



Development of Modelling Technique Guidelines to Improve Career Planning of Vocational School Students in Samatiga and Johan Pahlawan Districts, West Aceh Regency

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Abstract

Career problems experienced by students when choosing a career require more understanding when making their choices. To minimize these problems, it is necessary to provide career guidance services with optimal technical variations to make it easier for guidance and counseling teachers to provide services in career planning. For this reason, guidelines are needed to overcome career problems to plan the right career. This research aims to produce modelling technique guidelines that are feasible and effective in improving career planning for vocational School Student. This research was development research proposed by Brog and Gall with seven steps, namely 1) preliminary research and information collection, 2) planning, 3) initial product development, 3) initial field test, 4) revision of initial field test results, 5) main field trial, and 6) revision of main field test results, , 7) reviewing the results of the main field trials, 8) operational field trials, 9) final product revision, 10) dissemination and implementation. Data collection used material validation test questionnaires, media validation test questionnaires, guidance and counseling teacher test questionnaires, interviews, documentation, and career planning scales. Material experts, media experts, and guidance and counseling teachers carried out the feasibility test of the guide. The population in this study amounted to 76 students, and the subject of a trial of 10 guidance counseling teachers was used to determine this study's effectiveness level. The data analysis technique used quantitative dataanalysis. The results of this study show that: 1) the guidance of modeling techniques to improve students' career planning based on the results of the assessment of material experts obtained a score of 73 with the feasible category; the results of the assessment of media experts obtained a score of 83 with the feasible category; and all guidance and counseling teacher practitioners give a score with a range of $69 \leq S \leq 84$ with the very feasible category; 2) the modeling technique guide to improve students' career planning is effective based on the career planning scale. The effectiveness test conducted on 76 students resulted in an average score of 31.26 for the pretest and 41.2 for the posttest, so it can be concluded that the modeling technique guidebook for career planning is declared effective.

Keywords: *Guide Development; Modelling Techniques; Career Planning*

Introduction

Guidance and Counseling is one of the components in the educational process in schools. The role of guidance and counseling is important in helping students meet their needs. As the meaning of guidance and counseling is a process of assistance provided by an expert to counselors who need to alleviate the problems faced from daily effective activities being disrupted to daily effective activities.

One of the developmental tasks that must be successfully achieved is the development of the career field. According to Mathis & Jackson (2006), a career is a series of positions related to work that a person occupies throughout his life. Meanwhile, on the other hand, career is what a person feels in living his or her working life. It is understandable that a career is very important in an individual's life where a career lasts during his or her life. Career guidance is needed at school to help students choose talents, interests, and potential. The phenomena that occur in students in choosing a career are a lack of understanding in making their choices. One of them is in career selection, there are a lot of obstacles in the learning process because at the time of career selection there are many friends, desires and abilities that do not match, parents' wishes, so that when they go through it they experience obstacles and a lack of desire to undergo the process. In addition, Guidance and Counseling teachers also experience a lack of guidelines in career guidance, so that in providing guidance and counseling services, guidance and counseling teachers experience confusion in providing career guidance services in carrying out their duties.

Career problems are the future problems of students. Students need to be equipped with various information for a better future direction. Various career problems often occur in various schools. Based on research conducted by Septiana Ulfach (2019), regarding the influence of career guidance with modeling techniques to improve students' career planning, there are career problems that are felt by students at vocational schools. Based on the existing phenomenon, many students after graduation when they want to find a job are not in accordance with the major they took when they were in vocational school and they are confused when they want to continue their education.

The same problem is also experienced by students of SMK Negeri 1 Samatiga located in West Aceh Regency, many students in choosing a major follow their friends, there are also those who are interested in the desired major, but do not reach the specified threshold. The problems that occur are not only that, but after undergoing the learning process, there are also those who are unable and have the desire to move and there are those who change schools to be able to take the learning program that suits their desires. Another phenomenon was also found that students after graduation when looking for a job were not in accordance with the major they took when they were in vocational school and they were confused when they wanted to continue their education to a higher level and what major to take when they wanted to continue. As with the 2018 graduates, information obtained from the coordination of Guidance and Counseling at SMK Negeri 1 Samatiga stated that many of the students after graduation took a different major than what they took at school. Some are from the Fashion Department when they graduate majoring in Accounting at university. Not only in these schools, but in some high schools in West Aceh, there are also problems experienced by SMK Negeri 1 Samatiga. This problem often occurs in various schools in relation to the career field. Guidance and Counseling teachers must provide effective services to address the lack of understanding in students' career planning.

