Developing an Webquest Media to Improve of Career Choices of SMK Muhammadiyah Cilegon

Iis Solihah[1], Edi Purwanta[2]
Universitas Negeri Yogyakarta, Indonesia
e-mail: [1]iissolihah.2019@student.uny.ac.id, [2] edi_purwanta@uny.ac.id

Abstract: There is no denying the increasing role and influence of web technologies in versatile individuals, their independent career choices, professional self-design, and professional skills development. Due to the increasing availability of technology as a vehicle for career information services to increase student career choices, researchers are developing web-based information. This type of research is research and development. This research phase focuses on product manufacturing and development. The stages of development used in this research are (1) needs analysis, (2) information collection through questionnaires and interviews, (3) product design through flow charts and storyboards, and (4).) The design was verified by two media and material validators, and (5) design modifications were made based on the validator's suggestions. The research subjects were 75 students of class X-XII SMK Muhammadiyah Cilegon. Product in the form of webquest media is effective to increase career choice (p=0.000). There was an increase in the average score of student career selection in the pre-test group of 129.05 and post-test of 150.01 using webquest media.

Keywords: Career choiches; Webquest media

INTRODUCTION

Adolescence as a transition period between childhoods to adulthood, starting from the age of 18-21 years, is generally in the exploration stage and developmental task to start looking for information about careers and have alternative career choices (Santrock. 2012). Adolescence is a crucial phase of life where individuals need to choose a particular career. In choosing a career, many individuals experience problems. Nevertheless, many young men and women encounter difficulties in entering and remaining in the labour market.

A problematic start on the labour market can negatively impact both early and long-term career success (blossfeld, 2008; Buegess et al., 2003; Eng & Feldman, 2007). Furthermoree, De Vos et al. (2019) argue that the proccess of entering the labor has fundamentally changedfrom a one-off occipational choice to a more dynamic process of career crafting, posing additional challenges to today's graduates. Recent labor market statistics support this notion. For instansnce, European recent graduates' employment rate was 82.9% in 2016 againts 86% in 2007 (Eurostat, 2018). Moreover, the unemployment rate among newcomers is typically considerably higher than among other kinds of job seekers (Eurostat, 2019).

Individuals in their early career stage often do not have extensive work experience achievements. They are probably less likely to be actively sought after by employers (McDonald et al. 2019). The school to work transition is the foirst major career transitions in most peoples' lives, and it can be characterized as the period in which an individual transitions from their role as as student and takes on the role of a worker (De Vos et al. 2019). During this transition process, young people need to socialize into the labor market and from their vocational identity. To assess wheter they go through this transition effectively, it makes sense to gauge their early career success (Gonz'ales-Rom'a et al. 2018; Wendlandt & Rochlen, 2008).

The role of web technologies in vocational education is undoubtedly great. However, in order to make more effective use of internet technologies are suitable for learning, reproducing, reinforcing new material or other types of learning activities, which traditional teaching methods are different from multimedia technologies can be combined with the use of. Web resources can be used directly during the lesson and for independent study. A webquest is a challenging task with elements of a role-playing game that uses information resources from the internet. Webquest technology was developed in 1995 by scientists T. March and B. Dogde. Using a webquest in the learning process is currently one of the most effective

---

* **Corresponding Author:** ✉ iissolihah.2019@student.uny.ac.id,

ways to learn using internet resources. Technology's function in career advising has evolved significantly over the past few decades. When computers first became widely available, the primary use of these technologies was to quickly and accurately administer and modify interest questionnaires (Abduraxmanova, S. A., & Jo'rayev. X, 2022).

Job success is the proximity between children and parents in the chosen choice (Hershenson, 2016). According to Hartono (2016), students who already have a good career understanding will make easier choices in the future. According to Anne Roe, the family as the main focus in the professional development of children has a major influence on the development of peers or schools (Scudenberg, Vondracek, & Crouter, 1984). The role of the family has been implied in many ways, both in terms of parental background, applied parenting models, and parents' experiences with knowledge of the world of work (Miller, 1989; Reid & Stephens, 1985; Seligman et al., 1988).

