

# Electronic Book About Information of Higher Education for Career Guidance Services in Senior High School: Is It Practically?

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Abstract. High Scool graduates are prepared to continue their studies to higher education. Before high school students choose to continue in higher education, ideally they need to understand information about higher education. Awareness of information about higher education becomes an important aspect for students in planning their career development. The purpose of this study was to describe the practicality of the electronic book about information of higher education on career guidance services in high school. The results of the study will facilitate guidance and counseling teachers in providing career guidance services to high school students. This study was used for research and development (RnD). The model used is the ADDIE model which includes analysis, design, development, implementation, and evaluation. Data collection in this study used a practicality test instrument by the guidance and counseling teacher and followed by a focus group discussion (FGD). The results of the practicality test, this electronic book are included in the very practical category with a total score of 163 and the average percentage obtained from the practicality test by guidance and counseling teacher is 81.5%. Based on the results of the practicality test, the electronic book about information of higher education on career guidance services in high school is very practical and suitable for use without revision.

**Keywords:** career guidance services · electronic book · higher education

#### 1 Introduction

In educational settings in Indonesia, high school graduates are prepared to continue their studies in higher education [1]. The many choices of study programs offered by higher education make students have to be selective in choosing study programs according to their interests, potential, and career plans for the future. Guidance and counseling teachers play a role in guiding students so that students can understand what is needed and needs to be prepared for future career plans through career guidance services [2]. In the implementation of career guidance, guidance, and counseling teachers use the media. The media used can be in the form of graphic media, printed materials, and still images; silent projection media; audio media; film group; multimedia group; object media; and

interactive media [3]. Currently, the development of information and communication technology is growing very rapidly, causing many changes to occur in the learning system [4]. Therefore, guidance and counseling teachers are required to be more innovative in using career guidance service media.

The following is some research on the development of career guidance service media that has been carried out, including research on the development of interactive multimedia-based career information services to increase the career maturity of SMK Kerabat Bumiayu students. The product of interactive multimedia development that contains career information in the form of a Compact Disk using Adobe Flash CS 6 and Adobe After Effects CS 6. The results show that interactive multimedia media is feasible to be tested and proven effective in increasing the career maturity of SMK Kerabat Kita Bumiayu students [5]. Another study developed an interactive multimedia-based career guidance module to increase students' career maturity. The results showed that there were differences in scores between before and after career guidance using the module. Therefore, the interactive multimedia-based career guidance module is effective to increase students' career maturity [6].

The selection of media in career guidance services must be appropriate, namely by adjusting the needs of students and adjusting to advances in information and communication technology [7]. Based on the needs analysis that has been carried out by researchers on 214 high school students, the researchers developed an electronic book media about "information of higher education" which is used by guidance and counseling teachers in career guidance services. This electronic book about "information of higher education" has been validated by media experts and materials experts. However, in the ease of use of this electronic book media about "information of higher education", it is necessary to carry out a practicality test by users, namely guidance and counseling teachers. Therefore, this study aims to describe the practicality of the electronic book about "information of higher education" in career guidance services in high schools. This study will answer the level of practicality of the electronic book "information of higher education" on career guidance services in high schools.

## 2 Methodology

The practicality of career guidance service media in the electronic book about information of higher education using research and development (RnD) research. The model used was adapted and modified from the ADDIE research and development model (analysis, design, development, implementation, and evaluation). The research process consists of four stages, namely analysis, design, development, and practicality testing. At the analysis stage, the researcher conducted a needs assessment on two guidance and counseling teachers and 214 students. At the design stage, the researcher makes an initial product based on a needs assessment. At the product development stage, researchers have conducted validation tests by material experts and media experts as the basis for revising the product. Then continued the practicality test by the user. The subjects in this study were two guidance and counseling teachers at SMA Negeri 1 Baturaden who would use an electron book sook about the information on higher education as a medium for career guidance services. Collecting data in this practicality test using a practicality

| Criteria                   | Category  | Description                     |  |
|----------------------------|-----------|---------------------------------|--|
| 75,01%–100% Very practical |           | Can be used without revision    |  |
| 50,01%-75%                 | Practical | Can be used with minor revision |  |
| 25,01%–50% Less practical  |           | Recommended not to used         |  |
| 00,00%–25% Not practical   |           | Can not be used                 |  |

**Table 1.** The practicality category

(Source: adapted from Akbar, 2011: 208)

test questionnaire with a total of 25 items. Data analysis in this study used descriptive quantitative data analysis. Data analysis was carried out using the following formula:

$$P = f/N \times 100\%$$

P = final score

f = the score obtained

N = maximum score

After knowing the final score, the practicality category of an electronic book about the information on higher education in career guidance services can be seen in Table 1.