Guidance and Counseling services provided by Guidance and Counseling teachers to counselors with the aim of helping to optimize the potential of counseling and make it independent, especially career guidance. According to Winkel & Hastuti (2013:114) explained that career guidance is guidance in preparing for the world of work, in choosing a job or certain position/profession, and equipping oneself to be ready to hold a position, and in adjusting to the various demands of the job field that has been entered (In Shidratul Attika, ddk. (2020). Further about the meaning of career is the development and progress of a person in his life, both in education/learning, work, position, and other life activities. Guidance and Counseling Teachers provide assistance according to their needs. To provide understanding to students,

Guidance and Counseling teachers try to provide career guidance from various information so that students get an idea for better career planning in the future.

One of the efforts that can be given by Guidance and Counseling teachers in planning students' careers is by providing effective services in students' problems, providing information briefings can help students in planning their careers well. Efforts made by Guidance and Counseling teachers can apply modeling techniques.

According to Bandura (in Alwisol 2009) *Modelling* is a learning process through observation where the behavior of an individual or group, as a model, acts as a stimulus for thoughts, attitudes, or behaviors as part of other individuals observing the model displayed. So in modeling techniques, the type of technique that will be used is a symbolic model. The purpose of the symbolic model is to change inappropriate behavior. In symbolic *modelling*, the model is presented through written materials, audio, video, film or slides. *Symbolic modeling* forms people's images of the social reality of themselves, in such a way that it can photograph various human relationships and the activities they perform. For example, symbolic models are used to overcome dependence or addiction to drugs and alcohol, how to help individuals overcome phobias, help deal with severe personality disorders such as Corey psychosis, G. (2007).

Guidance and Counseling Teachers play a role in directing and guiding students in achieving their goals to be independent in resolving the obstacles experienced. In this case, Guidance and Counseling teachers help students in developing their own potential for strength. This effort is carried out so that students can be open to the problems they face.

These problems, of course, Guidance and Counseling teachers really need to open a guide to provide good and effective services in solving students' problems. There are still Guidance and Counseling teachers who are confused in providing career guidance services in career planning because there is no career guidance guidebook for students' career planning. This problem shows that in providing career guidance services to students, it is still not optimal. With this guide, it is hoped that it can be a reference in providing career guidance services for students' career planning using *modeling techniques* to be more optimal.

With the existence of a career planning guidebook using *modeling techniques*, it can increase knowledge and insight for Guidance and Counseling teachers in providing career guidance services. Maximum service provision is said to be if it has provided the right service and in accordance with the needs of students. Thus, the development of an alloy of *modeling techniques* for students' career planning must meet the eligibility standards and be useful for Guidance and Counseling teachers.

Research Methods

Type of Research

This research is a development research proposed by Brog and Gall with seven steps, namely 1) preliminary research and information collection, 2) planning, 3) initial product development, 3) initial field test, 4) revision of initial field test results, 5) main field trial, 6) revision of main field test results, 7) reviewing the results of the main field trials, 8) operational field trials, 9) final product revision, 10) dissemination and implementation. This research aims to produce a modeling technique guide development to improve students' career planning.

Time and Place of Research

This research has been carried out since the date of issuance of the research permit in approximately September-November 2024.

The research site was carried out at three vocational schools in Samatiga and Johan Pahlawan sub-districts of West Aceh Regency. Among them are SMK Negeri 1 Samatiga, SMK Negeri 1 Meulaboh and SMK Negeri 2 Meulaboh.

Procedure

This study uses the development procedure proposed by Brog and Gall (1983). 1) conducting preliminary research and information collection, 2) making planning, 3) developing the initial draft, 4) initial field trials, 5) revising the results of the initial field tests, 6) revision of main field test results, 7) reviewing the results of the main field trials, 8) operational field trials, 9) final product revision, 10) dissemination and implementation.

In the development of modeling technique guidelines for student career planning, it is necessary to analyze the needs of modeling technique guidelines for student career planning that use data sampling interview guidelines.

Research Target/Subject

The subject of this research is Guidance and Counseling teachers as a means of product testing. The subjects of the product trial are ten Guidance and Counseling teachers. The initial field trial involved two Guidance and Counseling teachers and the results of the field product trial involved eight Guidance and Counseling teachers.

