

The Role of Vocational Education in the Student Career Development Process

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Abstrak

Banyaknya kondisi siswa yang merasa cemas akan prospek pemilihan karir, hal ini dikarenakan kurangnya keterampilan yang didapatkan sehingga ditakutkan wawasan karir dilapangan tidak akan tercapai. Tujuan dari penelitian ini adalah mengkaji peranan pendidikan kejuruan dalam proses pengembangan karir terutama bagi siswa yang masih penuh keraguan akan karirnya. Jenis penelitian adalah kualitatif yang bersifat deskriptif dalam bentuk Systematic Literature Review (SLR) dengan tujuan untuk mengumpulkan bukti-bukti berdasarkan topik penelitian serta mendukung berkembangnya penelitian yang berbasis bukti. Adapun tahapan dalam metode SLR ini adalah berupa planning, conducting dan reporting. Subjek dalam penelitian ini adalah literatur yang terkait dengan pendidikan kejuruan dalam proses pengembangan karir. Hasil penelitian adalah ditemukan 5 tema besar dari 98 artikel yang sudah diseleksi terkait dengan topik yang diteliti. Adanya peranan pendidikan kejuruan mengenai karakteristik pekerjaan, layanan pengembangan kematangan karir, peluang karir, kemampuan dalam membuat keputusan karir serta pengembangan karir kejuruan dalam proses pengembangan karir siswa. Diharapkan temuan pada penelitian ini menjadi informasi bagi peneliti berikutnya, guru, masyarakat luas serta lembaga pengambil kebijakan khususnya di Indonesia.

Kata kunci: Pengembangan Karir, Pendidikan Kejuruan, Systematic Literature Review.

Abstract

Many students feel anxious about career prospects, so they are afraid that career insights in the field will not be achieved. The purpose of this study is to analyze the role of vocational education in the career development process, especially for students who are still full of doubts about their careers. This type of research is descriptive qualitative in the form of a Systematic Literature Review (SLR) to collect evidence based on research topics and support the development of evidence-based research. The stages in the SLR method are planning, conducting, and reporting. The subject of this study is the literature related to vocational education in the career development process. The results of the study found 5 major themes out of 98 articles that had been selected related to the topic under study. The role of vocational education regarding job characteristics, career maturity development services, career opportunities, ability to make career decisions, and vocational career development in the student career development process. It is hoped that the findings in this study will become information for future researchers, teachers, the wider community, and policy-making institutions, especially in Indonesia.

Keywords: Career Development, Vocational Education, Systematic Literature Review.

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1. INTRODUCTION

Vocational education is education that has an important role in improving the economy of a country, especially Indonesia. Vocational graduates will produce skilled workers who are ready to work. As a developing country where industrial needs are highly expected, the industry always needs a lot of human resources who have skills and are ready to face the world of work (Inderanata & Sukardi, 2023; Rizal et al., 2022). Vocational education has the goal of improving individual skills in addition to acquiring knowledge, work skills, and attitudes to be able to compete in the world of work (Lukesch & Zwick, 2020; Winandari et al., 2022). Apart from that goal, the wider community wants education that can later lead graduates to be able to work immediately and join the job market as in the industrial world after completing studies. The success of students in fulfilling their duties as students will determine their success in the process of career development in the next phase (Thaitami et al., 2021; Upadyaya & Salmela-Aro, 2017). Activities carried out by students during their

education period are the beginning of carving to achieve a better life later. One of the processes in his life journey is choosing and preparing for a career. Vocational education is closely related to individual career development (Quinlan & Renninger, 2022; Zeng et al., 2022). Career services provided to students in building and maturing a career should be considered. Individuals who are successful in their careers will usually enjoy their work and life. To have success in a career, usually, a person will prepare himself by studying and honing his skills diligently according to the dream of the job he will choose (Rudolph, 2021; L. Zhang et al., 2022). Individuals will try to understand their interests, talents, personalities, and job opportunities that they might take, especially in the environment around them. Someone's success in getting a job will be achieved in earnest and of course full of sacrifices due to the process of the struggle they go through (Rahmaniah, 2013; Sodik & Hidayat, 2022). Studying diligently and working the best can create success in one's career. That is, someone who is successful in a career will go through successful studies, work, family, and society.