#### 3 Result

The practicality test of career guidance service media in the form of electronic books about information of higher education in high school was carried out by users who were two guidance and counseling teachers at SMA Negeri 1 Baturaden, namely Agung Dwi Nugroho S., S.Pd. and Annisa Mailyastuti, S.Pd. The practicality test was carried out in May 2022. The results of the practicality test in the form of quantitative data are presented in Table 2;

Based on the quantitative calculations in Table 2, the practicality of the career guidance service media in the form of an electronic book about the information on higher education in high school obtained an average final score of 81.5% in the very practical category. Therefore, the career guidance service media in the form of an electronic book about the information on higher education in high school can be used without revision.

#### 4 Discussion

The electronic book about information of higher education on career guidance services in high schools has been tested for its practicality by users, namely two guidance and counseling teachers in high schools. The results of the practicality test show that the electronic book about information of higher education on career guidance services in high school is very practical, so it can be used without revision.

There are 25 aspect indicators that are assessed in the practicality test including: media selection, media design display, readability of material in media design, content

**Table 2.** The recapitulation of the results of the practicality test analysis

| No                     | Subyek 1 | Subyek 2 | <b>Obtained Score</b> | Percentage | Category       |
|------------------------|----------|----------|-----------------------|------------|----------------|
| 1                      | 4        | 3        | 7                     | 87,5%      | Very practical |
| 2                      | 2        | 3        | 5                     | 62,5%      | Practical      |
| 3                      | 3        | 3        | 6                     | 75%        | Practical      |
| 4                      | 2        | 3        | 5                     | 62,5%      | Practical      |
| 5                      | 4        | 4        | 8                     | 100%       | Very practical |
| 6                      | 4        | 4        | 8                     | 100%       | Very practical |
| 7                      | 4        | 4        | 8                     | 100%       | Very practical |
| 8                      | 4        | 4        | 8                     | 100%       | Very practical |
| 9                      | 4        | 3        | 7                     | 87,5%      | Very practical |
| 10                     | 4        | 3        | 7                     | 87,5%      | Very practical |
| 11                     | 3        | 4        | 7                     | 87,5%      | Very practical |
| 12                     | 3        | 3        | 6                     | 75%        | Practical      |
| 13                     | 3        | 3        | 6                     | 75%        | Practical      |
| 14                     | 2        | 4        | 6                     | 75%        | Practical      |
| 15                     | 3        | 4        | 7                     | 87,5%      | Very practical |
| 16                     | 4        | 4        | 8                     | 100%       | Very practical |
| 17                     | 3        | 4        | 7                     | 87,5%      | Very practical |
| 18                     | 3        | 3        | 6                     | 75%        | Practical      |
| 19                     | 2        | 3        | 5                     | 62,5%      | Practical      |
| 20                     | 3        | 3        | 6                     | 75%        | Practical      |
| 21                     | 3        | 3        | 6                     | 75%        | Practical      |
| 22                     | 3        | 3        | 6                     | 75%        | Practical      |
| 23                     | 3        | 3        | 6                     | 75%        | Practical      |
| 24                     | 3        | 3        | 6                     | 75%        | Practical      |
| 25                     | 3        | 3        | 6                     | 75%        | Practical      |
| Total Assessment Score |          |          |                       | 81,5%      | Very practical |

suitability, simplifying the process of providing information of higher education services, easy to use media, media use is not confusing, media provides opportunities for students to learn independently, the media can be used anytime and anywhere, the media is easy to duplicate, the selection of media is in accordance with the conditions of the current teaching and learning system, the use of media is in accordance with the characteristics of high school students, the suitability of the material with the thinking level of high school students, the suitability of the material with the career development level of high school students, the suitability of the material with the developmental tasks of high school students, the material can add insight, the material is in accordance with the needs, the

scope of the material is wide and complete, the content of the material is updated, the topic of the material is clear, the systematics of the material presented, the effectiveness of the use of language, the use of language that is easy to understand, the use of language that is easy to understandnot confusing, and effective sentence selection.

According to the theory of career development formulated by Donald Super [9], high school students in the age range of 15 years–24 years enter the exploration phase. Where individuals have started to think about various alternative positions even though they have not been able to make decisions. Therefore, information about further study at university is very important because it supports the task of career development. Hartono also added the importance of information on further study at university as a consideration in career decisions [10].

Meanwhile, the selection of electronic book was chosen as part of the development of information and communication technology. An electronic book is an electronic version of a book that allows it to be accessed via the internet [11]. Onggo also added that in addition to being more efficient, efficient in the process of duplicating and storing, the electronic book can be used anywhere and anytime [12]. Therefore, electronic books are seen as more practical.

From the results of the analysis of the practicality test, the electronic book about "information of higher education" is feasible to be implemented by guidance and counseling teachers to high school students. This research helps guidance and counseling teachers in developing career guidance service media that are efficient and practical in their use.

### 5 Conclusion

The results of the practicality test that have been carried out show that the media for career guidance services in the form of an electronic book about "information of higher education" in high school is very practical. Thus, the media for career guidance services in the form of an electronic book about "information of higher education" in high school is appropriate for use without revision. Suggestions for further researchers to be able to use this electronic book about "information of higher education" in several high schools. So that the practicality of electronic books about "information of higher education" in career guidance services in high schools is more thoroughly tested.

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