Data, Instruments, and Data Collection Techniques

Data Collection Techniques

The methods used in this study to collect data are interviews, career planning scales, and questionnaires for material experts, media experts, and Guidance and Counseling teachers (users).

Data Analysis Techniques

The data analysis technique used in processing the data obtained in this study is using quantitative data analysis.

Table 1. Categories of Grading

Categories Answer	Score
Perfectly Fit (SS)	4
Compliant (S)	3
Not Compliant (TS)	2
Highly Non-Conforming (STS)	1

The assessment for media and material expert validators in this study will be prepared by grouping scores (value intervals). After obtaining the score tabulation, the following are the steps: a) Determine the number of interval classes, namely 4 with a likert scale to obtain an assessment from the validator, b) Determine the score range, i.e. the maximum score minus the minimum score, c) Determine

the length of the class (P), i.e. the maximum score range minus the minimum score and divide the number of classes, d) Compile the interval classes starting from the smallest score to the largest score.

The following is a table of criteria for assessing the feasibility of the module by media expert validators and material expert validators, namely:

Table 2. Eligibility assessment criteria for validators, media and material experts

Value	Assessment Quality Criteria	
	Categories Assessment	Value Interval
4	Highly Worthy	$(S_{min} + 3P) \leq S \leq S_{maks}$
3	Proper	$(S_{min} + 2P) \leq S \leq (S_{min} + 3P - 1)$
2	Not Eligible	$(S_{min} + P) \leq S \leq (S_{min} + 2P - 1)$
1	Very Unworthy	$S_{min} \leq S \leq (S_{min} + P - 1)$

Research Results and Discussion

In the stage of developing modeling technique guidelines for student career planning, it is necessary to analyze the needs of modeling technique guidelines for student career planning that use data sampling interview guidelines. Identification of needs is also carried out by distributing the career planning scale to students to find out the level of problems in the career experienced. In addition, the identification of needs was also obtained from vocational guidance and counseling teachers in Samatiga District and Johan Pahlawan stated that there were still students who were undecided in determining their career direction.

The next stage is the design stage. This stage designs a framework of a modeling technique guidebook to improve students' career planning. The designed guidebook framework is the first part to contain the guidebook cover, introduction, table of contents, list of pictures, list of tables, and list of attachments.

Part one contains an introduction, including rationale, goals, users and service objectives, the role of Guidance and Counseling teachers and students, instructions for use and career planning measurement instruments.

Part two of the guidebook contains modeling techniques to improve career planning, including the definition of modeling techniques, the goals and types of modeling techniques, the principles and benefits of modeling, the steps of modeling, career planning, the goals and benefits of career planning, the stages of career development and personality types in career preparation.

Part three of the guidebook contains modeling techniques and procedures for student career planning consisting of the steps to implement modeling techniques and scenarios for the implementation of modeling techniques. The final section contains the conclusion, bibliography, appendices, author profile and back cover.

The feasibility of the guidance according to the material experts received a score of 73 with a feasible category. The results of the assessment of media experts obtained a score of 83 with a feasible category, and all guidance and counseling teacher practitioners gave a score with a range of $69 \leq S \leq 84$ with a score of 77 in the very practical category.

Product Trial Results

In the initial field product trial, both guidance and counseling teachers gave scores in the very practical category with a range of $69 \leq S \leq 84$. In this test, the researcher did not receive any revisions

from the practitioners. Therefore, the product was then tested by 8 guidance and counseling teachers. The results obtained were that all assessors gave a very decent score with a range of $69 \leq S \leq 84$ with a score of 77 very practical categories.

The product of the career planning modeling *technique guidebook* has gone through a feasibility test, then an operational field test will be carried out to determine the level of effectiveness. This test was carried out on 76 vocational school students. The test will be analyzed with the T Test, which previously the data had to go through a prerequisite test, namely the normality test. Based on the test results, normal distribution of pretest and posttest data was obtained, so that it was eligible for an effectiveness test.

In the T Test, the average score of the pretest was 31.26 and the posttest was 41.2. Based on this data, it can be seen that there is an increase in scores between pretest and posttest. Furthermore, in the T Test, the value of sig. (2-tailed) is $0.000 < 0.05$. Therefore, it can be interpreted that there is a significant increase in pretest and posttest scores, indicating that there is an improvement in career planning skills in students. Thus, it can be concluded that the modeling technique guidebook developed has effectiveness in improving students' career planning skills.