Conditions in the field are still found in many students who feel anxious about choosing a career. Students have not been able to determine what kind of career choice they will choose. Some students still do not understand what skills must be mastered to get a job in the future and there is no insight into job prospects. Students do not fully know what strengths they have and some do not even know what goals to take and pursue in developing their careers later. Career problems that students have are also caused by a lack of knowledge regarding job information, lack of understanding, interest, and potential (Klotz et al., 2014; Schmid & Haukedal, 2022). This shows that students generally do not understand what steps must be taken in career development. Added to this is the lack of information found on jobs that will be in demand, and a lack of understanding of the advantages and disadvantages of jobs that will be in demand in the future (Denault et al., 2019; Negru-Subtirica et al., 2015). Lack of understanding of career information will cause these students to be unprepared, have undeveloped careers, and be immature in deciding which career to take (Batool & Ghayas, 2020; Kertechian & Bester, 2023). Career problems are problems related to one's future. Activities carried out now will be a separate color later in the future. To be able to prepare provisions for a smooth career in the future, you must be equipped with information about skills regarding the career you will choose later (Elena, 2014; Sulistiobudi & Kadiyono, 2023). The information received and found must be following his interests in the future.

Several previous studies have only focused on certain levels of education, such as the vocational or tertiary level. Therefore it is necessary to conduct broader research involving students from various levels of education to understand the role of vocational education in career development. On the other hand, it was found that most of the previous research focused more on student internal factors such as students' abilities and interests in career development through vocational education. Several literature study activities that have been carried out that state vocational education will increase a student's interest in working in the future (Abdillah et al., 2020; Efronia & Ahyuardi, 2022). If there is an interest that arises in a person, an understanding of the career that is taken and prepared later will emerge. Research conducted by other studies said that vocational education will improve students' abilities, especially skills, and self-adaptation as preparation for future careers (Choy & Yeung, 2022; Zeng et al., 2022). Skills learned in vocational education will sharpen one's career maturity so that they have skills that can be used in the future (Medici et al., 2020; Volodina et al., 2015). Careers can also be achieved if there is a cooperation between management, leadership, and teachers who are in the education element. Education will make it easier for students to determine a career in the future very clearly. It is necessary to conduct research that also takes into account other external factors such as existing policies, the role of the teacher, and cooperation between schools and industry. This is done to fully reveal the

role of vocational education in the student career development process. For these problems to be resolved, it is necessary to conduct a literature review in integrating the results of previous studies with the topics studied. This will provide a clearer picture of the problem being studied. The literature study conducted focuses on vocational education in the process of developing student careers. Based on these problems, it is necessary to study the literature to provide a clear picture of career maturity and the role of vocational education in guiding student careers both from internal and external factors. Therefore, the purpose of this research activity is to analyze the role of vocational education in the career development process, especially for students who are still full of doubts about choosing a career. It is hoped that by examining these problems and the role of vocational education in bridging career problems, student career development and maturity can be resolved properly. Students have a clearer procedure regarding career information and can apply it in real life.

2. METHODS

The method used is library research or commonly called literature review research. This literature method is in the form of a Systematic Literature Review (SLR) which has the goal of gathering existing evidence on research objectives and supporting the development of evidence-based research. The stages of SLR are planning, conducting, and reporting. The planning stage is the initial stage and is the basis for determining research questions to direct the literature search process. The second stage is conduction, namely the implementation stage which begins with a search for literature sources originating from national journals and international journals. National journals used as data sources come from accredited nationals in the sinta category at the sinta 1 and sinta 2 levels. Reputable international journals use search engines on journal suggester, science direct, and sage journals. The keywords used are vocational education, career development, and career maturity. The protocol used in the search for article sources is in the form of research articles in the 2011-2023 range. The article you are looking for already has a DOI and can be accessed.

