools in South Sulawesi in selecting a major according to their skills, interests, and potentials.

The first step of the study was the need analysis by distributing a questionnaire to 13 Guidance and Counseling teachers of Vocational High Schools in five regions / cities in South Sulawesi. They consisted of 5 Guidance and Counseling teachers of Vocational High Schools in Makassar (Vocational High School 8, Vocational High School of Telkom, Vocational High School of Darussalam, Vocational High School 1, and Vocational High School 7), 2 Vocational High School teachers in Bantaeng (Vocational High School 1 and Vocational High School 2), in Pangkep (Vocational High School 1 and Vocational High School 3), and in Bulukumba (Vocational High School 1 and Vocational High School 3). The research instrument was a questionnaire identifying Guidance and Counseling teachers perception on the service to assist students determine their interest on a program in Vocational High School. Data were collected using a questionnaire (to measure the validity and acceptability of the assessment conducted by experts of guidance and Information and Communication Technology and prospective users of product / Guidance and Counseling teachers) and Focus Group Discussion (FGD). Data were analyzed using descriptive percentages.

RESULTS AND DISCUSSION

The research findings show that the android based application service to assist students in determining their interest in further study is highly needed by Guidance and Counseling teachers. The application facilitates Vocational High School students to select a major for their higher education according to their skills, interest, and potential. In assessing teachers' need of the application, we performed a need analysis consisting of aspects as presented in the following table:

1. Results of Need Analysis on the Development of U Career for Vocational High School

Based on table 1 above, the response of Guidance and Counseling teachers about the career guidance application indicates that guiding students to select a major in Vocational High School is very important. Melmambessy (2017) stated that guiding students to select a

group of subjects and cross interest will facilitate them in understanding their interest and selecting a major in Vocational High Schoool level that will be helpful for their career development and the selection of a program in their higher education which is based on their skills and interest. The study conducted by Marsetyana & Nusantoro (2015) shows that although Guidance and Counseling teachers have a good understanding of the service to guide students in deciding their interest (in the high category), they still need to learn the mechanism of the service so that the Guidance and Counseling program can be optimally implemented.

Without guidance service for Vocational High School students' career, their education in the Vocational High School level might be failed. According to Wicaksono & Aminuddin (2017); Budianto & Irawan (2017), when Vocational High School students mistakenly select their major, their study will be failed. Guidance and Counseling teachers tend to face problems in guiding students in determining their interests, and they usually find it difficult to develop instruments. It was mentioned by Susanto & Novitasari (2018) that there were still many Guidance and Counseling teachers unable to provide guide service to their students to assist them in selecting a major. Because the available easy and effective applications for students are still limited, Guidance and Counseling teachers believe that there should be an android application to help students select the program for their higher education based on their skills and interests. It will also support teachers in providing guidance and counseling service, especially for students' careers. The quantitative description shows that teachers' responses on U career application are categorized into three groups, namely high, medium, and low. The further analysis of the role of U career on Vocational High School students shows that they highly expect to develop the android based U Career application. The results of need analysis are presented in the following graph:

Table 1. Results of Need Analysis on the Development of U Career Application for Vocational High School