Product Revision

All revisions from the validator have been done by researchers. Then, at the field trial stage of guidance and counseling teachers, which amounted to 2 teachers in the initial stage and 8 teachers in the main stage, did not provide revisions, meaning that the career planning modeling technique guidebook product is ready to be used to be tested on students. The following are the results of the product revision of the modeling technique guidebook to improve students' career planning:

1.Revision of the Material Expert Assessment Guidelines

The input based on the assessment of the guidebook to improve the opening of the guidebook so that it is suitable for use in the assessment of the guidebook is followed up and revised.

a. The guidebook is too theoretical It is better to present the guidebook with practitioner instructions.

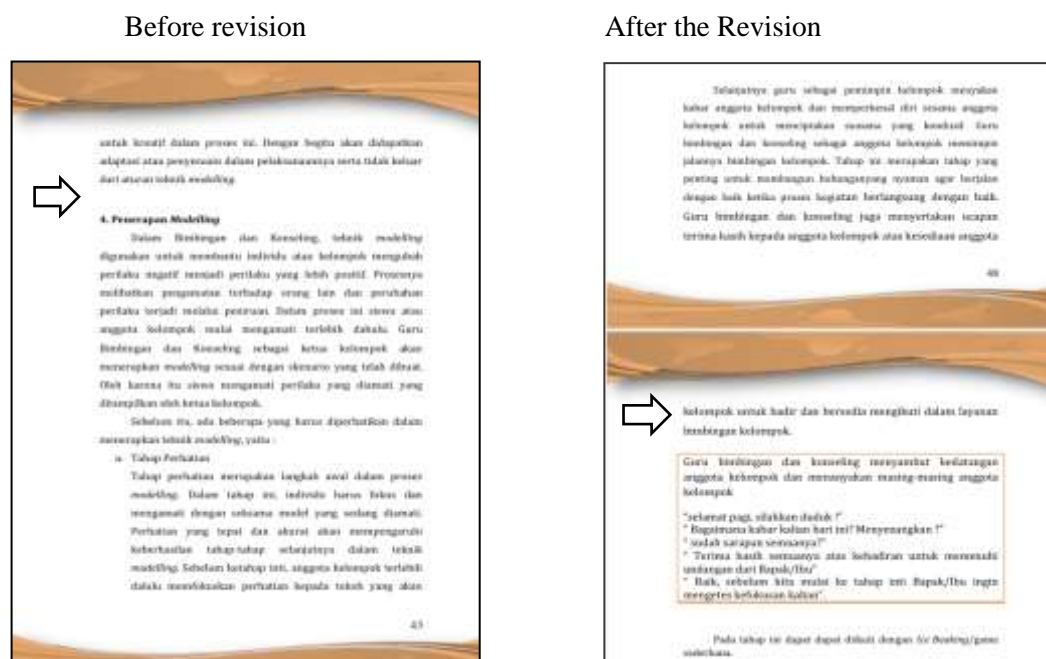


Figure 1. Improving theoretical content into practical

b. The contents of the guidebook can be explained with pictures to make it easier to understand.