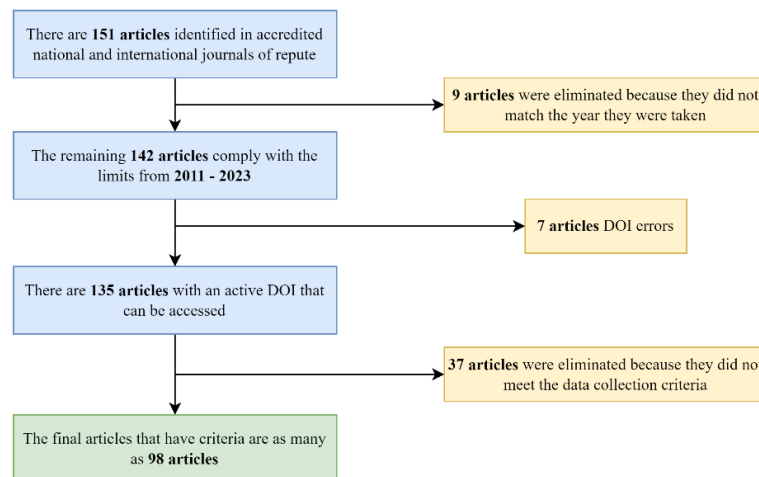


Figure 1. Elimination Process and Identification of Literature Sources

The data sources found in the search were very broad and numerous, due to the limitations of the researchers, the many and extensive articles were selected into 151 articles. Based on Figure 1, there were 151 articles found, and as many as 9 articles were eliminated because based on a predetermined year range, several articles were found whose year of publication was below a predetermined standard. There were 142 articles remaining, after

checking the DOI it was found that there were several articles, namely around 7 articles were eliminated. This is because the 7 articles have DOI errors or cannot be accessed. A total of 37 articles were not found or did not meet the data collection criteria. The final total was 98 articles which were used as a reference for literature studies. Data source retrieval condition is show in [Figure 2](#).



Figure 2. Data Source Retrieval Conditions

Most of the articles found were published in 2022 as many as 21 articles and at least around 4 articles around 2012. [Figure 2](#) is the distribution of data regarding the year and number of articles that have been analyzed. This research is more in the form of qualitative research because this type of research describes. The subjects in this study and at the same time become the object of research, namely in the form of written texts regarding the role of vocational education in the process of developing student careers.

3. RESULTS AND DISCUSSION

Results

The information found after tracing the data sources that have been taken found several levels of understanding based on the answers to the questions that have been prepared before. 5 major themes were found based on the results of the selection and understanding of the data sources found. All these themes will be explained one by one in the results and discussion section. The themes that have been divided are 1) the importance of job characteristics; 2) career maturity development services; 3) career opportunity analysis development services; 4) career decision-making skills development services, and 5) vocational career development. The following presents 5 major themes regarding the role of vocational education in developing student careers which can be seen in [Table 1](#) and [Figure 3](#).

Table 1. Literature Review Themes

Study Theme	Number of Articles
The Importance of Job Characteristics	15
Career Maturity Development Services	11
Career Opportunity Analysis Development Services	32
Decision Making-Ability Development Services Karir	29
Vocational Career Development	11
Total	98