The internet has unique characteristics that are missing from the other resources. For example, the career seekers can use the internet to seek out what jobs are currently available and the qualifications the employer is seeking at anytime and place. Internet use among adolescents is very high (Johansson & Götestam, 2004; Samaha et al., 2018). nen et al. (2014) found that high school students who use the internet are more likely to be on the internet. The role of assisting vocational students in career guidance can be supported by the use of information and technology-based website in an effort to facilitate students'access to career informations as well as access indepent career guidance services complementing career guidance sought from parents and career counselors. Explained that webquest do not only functions as a medium of information and communication but can also be used as a reference system that acts as an expert in the vocational pathway that supports decision making.

METHOD

This research method is procedure and technique to get the data with certain purpose and function (Sugiono, 2010). The research subjects were all students of SMK Muhammadiyah Cilegon City by using purposive sampling technique as many as 75 respodents. The research instrument is a questionnaire based on Anne Roe's theory. Data collection procedures are observations, questionaires, documents. Data using SPSS 23 for descriptive analysis.

RESULT AND DISCUSSION

Figure 1.1 shows the performance process of the webquest media. When starting the application, users go to a login page. The users should then fill their registered username and password do not not match, the web will return to the login menu. If the login is successful, the main menu page, which contains choiches of the menu list, will appear. On the menu page, the users can choose a list of existing services. For service changes and update on database system, the program user admin must log in first by filling in his or her username and password. Functional testing is carried out by media experts, where the results are show in table:
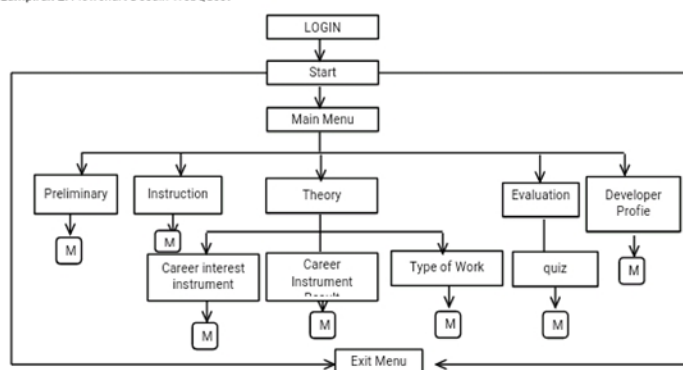

Figure 1.1 Navigation Flowchart For Users

Table 2.1 Of Career Information Webquest Application Test Results

No	Assessment Aspect	Skor	Category
	Aspect Of Media Engineering		
1	Effectiveness and efficiency	5	Very Good
2	Reliability	5	Very Good
3	*Maintainable*	5	Very Good
4	Usability	5	Very Good
5	Accuracy of choosing media	5	Very Good
6	Documentation	4	Good
7	Reusability	4	Good

Based on table 2.1 is very good in the aspect of media engineering (effectiveness and efficiency, usability, accuracy in choosing media) on webquest media to improve the career choices of students of class X SMK Muhammadiyah Cilegon stated very well based on media and design experts

Based on the table 3.1

The first impression of a website's appearance determines website users' evaluation, which influences perceptions and behavior. The aesthetic aspect in particular can influence the satisfaction with a website. Moreover, the aesthetic appearance of a website shows the level of credibility of a website. This is in line with research by Flavian et al (2011); Chen et al (1999) suggested that good and attractive appearance or design can evoke happy and positive feelings, so that the perceived level of website usability can lead to high satisfaction, trust and loyalty to the website.

In this study, the researchers found that the users in the sessions with graphical content (e.g. poster and photo) instead the text is more active and interested. However, in this study, users stated that the website had attractive appearance, but looks like apart from its attractive appearance, the website must have interesting content. One strategy for increasing atrractiveness is the use of posters and photos to encourage users to pay more attention to the content.