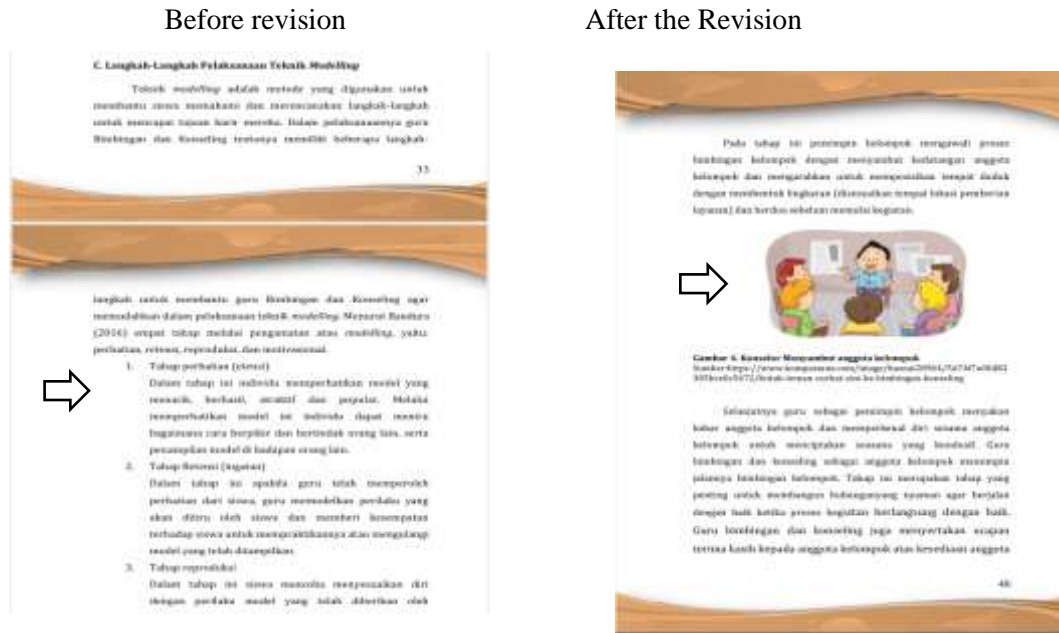


Figure 2. Improved image addition in guide description

c. If there is a movie that is recommended to watch, a link to the film is presented.

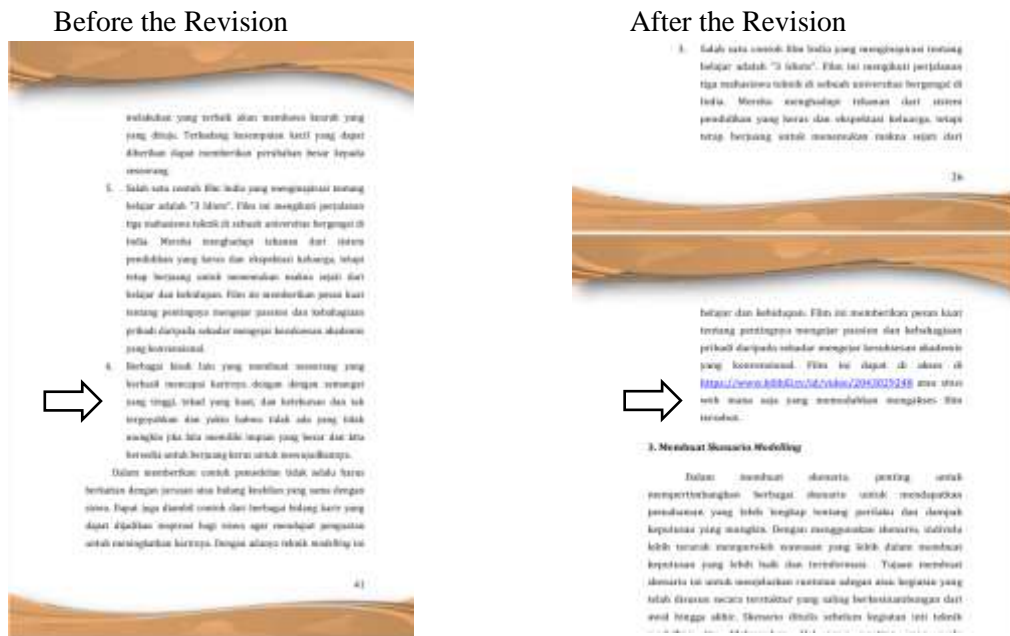


Figure 3. Fix for listing movie links

2. Revision of Media Expert Assessment Guidelines

Suggestions and inputs on the assessment of books can be made without further improvement or revision. The inputs and suggestions from the assessment of media experts to improve the guidelines are:

a. Because this guide is for Indonesian students, the book cover photo should be sought by Indonesians as well, or it can be adjusted to the description of the guide's title.



Figure 4. Cover Revision

b. It is recommended that the author of the chapter number/section be consistent, i.e. all large roman numerals, e.g. I, II, III, etc. And the writing of the title of CHAPTER / Section is consistent, namely using all capital letters, for example: INTRODUCTION (including parts 2, 3)

