



Development of Modeling Techniques Guidebook to Assist Students' Career Planning

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Abstract. The need for appropriate career planning must be initiated early on and reinforced at the senior high school level. It is intended that students have a clear direction for their future careers. However, suitable career guidance resources are still quite limited. This study aimed to (1) develop a guidebook for modeling techniques in group guidance that can be used by Guidance and Counseling teachers to improve career planning for vocational high school students; and (2) construct a modeling technique guidebook in group counseling that is suitable for use to improve career planning for vocational high school students. The research used Research and Development (R&D) research based on the Borg and Gall development model. The stages of this research consisted of seven stages, namely: research and information gathering, planning, development of initial product forms, initial field trials (small group), main product revisions, main field trials (large group), and revision of main field trials. The data analysis technique used was descriptive qualitative data analysis and quantitative data analysis. The results of the study showed that a modeling technique guidebook in group counseling to improve student career planning was categorized as “very feasible” with a percentage of 83%. This could be proven by the validation results from material experts, media experts and user practitioners. Therefore, this study recommends using this modeling technique guidebook as a reference for guidance and counseling teachers in providing career guidance.

Keywords: Development Guidebook · Modeling Techniques · Career Planning

1 Introduction

One of the developmental tasks possessed by adolescents who are in high school is tasks related to careers and further education. One of the determinants of career success is the maturity of career planning that has been carried out since high school. High school students are faced with many career choices that must be decided based on their talents and interests [1]. Super stated that career planning is a process where an individual identifies and take steps to obtain his/her career goals [2].

However, in the reality, as explained by Yusuf that the process of selecting a career that is suitable for high school students is still very difficult to do [3]. Data from the Indonesian Central Bureau of Statistics in May 2019 showed that during this period

the number of unemployed decreased by 5.01%, but the open unemployment rate for Vocational High Schools was still the highest among other levels of education at 8.63%.

One of the steps that can be taken by Guidance and Counseling teachers to help improve students' career planning is to provide group guidance services using modeling techniques. Modeling is a technique popularized by Bandura in social learning theory which is also known by several other terms such as observational learning, modeling and imitation which means learning through direct observation to imitate the behavior of other people or characters [4]. Supporting students' career exploration may help them to make career decisions, be less doubtful or confused throughout the decision-making process, and enhance their perceived employability [5]. Modeling techniques will be very suitable to be used in improving students' career planning because they will make conscious decisions to carry out the behaviors they learn through observation. Not just observing and imitating the actions and behavior of others. In line with the opinion of Alwisol, modeling techniques are not just imitating or repeating what other people do (models) but modeling involves the addition or subtraction of the observed behavior [6]. Various observations involve the cognitive processes. The use of modeling techniques in group guidance is expected to be appropriate in developing student career planning by imitating the behavior of the model.

The Guidance and Counseling teacher is one of the most influential parties for a student in the development of expectations and career development. This is the starting point for someone to get acquainted with the world of work. Yusuf, Supriatna & Budi-man said that education is a pre-occupation that is the beginning of determining one's career [7, 8]. As Jordaan stated "Career development tasks of adolescents; knowledge, information seeking, planning and decision-making, attitudes, and skills" [9]. So that the ability of Guidance and Counseling teachers in providing guidance and counseling services is also one of the things that must be considered.

The success of the service is not only determined by the ability of the teacher but is also determined by the infrastructure in the form of guidance and counseling media that facilitates Guidance and Counseling teachers in carrying out services such as guide books. The guide will be a reference for Guidance and Counseling teachers in implementing a guidance and counseling service technique. The guidelines will also maximize the efforts of successful service delivery by Guidance and Counseling teachers in a systematic, planned, effective and efficient manner. So, the fact that there is no modeling technique guidebook in group guidance in schools is a problem that requires an immediate solution for Guidance and Counseling teachers.

From the results of preliminary research in the form of interviews conducted by researchers with Guidance and Counseling teachers at State Vocational Schools in Depok District, it was found that the modeling technique in group guidance was very rarely implemented. Even if it is implemented, its implementation is not as it should be. According to Guidance and Counseling teachers, the implementation of modeling techniques in group guidance at the school is often carried out simultaneously (concurrently) with classical guidance. In addition, there are still many students who also think that the service is not important, making the implementation not optimal. The fact that schools do not yet have a manual for modeling techniques in group guidance becomes a very big obstacle for Guidance and Counseling teachers in its implementation. Even though the

Guidance and Counseling teachers themselves admit that the modeling technique guide book in group guidance is something they really need in supporting the achievement of the goals of the service itself. With the guidebook, Guidance and Counseling teachers believe that the implementation of the service will be able to be systematic and structured so that it will also have an impact on maximum student career planning.

