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Practicality of the Study Program Profile Booklet as a Promotional Tool in the Mathematics Education Study Program

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Abstract. This research aims to develop promotional media for the IAIN Curup Tadris Mathematics study program based on booklets. The booklet contains information that the bidder of goods or services wishes to convey in promoting the superiority of the goods/services being offered and consists of approximately 30 pages. The booklet development model used is the 4D model (Define, Design, Develop, and Disseminate). The research results showed that the booklet developed met the valid criteria with an average score of 3.7. The results of the student response questionnaire regarding the practicality of the Booklet showed that the average attractiveness aspect was 4.193 (good), the average convenience aspect was 3.813 (good), the average usefulness aspect was 3.68 (good). The overall average result was 3.895 in the Practical category.

Keywords: Promotional Tool, Media Booklet, Mathematics Education

Introduction

Nulhaqim stated that improving the quality of Human Resources (HR) in a country can be achieved through education obtained in higher education (Nulhaqim et al., 2015). In realizing this, the Indonesian government has established various higher education institutions in many regions in Indonesia, from Sabang to Merauke, so that more high school graduates in Indonesia can experience higher education.

IAIN Curup, as the only religious college in Rejang Lebong Regency (one of the regencies located in Bengkulu Province), has one of the relatively new study programs established (in 2016). The IAIN Curup Mathematics Education Study Program has been accredited as Good. In Rejang Lebong Regency, only IAIN Curup opens the Mathematics Education Study Program. Such conditions should make high school graduates or equivalent in the Rejang Lebong Regency area or neighboring regencies that do not yet have universities, many are interested in continuing their education at IAIN Curup. This is in contrast to the reality in the field, from year to year, the number of enthusiasts who choose to continue their education at IAIN Curup, especially the Mathematics Education Study Program, does not show a significant increase. The following data was obtained from the Mathematics Education Study Program Staff regarding the number of new students from year to year, presented in the following table:

Table 1.
Number of New Students 2017-2023 Mathematics Education Study Program at IAIN Curup

No	Year	Number of Students New
1	2017	17
2	2018	17
3	2019	15
4	2020	18
5	2021	17

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6	2022	12
7	2023	13

Source: Staff of the Mathematics Education Study Program

Based on an interview with the Head and Secretary of the Mathematics Education Study Program, regarding the socialization strategy carried out in previous years, "Socialization activities have been carried out to the community and to schools by lecturers and students with presentations and bringing New Student Admissions Brochures, but interest in the mathematics education study program is still low". The following is the Brochure for the acceptance of new students at the Mathematics Education Study Program at IAIN Curup:

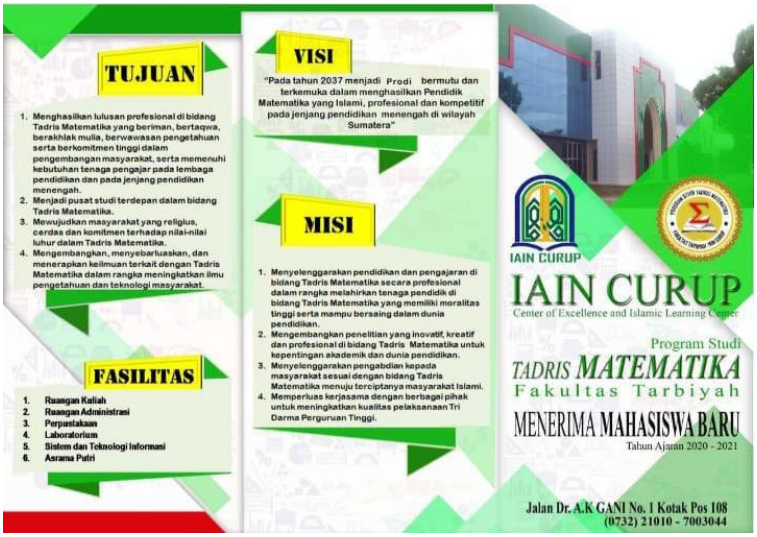

Figure 1.

New Student Admissions Brochure

Figure 2.