1. Main Navigation Page

in the main menu there is a page with a drop down list consisting of a material menu with tools for career interest, job level, type of work, chastity, evaluation and admin login as shown in picture 4.1. Access to the material menu for career interest, career interest tool results, the type of work , as shown in the figure. in this menu the user has entered the system that will display questions related to career interests. After entering career interests, users can see scores that can be used as a reference for the system to make recommendations for career choices relevant to their interest.
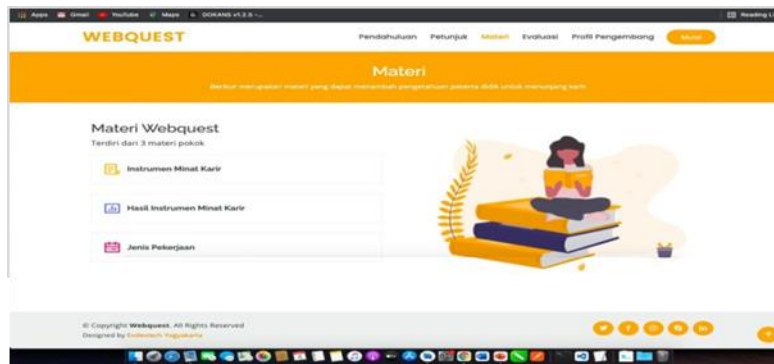
Table 5.1. Kolmogorov Smirnov Test Results

group	*p value*	Description
Pre Test	0,200	Data is normally distributed
Post Test	0,072	Data is normally distributed

Source : primary data processed (2022)

Table 5.1. above it shows that the pre- and post-test groups are normally distributed with p-value = 0.200 and 0.072 (p>0.05), then the parametric test Paired Sample T-Test in Table 4.9 is used as follows:

Table.6.1 Test *Paired Sample T-Test* result

Group	Mean	*p value*	Keterangan
Pre Test	129.51	0,000	There is influence and difference
Post Test	150.01		

Discussion

The online media feasibility in this study by media and material experts indicated that media validation results were good, while 75 students were obtained in both very good and good categories. Among the 75 students based on Anna Roe's theoretical career choice, students were found to be more dominant in choosing a career in science with a mean value of 22.01 than in choosing a career in business communication with a mean value of 15.64.

According to Agung (2005), the reasons why teachers do not use learning media, i.e. media is annoying, sophisticated and expensive, cannot use media, media is distracting students from serious learning, no teaching media is available in schools, teachers are accustomed to On the lectures, the use of learning methods is not appreciated by their superiors. According to Noening (2014), educational media, including teaching aids, function properly if the media can provide a useful, effective and enjoyable learning experience for children/students.

The use of media is one of the ways that can influence the success of counseling using technology that can be accessed anywhere and at any time (Alhadi, et.al., 2016). The use of learning media should be diverse, attract attention, be more enjoyable, and can provide a learning experience so that students can easily familiarize themselves with the topic (Rosita et al., 2014).

According to Sudjana & Rivai (2011), the types of media that can be used in learning are graphic media (photos, pictures, diagrams, posters), 3D media (action models, models, dioramas), and presentation media (slides, films, OHP).), and webquest as educational media through the use of the intranet in the school environment. Sujatna (2012) explains that a webquest is a request-based activity for some or all of the information that students interact with that comes from online sources equipped with video conferencing. According to Rachmawati & Madya (2014), there are several parts in *WebQuest* yakni *Welcome, Introduction, Task, Process, Evaluation, Conclusion, Teacher's Page*, dan *Quiz*.

The results showed that there was an effect of career information services using webquest media on students ($p < 0.05$) or that the use of webquest media was effective for improving students' career choices at SMK Muhammadiyah Cilegon.

Rustam's research (2014) that there is an effect of career information services using webquest media on the achievement motivation of Class XII students of SMA Negeri 10 Pontianak. Research by Mukharomah & Sholih (2021) found that the use of interactive video media was quite effective in increasing the career choices of class XI students at SMK Negeri 2 Tangerang Selatan City. Lestari (2018) in his research that there is a difference in the average value of students' economic learning outcomes before using webquest learning media or increasing the value of economic learning outcomes of students in the experimental group better than the control class.

Career information services with brochures and lectures from resource persons score lower than career information services with webquest media given to students. This is due to the fact that webquet media presents an impression that is very real and concrete. As a result, it encourages students to realize their career choices that are characterized by self-motivation, the ability to set goals that are both measurable and specific, recognizing one's strengths and weaknesses as well as those of one's environment, and not giving up after success and praise.2014 Rustam).Marianne et al. assert that ((2004)), webquest is a framework for inquiry-based online learning activities that requires students to use the internet.