No	Problems Faced by Guidance and Counseling Teachers Related to the Selection of A Major	Very Agree	Agree	Disagree	Very Disagree	% VA	% A	% D	% VD
1	In my opinion, guidance service to select a major is important in Vocational High School	7	6	0	0	54	46	0	0
2	In my opinion, the guidance service to select a major in my school is not based on students' skills and interests.	9	4	0	0	69	31	0	0
3	I face difficulties in guiding students to select a major in my school	9	4	0	0	69	31	0	0
4	I face difficulties in developing the instrument to guide students selecting a major in Vocational High School	10	3	0	0	77	23	0	0
5	In my opinion, the guidance service to select a major in my school needs a relatively long time.	8	5	0	0	62	48	0	0
6	In my opinion, there should be an instrument usng information technology in assiting students selecting a major in the Vocational High School	11	2	0	0	85	15	0	0
7	In my opinion, we need to develop an android based application as the instrument to assist students in selecting a major in the Vocational High School	10	3	0	0	77	23	0	0
8	In my opinion, developing the android based application can assist students in selecting a major in Vocational High School.	9	4	0	0	69	31	0	0
9	In my opinion, the android based application will be helpful for students to prevent them from mistakenly choosing a major in the Vocational High School	11	2	0	0	85	15	0	0
10	In my opinion, android based service to assist students in selecting a major will ease Guidance and Counseling teachers in running their tasks.	12	1	0	0	92	8	0	0
	Total	**9,6**	**3,4**			**73,9**	**27,1**		
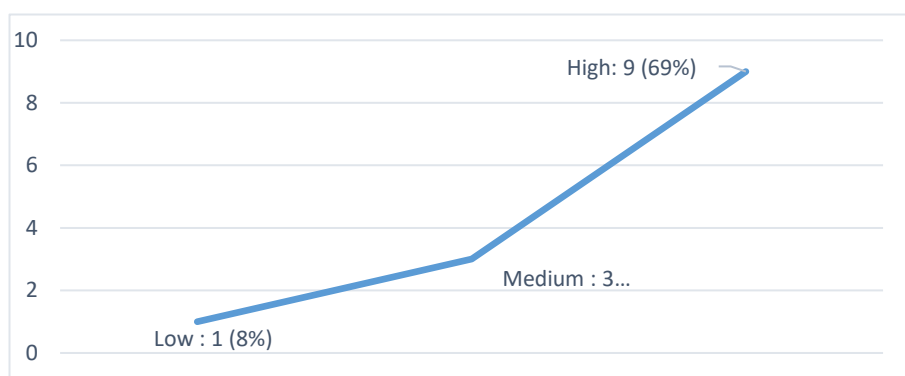
Graph 1. The Importance of U-Career Application for Assisting Students Determining their Interest

Based on Graph 1, the Guidance and COunseling teachers believe that the existence of U Career application is important to facilitate students selecting a major in Vocational High School. The application was developed by applying information technology for guidance and counseling services. The information technology-based guidance and counseling service will improve the effectiveness and efficiency of guidance and counseling services provided to the student. Gozali (2020) mentioned that information technology-based guidance and counseling is a service utilizing technology to help Guidance and Counseling teachers improve the program's effectiveness, including planning, implementation, evaluation, and follow-up stages.

2. Results of Validation by Experts and Users of U Career Application

Expert judgment aims to assess the validity and practicality of U Career application in assisting students in selecting a major in Vocational High School based on their skills and interests. Results of the expert judgment can be seen in the table 2.

Table 2. Aspects of Properness of U Career for Vocational High School Students

No	Statements	Scores		Percentages	Categories
		Expert 1	Expert 2		
1	The properness of measuring tool for the selection of a major in Vocational High School	4	4	100	Very proper
2	The properness of the goals of U Career application which was developed	4	3	87,5	Very proper
3	The accuracy of U Career application manual, which was developed	3	4	87,5	Very proper
4	The clarity of the language used in the U Career application manual, which was developed	4	4	100	Very proper
5	The procedure to fill information into the U career application, which was developed	3	4	87,5	Very proper
6	Indicators of future U Career manual, which was developed.	4	4	100	Very proper
7	Aspects measured in the future U Career manual, which was developed	4	4	100	Very proper
8	Quick and can be used anywhere	3	4	87,5	Very proper
9	The cost is relatively low	4	4	100	Very proper
10	Mapping study programs using U Career application in selecting a major in Vocational High School	4	4	100	Very proper

Based on table 2 above, experts gave high scores for the properness aspects. In this case, in general, they gave scores of 4 or 3 in each item. The average scores are 4 and 3, so the percentage is 100 (very proper). It shows that U Career application is very proper, and the application can be further developed.

Table 3 above shows that the experts gave a high score for the U Career application's practicality. In general, each aspect got a score of 4 or 3, meaning that the practicality reached the percentage of 100 (Very practical). In general, the U career application is valid and practical to be utilized by students in selecting a major according to the assessment performed by both experts. After experts performed the assessment, we gathered data from respondents' suggestions and solutions for improvement, as presented below.

a. Lecturers of Information and Communication Technology (ICT)

According to the lecturers of ICT, the manual of each section in U Career application uses short sentences, and the design is interesting so that it can attract students'

attention to use the application. Students are also

not bored in using the U career application.