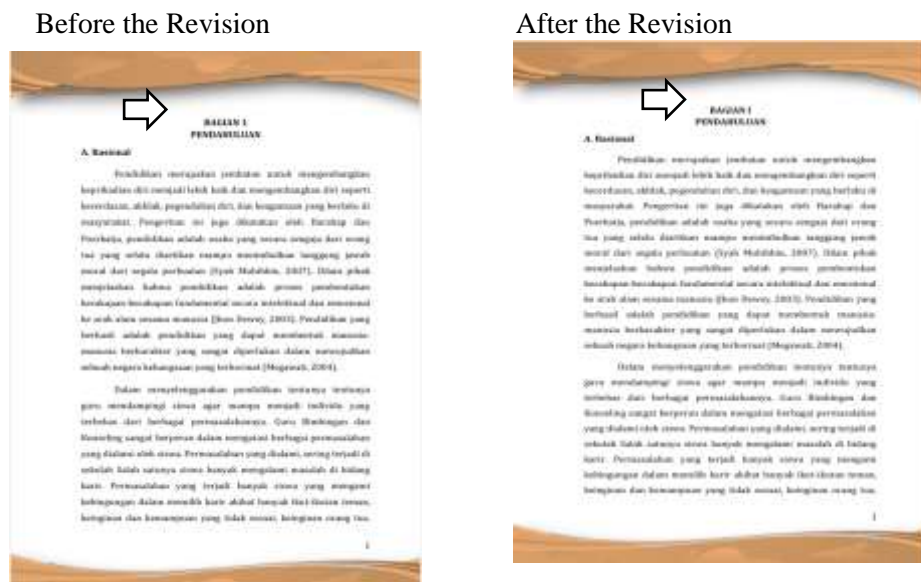


Figure 5. Roman Font and Capital Improvements

3. Revision of Practitioner Assessment Guidelines

The suggestion from the Guidance and Counseling teacher assessor to improve the guidebook is "The Guidebook makes it very easy for us as Guidance and Counseling teachers. However, it would be interesting if there were more pictures".



Figure 6. Improvements to adding images in the Guide

Final Product Review

The revised guidebook will conduct a trial of the student career planning modeling technique guidebook. This stage was carried out for vocational school students in Samatiga and Johan Pahlawan Districts by spreading the career planning scale. According to Emzir (2015), the test can determine the effectiveness of the developed guidelines. The trial was carried out by giving pretests and posttests to students to find out the difference before and after being given career guidance services using modeling techniques. Nugroho (2015) developed a good guidebook made based on field needs, so that users can use it to be able to solve problems in students more optimally.

The final stage is to thoroughly evaluate and test the feasibility of the product. At this stage, the guidebook is already a good book to use. The guidebook is assessed based on the aspects of suitability, accuracy, completeness, usability, and clarity of the language so that the material is suitable for use (Khoriyah, 2019). In addition, Jensen (2017) explained that the product manual must be evaluated by the

experts concerned to ensure that the product is suitable for use. The feasibility assessment of modeling technique guidance to improve student career planning at SMK Samatiga and Johan Pahlawan Districts is seen from the results of material experts, media experts and practitioners.

The feasibility of the guidance according to the material expert received a score of 73 with the feasible category. The results of the assessment of the media expert obtained a score of 83 with the feasible category, and all Guidance and Counseling Teacher practitioners gave a score with a range of $69 \leq S \leq 84$ with a score of 77 in the very practical category.

The effectiveness test conducted on 76 students resulted in an average score of 31.26 for the pretest and 41.2 for the posttest, there was a difference in the results before and after the *treatment*. So it can be concluded that the modeling technique guidebook for career planning is declared effective.

Conclusion

Development of a modeling technique guide to improve career planning for vocational school students in Samatiga District, Johan Pahlawan, West Aceh Regency, can be concluded:

1. Based on the results of the feasibility test for media expert validators and material expert validators, it can be concluded that the modeling technique guidebook for student career planning is feasible. This is because both validators provide assessments in the feasible category, so that the modeling technique guidebook for student career planning can be used at the effectiveness trial stage. Then, based on the results of the initial field trial of 2 guidance and counseling teachers, it was also declared very feasible. Based on the results of the main field trial of 8 guidance and counseling teachers, all guidance and counseling teachers gave a score in the very feasible category, so that the modeling technique guidebook for student career planning was declared feasible.
2. Based on the results of the practicality test, the modeling technique guidebook to improve students' career planning, was declared very practical. This is based on the acquisition of eight Guidance and Counseling teacher practitioners who gave scores in the range of $69 \leq S \leq 84$ with a score of 77 in the very practical category.
3. Based on the results of the effectiveness test, the modeling technique guidebook for student career planning was declared effective. This is based on the results of the effectiveness test using the T test, where there is an increase in the score on the posttest compared to the pretest. The effectiveness test conducted on 76 students resulted in an average score of 31.26 for the pretest and 41.2 for the posttest, so it can be concluded that the modeling technique guidebook for career planning is declared effective.

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