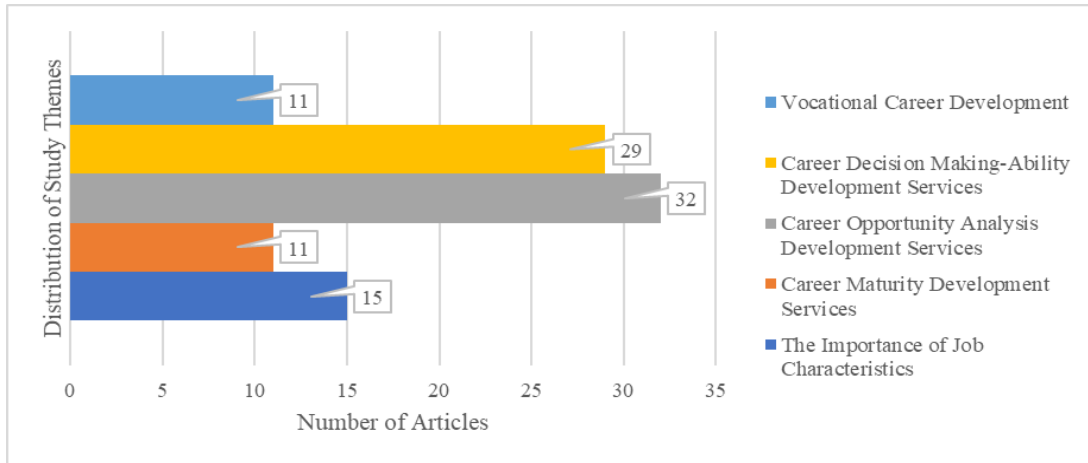


Figure 3. Major Themes Studied

Table 1 and Figure 3 are the total data sources obtained in this literature review process. In point 1 it is found that as many as 15 articles contain the importance of job characteristics. 11 articles on the theme of career maturity development services, 32 articles on the theme of career opportunity analysis development services, 29 articles on skills development services in making career decisions and finally 11 articles on vocational career development.

Discussion

The role of vocational education in the student career development process needs to be studied further. For students' careers to develop and mature in the process of their lives, it is necessary to clarify what factors make this achievable. The true career journey is to achieve a decent and full of achievements life. The career selection period can occur from the phase of 11-year-old children, 11-17-year-old youth to early adulthood at the age of 24 years (Batubara, 2013; Widati et al., 2021). Individuals can gradually determine which career options are suitable for the conditions, interests, and skills are taken. The process of providing career information when studying is very important, to form a career that is truly by the character of each individual (Arsyad, 2015; J. Zhang et al., 2020). The services provided to students while studying will increase educational aspirations and help the career maturation process.

The role of vocational education will be very important in helping students to develop skills and knowledge in the world of work. Vocational education must be able to present programs that are in line with the demands of the world of work, be able to develop soft skills, and be able to provide learning that is more innovative and relevant according to technological developments and current market needs. Thus, students can obtain careers that match their interests and abilities. The following discusses the results of research on the role of vocational education in student career development, including job characteristics, career maturity development services, career opportunity analysis services, career decision development services as well as vocational career development.

The Importance of Job Characteristics

The career maturation process is obtained through information based on services that have been provided while studying. So that interest and motivation arise in learning activities for the subjects taken. The choice of a vocational field in education is a predictor in determining one's career decisions (Hsu et al., 2022; Quinlan & Renninger, 2022). Careful career planning will have an impact on one's performance so that there is enthusiasm for learning for working capital and improving one's performance (Hamsinah, 2023; Hatane et

al., 2021). Someone who has more career information will form different job characteristics so that they can choose which career is suitable and better for life planning. Job characteristics are job designs that have diversity, skills, job identity, and the feedback you get. Characteristics are indicators of a job so that the work process can run as desired. Someone tends to feel satisfied in pursuing a career if the job involves certain characteristics that are following the interests they have. Job characteristics refer to the nature of the tasks assigned when taking on a job. Job characteristics are also based on the status of a person's job. The better the job characteristics, the better the impact will be, especially in working conditions (Brokmeier et al., 2022; Plaisier et al., 2012). The result is that it can make a person feel passionate, motivated, and satisfied at work and get a good life.