The purpose of developing this research is, first, to produce a product manual for modeling techniques in group guidance that will be used by Guidance and Counseling teachers to improve career planning for vocational students. Second, to produce a modeling technique guidebook product in group guidance that is suitable for use to improve career planning for vocational students.

2 Method

2.1 Type of Research

This research uses Research and Development (R&D) research. "Educational research and development (R & D) is a process used to develop and validate educational products". Borg & Gall research and development is an effort to develop and validate products that will be used in learning [10].

2.2 Development Steps

Ten development step according to Borg & Gall are: research and information collecting, planning, develop preliminary form of product, preliminary field testing (small group), main product revision, main field testing (large group), operational product revision, operational field testing, final product revision, dissemination and implementation to the community.

2.3 Place and Time

This research was conducted at Vocational High School 1 Depok and Vocational High School 2 Depok in Yogyakarta. This research was conducted from October to November 2021.

2.4 Testing Subjects

The expert subjects used in this study are media experts and material experts, both of whom are lecturers with criteria that comply with the minimum terms and conditions as described in the Thesis and Dissertation guidelines of Universitas Negeri Yogyakarta. Each of these experts are Diana Septi Purnama, M.Pd., PhD as a material expert and Agus Triyanto M.Pd. as a media expert. Furthermore, the subject of practitioner validation is the Guidance and Counseling teacher who is in charge of Vocational High School 1 Depok and Vocational High School 2 Depok totaling 10 teachers of Guidance and Counseling with educational qualifications undergraduate degree (S-1) in the major of Guidance and Counseling.

2.5 Data Collecting Instrument

The data collection instruments used in this study were interviews and validation sheets for the expert and practitioner team. Interviews were conducted in the early stages of the research aimed at knowing the facts in the field as well as the level of understanding and needs of Guidance and Counseling teachers in schools on the modeling technique guidebook which was then used as the basis of the research. The validation technique was carried out by a team of experts and practitioners to determine the feasibility of the product developed, in this case the modeling technique guide in group guidance to improve career planning for vocational students.

2.6 Data Analysis Tech

The collected data was then analyzed using qualitative descriptive data analysis techniques and quantitative data analysis. Qualitative descriptive data analysis will be carried out by collecting qualitative data such as inputs and responses obtained from the testing of the expert team and user practitioners. Quantitative data analysis will be done by calculating the assessment scores given by material experts, media experts and user practitioners.

3 Finding and Discussion

3.1 Preliminary Product Development Result

Research and Information Collecting. The school has never implemented the modeling technique at all. Modeling techniques are also not included in the school Guidance and Counseling program. In addition, schools also do not have a modeling technique guide that can be used as a reference in its implementation. There is no guidebook on modeling techniques in group guidance to improve student career planning that can be used as a reference in implementing this service. This is also an important concern for researchers. Guidance and Counseling teachers agree that the existence of a modeling technique guidebook in group guidance to improve students' career planning will be very meaningful for Guidance and Counseling teachers, students, schools and also for the service process itself. The data obtained from the results of the interviews were then analyzed through qualitative descriptive data analysis techniques. It can be concluded that from the interviews, it is known that students' career planning is still low, modeling techniques have never been done at all and there is no guide to modeling techniques in group guidance and is very much needed by Guidance and Counseling teachers.

Planning. Researchers will develop a guide in the form of printed materials, namely a modeling technique guidebook in group guidance to improve student career planning that is concise, lightweight and practical and easy to carry. This guide will be used as a reference in implementing modeling techniques by Guidance and Counseling teachers. This guide contains an introduction, modeling techniques, career planning, and the steps for implementing modeling techniques. Several considerations were made to the design, color selection, type and font size. After going through some considerations, the researcher decided to use a book in B5 size, Cambrian font, 12 font size and 1.5 spacing.

Preliminary Product Development. The product is in the form of B5-sized printed teaching materials with soft cover and HVS content. The product used by the Guidance and Counseling teacher consists of several components including the title page, gratitude, foreword, table of contents, part 1 introduction, part 2 planning, part 3 modeling techniques, part 4 implementation of modeling techniques, bibliography.

3.2 Product Testing Result

Material Expert Testing. The results of the material expert's assessment of the feasibility of modeling technique guides in group guidance to improve career planning for vocational students get a score of 91 with a score of 76 in the "very feasible" category (Table 1).