Table 3. Practicality aspects of U Career Application Model

No	Statements	Assessment Scores		Percentages	Categories
		Expert 1	Expert 2		
1	It is useful to identify students' skills and interest	4	4	100	Very Useful
2	It is useful to identify students' potential	4	3	87,5	Very Useful
3	It is useful to select a right major	4	4	100	Very Useful
4	It is useful for Guidance and Counseling teachers in providing guidance and counseling service for students in selecting a major	4	4	100	Very Useful
5	It is useful to assist Guidance and Counseling teachers in providing effective and efficient service in guiding students in selecting a major	4	3	87,5	Very Useful
6.	It has clear and detailed goals	4	4	100	Very practical
7	It has a clear and practical manual to follow	4	4	100	Very practical
8	Quick and can be used anywhere	4	4	100	Very practical
9	The cost is relatively low	3	3	75	Practical
10	The implementation does not need a big number of Guidance and Counseling teachers	4	3	87,5	Very practical

b. Guidance and Counseling Lecturers

According to the experts of Guidance and Counseling, the language used in each section of U Career application should be simplified to make it easier to understand by Vocational High School students. Besides distributing the questionnaire to experts, the acceptability of the application was also assessed by the prospective users who were the Guidance and Counseling teachers. Thirteen Guidance and Counseling teachers joined Focus Group Discussion (FGD) and concluded that: (a) related to the properness aspect, U career application can well and effectively assist students mapping their interest on a program in Vocational High School; (b) for practicality aspect, in general, Guidance and Counseling teachers agreed that U Career application is useful to identify students' skills and interest within a relatively short period and it can be done anywhere.

Suggestions from the expert lecturers and potential users (Guidance and Counseling teachers) will be followed up by revising some aspects of the U Career application so that it can function better and optimally for students. Guidance and Counseling teachers had an important role in facilitating students to select a program by utilizing the information technology in the form. Thus, they should develop valid and practical media. Risqiyain and Purwanta (2019) also developed a product by developing multimedia as an effective information service that can increase the maturity of Vocational High School students' careers. The use of the technology will increase the effectiveness and efficiency of guidance and counseling services. As was mentioned by Sabella & Booker (2003) that professional guidance and counseling teachers should utilize effective and efficient technology to present more comprehensive guidance and counseling programs.

The study conducted by Sampson & Makela (2014) found that the development of

training and research resources through the use of technology makes services faster and more effective so that services to clients are improved. Shifting on human activities to the digital-based pushes each profession to use techinology in providing service. Guidance and Counseling teachers should also utilize information technology to provide optimum guidance and counseling service. Furthermore, Haryati (2020) stated that the rapid development of technology demands Guidance and Counselor teachers to innovate, especially in providing e-counseling services as the media to provide alternatives for counselee's problems. The development of information technology-based media, U career, will help students and ease Guidance and Counseling teachers to implement guidance and counseling services to students.

CONCLUSION AND SUGGESTION

The study concluded that: the response of Guidance and Counseling teachers on the U Career Guidance application shows that guiding students of Vocational High School to identify their major interest is important. Besides that, Guidance and Counseling teachers have been able to effectively and efficiently guide students in selecting an appropriate major. The available applications of guidance and counseling for students' careers are still limited, so Guidance and Counseling teachers argued if they need android based services to ease them in providing guidance and counseling service at school. The quantitative description shows that teachers' responses on the U career application can be divided into three categories: high, medium, and low. Considering the importance of the role of U Career, this android based application is highly expected to be developed.

In the validity and practicality test, both experts gave scores of 3 or 4. Thus, the U career application reached valid and practical categories to be used by students in selecting majors. Input from expert lecturers and target users of product or Guidance and Counseling teachers will be used as the basis to revise the U Career application so that it can be more optimally used by students.

The findings of this study can be taken as the reference and alternative for Guidance and Counseling teachers in providing information technology-based media in guiding students selecting a major. Other researchers or students can use the findings as references related to the use of media and implementation of service guiding Vocational High School students selecting a major. Besides that, the findings can be further developed to produce a better product for career counseling services.

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