In this study, the importance of developing the software is highlighted. The reason behind the selection of web-based media is due to is practically and friendliness. Almost all students today have access to the internet via both PC and smartphone. This makes it easy for them to be career guided by expert system from anywhere because technology is presently ubiquitous. In addition, this type of technology is user-friendly to both teachers and students.

Advantages of using webquest, first, students can work on a school project at home at the same time. Second, the finished product can be published on website. It should be noted that some of the above services are actively used by students and teachers. Previous studies on the effect of ICT-mobile work on website showed that is a positive relationship between technologies and work. Communication and information technology based methods create flexible (chung & vander horst, 2018). Thus, we see that the use of web technologies in education can increase not only the motivation of students, but also learning outcomes.

The design and manufacture of the website in this study was carried out to complement the learning media in career information services. This design is carried out by meeting the needs of students. To use this new system in online learning, good cooperation between teachers and students is needed. In online learning trhough this website, interaction between teachers and students is needed. This is facilitated by the existence of a discussion forum between teachers and student. Webquest was chosen because it is light, easy to use and simple. It is hoped that the design of this information system can help complete the shortcomings that exist in each existing learning system.

The career information provided by the internet is more trusted believed to set individuals up for career succes. These findings not only suggest that emerging adults use the internet differently than traditional media to seek for career information but that adding the internet to one's career information seeking sources will only assist in career preparation. The internet has the ability to provide current career information thta differentiates it from traditional sources. There are several practical implications to be gleaned from tthis study. The website provides limitless uses and opportunities for career seeking. User can search for specific information or network with other individuals in their chosen field. These findings show the web capable of a meeting a variety of needs individuals have when searching for career information. Teaching emerging adults to use the web and increasing their media literacy skills is an important factor in making a succes decision (Sinkkonen et al., 2018).

CONCLUSION

The website is one of the guidance and counseling services based in information and communications technology. The objective of this study was to design and develop an website and study its impact on the career decision-making of students. Webquest media has been successfully developed. Its design utilizes several software builder applications such as: MySQL,

PHP. The webquest web contains severals menu, which contain career instrument, result instrument career, type of work and admin login. The webquest tool has been tested and proven to work as well. The article has discussed the importance of ICT in today's world and how it would improve the quality of education in building curriculum for students.. Teachers, too, need to know how to use ICT in order to provide relevant training to students in their field of study. Teacher function, according to Jenkins, is that of a facilitator or manager who helps students learn.

REFERENCES

Abduraxmanova, S. A., & Jo'rayev, X. (2022, February). Modern web technologies used in professional education. In Conference Zone (pp. 178-179).

Blossfeld, H. P. (2008). Young workers, globalization and the labor market: Comparing early working life in eleven countries. Edward Elgar Publishing

Burgess, S., Propper, C., Rees, H., & Shearer, A. (2003). The class of 1981: The effects of early career unemployment on subsequent unemployment experiences. Labour Economics, 10(3), 291–309. https://doi.org/10.1016/ S0927-5371(02)00138-0

Chung, H., & Van der Horst, M. (2018). Women's employment patterns after childbirth and the perceived access to and use of flexitime and teleworking. Human Relations, 71(1), 47–72. https://doi.org/10.1177/00187 26717713828

Dahniar, I. (2020). Analysis of Career Guidance Services Grow Students' Career Understanding. (Doctoral Dissertation, Universitas Pendidikan Indonesia)

De Vos, A., Akkermans, J., & Van Der Heijden, B. I .J. M. (2019). From occupational choice to career crafting. In H. Gunz, M. Lazarova, & W. Mayrhofer (Eds.), The Routledge companion to career studies (pp. 128–142). Routledge.

Eurrostat. (2018). Employment rates of recent graduates. https://ec.europa.eu/eurostat/statisticsexplained/index.php/Employment_rates_of_recent_graduates

Eurostat. (2019). Unemployment statistics. https://ec.europa.eu/eurostat/statisticsexplained/index.php?title¼Unemployment_statistics#Youth_unemployment

Fakhri, S., & Indraswari, C. (2020). Study between self-efficacy and career interest on the effectiveness of career guidance. JOURNAL OF SPIRITS, 11(1), 65-83.