The latest research on various job characteristics will affect one's job satisfaction, previous study said that the diversity of job characteristics provided will affect job satisfaction, motivation, and welfare of workers (Santi et al., 2014; Seniwati et al., 2014). Workers will feel more satisfied and more loyal to the company where they work because they have a positive reaction to the work being done. Therefore, it is important to improve job characteristics so that worker welfare can increase by providing training following the field being taught. This will increase motivation and career run. Vocational education provides information about the characteristics of jobs that may exist in the future. Providing up-to-date information will increase students' understanding of the types and characteristics of jobs that can be prepared from the start. This aims to be able to determine which direction the student will decide in his career.

Career Maturity Development Services

Career maturity is a person's readiness to decide on a career that can be found through strong information. Career maturity is defined as a person's level of mastering career development in terms of knowledge, skills, and attitudes that are adapted to the stages of career development. These careers can be found in the world of education, work, or activities carried out in spare time. For a career to develop as expected, it is necessary to take an educational route because in this process career stages will begin to develop. Education that is well integrated into the learning process in the form of honesty, tenacity in learning, confidence, conscientiousness, and others can help students achieve careers in the future (Iswari, 2018; Santosa, 2013). Students should be encouraged to be able to interact with people around them, so they can access information about careers. This interaction is a social skill possessed by everyone that can help increase career maturity. Interaction can be found when someone gets career-related services. Career maturity service is an activity of providing information obtained in the educational process and usually in the form of career guidance.

Career maturity is the key to deciding whether a career is right or not or can develop a career that is following expectations. According to previous study career maturity is obtained based on strong and integrated information through activities in education (Budiman et al., 2020; Putra et al., 2014). Vocational education provides effective career services besides providing the best information for their students. Well-planned and well-formed career development will help a person choose a career that suits their talents and interests as well as the expertise they have (Suwanto, 2018; Wutsqo et al., 2020). Individuals need to prepare for the right career and develop according to expectations. This will make individuals able to live more worthy and happier.

Career Opportunity Analysis Development Services

Vocational education offers different careers and can encourage individuals to find careers that match their preferred interests and skills. The learning style applied using the right method will affect learning outcomes. Optimal learning outcomes will optimally improve student career development (Freedman, 2014; Husin et al., 2022). Besides that,

providing training by conducting group discussions will be very effective in improving one's career planning so that there are opportunities in the future. Other training services such as providing mentors can increase and improve career direction for someone (Huebner et al., 2018; Nove et al., 2021). Someone who has better career goals, will need training in order to increase knowledge and obtain various information in the career development process to increase the right career opportunities. Appropriate career information for a person will increase career opportunities in the future (Basuki & Kurniawan, 2022; Toygar & Ergün, 2021). Providing information about career planning will help mature careers and create even better career opportunities. Teacher involvement and professional responsibility will predict student career changes so that they are able to find career opportunities for these students (Nouri & Parker, 2013; Rahmaniah, 2013; Richter et al., 2011). When given trust regarding the job offered with a clear commitment, it will increase the growth of career opportunities for the individual.

Opportunities for career growth will increase career commitment and reduce regret about career downturns so that it will make a person successful in living his life. Career opportunities will appear if there is positive career development on the performance carried out. Making the right career decisions with a blend of the latest technology will increase career opportunities (Huo, 2021; Inderanata & Sukardi, 2023). Career development at this time has all been accompanied by technological developments. Technological developments have a high impact on a person's self-development. Good career development will increase career opportunities based on one's performance. According to previous study the use of the latest technology in the process of developing career opportunity analysis services will increase the effectiveness and efficiency of these services (Apriatama, 2018; Putro & Japar, 2021). Technology can perform more in-depth data analysis and can provide more accurate recommendations for service users. In addition, the integration of services in the analysis of career opportunities can help achieve career goals. According to other studies integration in career opportunity services accompanied by training and career development as a whole will help in achieving career goals (Liza & Rusandi, 2016). More effective and efficient career opportunities provided by vocational education institutions will provide significant benefits for service users in achieving career goals. Need further development in the concept of this service to support career success.