Media Expert Testing. The results of the material expert's assessment of the feasibility of modeling technique guides in group guidance to improve career planning for vocational students get a score of 60 with a score of 75 in the "feasible" category (Table 2).

Table 1. Percentage of Feasibility Based on Material Expert Validation.

| Score | Conversion Value | Qualification | Explanation |
|--------|------------------|---------------|---------------|
| 91–120 | 76–100 | Very Good | Very Feasible |
| 61–90 | 51–75 | Good | Feasible |
| 31–60 | 26–50 | Sufficient | Less Feasible |
| 0–30 | 0–25 | Not Good | Not Feasible |

Table 2. Percentage of Feasibility Based on Media Expert Validation.

| Score | Conversion Value | Qualification | Explanation |
|-------|------------------|---------------|---------------|
| 61–80 | 76–100 | Very Good | Very Feasible |
| 41–60 | 51–75 | Good | Feasible |
| 21–40 | 26–50 | Sufficient | Less Feasible |
| 0–20 | 0–25 | Not Good | Not Feasible |

Media Expert Testing. The overall score obtained from the assessment of 4 Guidance and Counseling teachers in the preliminary field testing of the modeling technique guide in group guidance to improve career planning for vocational students is 567 with a score of 93.2 in the “very feasible” category (Table 3).

Main Field Testing. The overall score obtained from the assessment of 6 Guidance and Counseling teachers in the main field testing of the modeling technique guide in group guidance to improve career planning for vocational students is 764 with a score of 83.7 in the “very feasible” category (Table 4).

Final Product Review. The results of testing conducted to material experts and media experts are used as the basis for making improvements to the preliminary product. Material experts provide input on the absence of an explanation of what type of modeling is used in the guide and the application of more detailed technical modeling. Revisions were also made to the material in the guide based on input and suggestions provided by material experts. Media experts provide input on covers that are still less attractive and editorial language on covers that are less perfect. Revisions were also made to the media in the guide based on input and suggestions given by media experts.

Table 3. Percentage of Feasibility Based on Preliminary Field Testing.

| Score | Conversion Value | Qualification | Explanation |
|---------|------------------|---------------|---------------|
| 115–152 | 76–100 | Very Good | Very Feasible |
| 77–114 | 51–75 | Good | Feasible |
| 39–76 | 26–50 | Sufficient | Less Feasible |
| 0–38 | 0–25 | Not Good | Not Feasible |

Table 4. Percentage of Feasibility Based on Main Field Testing.

| Score | Conversion Value | Qualification | Explanation |
|---------|------------------|---------------|---------------|
| 115–152 | 76–100 | Very Good | Very Feasible |
| 77–114 | 51–75 | Good | Feasible |
| 39–76 | 26–50 | Sufficient | Less Feasible |
| 0–38 | 0–25 | Not Good | Not Feasible |

The next stage was the Preliminary field testing for 4 user practitioners, namely the Guidance and Counseling teacher from Vocational High School 1 Depok who provided input on the existence of inconsistent writing styles, incorrect writing, unstable spacing and some writings that were not clear. Revisions were also made to the guide based on the input provided by the Guidance and Counseling teacher. Furthermore, the main field testing on 6 user practitioners, namely Guidance and Counseling teachers from Vocational High School 2 Depok. From the results of the main field testing, it was found that there were still errors in writing and the size of the writing on the contents of the guide was too small so it was difficult to read. Revisions were also made to the guide based on the input provided.

Inputs have been received and revisions have been made based on these inputs in order to produce a product in the form of a guide that is appropriate in terms of materials and media according to experts and practitioners who will use the guide. The resulting product also has aspects that are in accordance with aspects that should be owned by a guide book, namely material/content aspects, presentation components, language components and graphic components [11]. Therefore, the modeling technique guide in group guidance to improve career planning for vocational students can be categorized very feasible or very good based on the material expert and media expert tests, field testing on ten user practitioners, namely Guidance and Counseling teachers, and have met terms and conditions in the product development guidebook.

4 Conclusion

The modeling technique guide in group guidance to improve the career planning of vocational school students has been developed as attractively as possible so as to facilitate the understanding of Guidance and Counseling teachers as user practitioners in providing services, especially group guidance services with modeling techniques. The modeling technique guide in group guidance to improve career planning for vocational students is considered “very feasible” because it has met the criteria. This can be proven by the validation results from material experts, media experts and user practitioners.

This research and development is only implemented until the main field testing stage in large groups, so for further researchers it is necessary to carry out an advanced stage to see the level of effectiveness of the guide in order to produce a more optimal product. In addition, this research and development can also be used as a reference in developing other technical guidelines that aim to add insight and knowledge.

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