Febriani, F. (2019). The Efforts of Advisors in Providing Career Guidance to the Maturity of Class Xi Students in the Dkv Department at Smk It Khoiru Ummah (Doctoral dissertation, IAIN Curup).

Halimah, A., & Kusumah, B. K. (2019). Student Career Guidance Management. Tadbir Muwahhid, 3(2), 167-182.

Hartono, A. B. (2016). The Relationship of Self Efficacy with Career Maturity of Professional Nurse Profession Students Stikes General Achmad Yani Yogyakarta 2014-2015 (Doctoral Dissertation, Stikes General A. Yani Yogyakarta).

Hershenson, D. B. (2016). Reconceptualizing retirement: A status-based approach. Journal of aging studies, 38, 1-5.

Johansson, A., & Götestam, K. G. (2004). Internet addiction: characteristics of a questionnaire and prevalence in Norwegian youth (12–18 years). Scandinavian journal of psychology, 45(3), 223-229. https://doi.org/10.1111/j.1467-9450.2004.00398.x

Kumalasari, D. K., Yusuf, M., & Priyatama, A. N. (2015). The relationship between extrovert personality type and work motivation with career development in employees of PT Andalas Multi Kencana Jakarta. Discourse, 7(2).

Kwon, J. W and Kim, S.D. (2014). Characterization of an antibiotic produced by bacillus subtilis JW-1 that suppresses Ralstonia solanacearum. J. Microbiol. Biotechnol. 24(1): 13-18, http://dx.doi.org/10.4014/jmb.1308.08060.

Lidyasari, A. T. (2019). Career Guidance Innovation in Developing Career Awareness of Elementary School Students in the Industrial Revolution Era 4.0. XXI National Convention on Guidance and Counseling, 47-53.

Madigan, M.T., Martinko, J.M., Stahl, D.A.,Clark, D.P. (2010). Brock Biology of Microorganisms, 13th ed. Benjamin Cummings. San Francisco. pp. 42-59.

Nugrahaini, F., & Sawitri, D.R. 2015). The Relationship Between Career Maturity and Psychological Well-being in Class XII Students of SMA Negeri 5 Semarang. Journal of Empathy, 4(2), 87-92.

Nugroho, G. B. (2020). The role of guidance and counseling teachers in assisting student learning during online learning. Psycho Education, 18(1), 73-83.

O'Brien, P., Revaprasadu, N. (2013). Solid-State Materials, Including Ceramics and Minerals. In Reedijk, J., Poeppelmeier, K. (eds.), Comprehensive Inorganic Chemistry II, 2nd ed. Elsevier. United states. pp.xxii-xxiv.

Önen, C., Tunçdemir, A., & Ali, Ö. Z. E. R. (2014). Internet addiction of students at the vocational high school of healthcare. Bitlis Eren University Journal of Science and Technology, 4(2), 23-25. https://doi.org/10.17678/beujst.76811

Reid, P. T., & Stephens, D. S. (1985). The roots of future occupations in childhood: A review of the literature on girls and careers. Youth & Society, 16(3), 267-288.

Samaha, A. A., Fawaz, M., El Yahfoufi, N., Gebbawi, M., Abdallah, H., Baydoun, S. A., ... & Eid, A. H. (2018). Assessing the psychometric properties of the internet addiction test (IAT) among Lebanese college students. Frontiers in public health, 6, 365. https://doi.org/10.3389/fpubh.2018.00365

Santrock, J.W. (2012). Lifespan Development (13th Edition). Benedictine Translator Widyasinta). Jakarta: Erlangga Publisher.

Seligman, L., Weinstock, L., & Owings, N. (1988). The role of family dynamics in career development of 5-year-olds. Elementary School Guidance & Counseling, 22(3), 222-230.

Sinkkonen, H., Puhakka, H., & Merilainen, M. (2018). Adolescent's internet use in relation to self-esteem and adaptability in career decision-making. British Journal of Guidance & Counseling, 46, 738–751. https://doi.org/10.1080/03069885.2018.1455169