Career Decision-Making Ability Development Services

Decision-making is an activity that is carried out intentionally and does not occur by chance and should not be decided arbitrarily. Decision-making is a choice taken from several alternatives offered to produce decisions that are made consciously. This of course did not happen by chance. Career decisions taken will be very beneficial in improving and choosing suitable careers for individuals in the future (Choi & Kim, 2013; Chuang et al., 2020). These decisions can be honed from the start from small decisions to big things so that they can strengthen future decision-making. The decision taken is a wise and full consideration that determines whether the career taken is appropriate.

Many factors influence the career decision-making process. Decisions in choosing a career are influenced by personal and family and social desires (Alboliteeh et al., 2022; Ireland & Lent, 2018). That is, career decisions are very much dominated by internal factors and come from external factors. Talking about internal factors are factors from within individuals such as skills in dealing with tasks and problems. Shifts in career selection also depend on learning motivation and gender gaps. Learning motivation and genetic conditions have a major influence on career preparation (Choi & Kim, 2013; Tsai et al., 2012). On the other hand, creative thinking styles also contribute to making and producing career decisions. This development service in making career decisions is the latest innovation in the process of developing one's career. The results of the previous research show that this service provides a

lot of assistance and benefits for someone in developing career skills and can sharpen their views on available career choices (Abdillah et al., 2020; Ristian et al., 2020). The update of this service lies in the approach used that is well integrated. This service not only assists individuals in understanding career preferences but also provides information regarding the job market and available job opportunities (Porfeli & Savickas, 2012; Sodiq & Hidayat, 2022). This is provided by vocational education institutions in improving the service programs provided. Through this innovative and integrated approach, skills development services in making career decisions will assist individuals in achieving their career potential.

Vocational Career Development

The link between work experience and the conditions that exist in the world of education has been felt before. Because the concept of vocational education is to provide experience and collaboration between educational institutions and the business world. Students are allowed to develop skills by taking part in internships in the world of business and industry both on-time and part-time internships (Pappas & Kounenou, 2011; Šverko & Babarović, 2016). Programs like this allow students to test the career development they have planned against the conditions in the field. The experience program provided will provide goals for improving future career plans. The use of the latest technology in educational institutions as well as when receiving internships in the industry will improve skills so that creative innovations will arise to foster student career development. Career adaptation in the vocational education environment will produce a good career identity. On the other hand, teachers as teachers must be trained and professional so that students can organize careers (Martaningsih et al., 2019; Özkamali et al., 2014). This is also obtained in teacher apprenticeship programs to the industry to equalize competence and expertise in the world of work and workplace institutions. So, it can be concluded, career development in vocational education does not only develop students' careers, teachers as professional educators will also contribute so that this can be fulfilled.

The novelty that can be found in the field of vocational career development in vocational education is that it focuses on the training and certification that has been given. The use of technology is growing, so the opportunity to develop a vocational career can certainly be done not only face to face (Nadiana et al., 2014; Verianto et al., 2015). This can also be done online or get digital certifications which are easier to obtain. The results of research that has been conducted by previous study state that many individuals want to develop careers in certain vocational fields (Suwanto, 2018). Of course, this may be done, as long as it has the capabilities that have been planned from the start. The importance of developing both technical and non-technical skills is needed in certain vocational fields. It also covers the social skills, time management, and analytical skills needed in a vocational career.

4. CONCLUSION

The conclusion that can be presented regarding this problem is that job characteristics, career development services, career opportunities, career maturity services and career opportunities as well as career development carried out in vocational education will play an important role in the development of a person's career, especially students in vocational education. The choice of vocational field taken in the educational process is one of the possible predictions in determining one's career decision. The characteristics of the job to be taken are based on the nature of the job given. Career development will be well planned because there is preparation from the start. Someone who has better career goals will need training in order to increase the knowledge, skills and information needed to increase career

opportunities. Information about careers obtained is an initial plan and can improve career development and create career opportunities.

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