New Student Admissions Brochure

The brochure contains brief information about the Profile of the Mathematics Education Study Program at IAIN Curup. The researcher also interviewed several teachers and principals,

who found that there are still schools that do not know that IAIN Curup has opened a Mathematics Education Study program. In addition, it was found that the school still needs an explanation of information related to lectures in the Mathematics Education Study Program, other than the information listed in the Brochure that was distributed. This shows that the information available in the Brochure is still incomplete and needs to be developed to attract the interest of high school graduates by adding clear and easy-to-understand information points. So that questions such as "Is the Mathematics Education Study Program Accredited?", "Where will graduates of the Mathematics Education Study Program work later?", "What are the requirements for getting a scholarship?", "What are the benefits of high school graduates choosing the Mathematics Education Study Program?" and other questions can be answered in the Brochure.

Based on the above problems can be overcome by developing a printed media product as one of the promotional strategies to increase the number of students, namely an Advertisement using a Print Media Booklet, which can accommodate all information about the profile of the mathematics education study program and is practical to read and use by those who need information. Dharmawansyah's research (Dharmawansyah, Cangara, & Sultan, 2014) concluded "In carrying out the promotional strategy of the Makasar Creative Media Polytechnic using 4 promotional mixes, namely where the Advertising dimension influences the increase in the number of students at the Makasar Creative Media State Polytechnic".

A booklet contains information that the bidder of goods or services wants to convey in promoting the advantages of the goods/services offered. Booklets usually contain approximately 30 pages. Andreansyah said (Andreansyah, 2015). Booklets are information about a service product from a company to promote the company. Booklets as mass media that are able to disseminate information in a relatively short time to many people who live far away.

Previous studies have discussed how college strategies attract high school graduates in choosing their intended college. The research to be conducted will develop a booklet linking the importance of mathematics in everyday life, the benefits of mathematics, and the job opportunities for graduates. The aim is to attract new students to choose the mathematics study program. Such as Sri Yunawati's research where the results of her research concluded that direct promotion strategies can increase the number of new students (Yunawati, 2013) and research conducted by Asmiati concluded that the promotion mix using print media, electronic media, and leaflets through personal by conducting socialization to the regions is proven by the increase in the number of students each year (Asmiati & Sultan, 2014). In this research, a booklet will be developed that meets practical criteria and contains information about the Mathematics Education Study Program and its advantages as one of the advertising media in promoting the Mathematics Education Study Program to the wider community, so that interest in the Mathematics Education Study Program increases.

Materials and Methods

The type of research in this study is quantitative descriptive. Quantitative descriptive research describes, researching, and explaining something that is studied as it is, and drawing conclusions from observable phenomena using numbers (Sugiyono, 2013). Quantitative descriptive research is research that only describes the contents of a variable in the study, not intended to test a particular hypothesis (Eriyanto, 1999).

The sample was selected using the Cluster Random Sampling technique from 35 schools in Rejang Lebong. Data collection techniques used questionnaires and interviews. The practicality questionnaire was used to determine the level of practicality of the developed booklet. The questionnaire was made using the Likert Scale. Before being distributed, the questionnaire was first validated by experts to determine the validity of the practicality questionnaire instrument.

Pre-research interviews were conducted to obtain an overview of the implementation carried out by the study program in the Promotion of the Mathematics Education Study Program in Schools, the Community Environment, and related agencies.

Result and Discussion

Result

Data Analysis Techniques: Validity of Practicality Questionnaire Instruments

The validation sheet is used to obtain validity data from the practicality questionnaire instrument based on the validation format consisting of four components, namely measurement objectives, instructions, aspects assessed, and validator input. The validators who assessed this instrument were Anisya Septiana, M. Pd and Irni Latifa Irsal, M. Pd, and Zelvi, M. Pd. Filling in the validation sheet by providing a checklist of the answer choices that are in accordance with the opinion on the statement submitted. The criteria for stating that the questionnaire instrument is valid consist of 5 assessment scales, namely value 1 (not valid), value 2 (less valid), value 3 (quite valid), value 4 (valid), and value 5 (very valid). In addition to providing a checklist on the answer choices, there is also a comments/suggestions column as a consideration for improving the questionnaire. The aspects generally assessed in the practicality questionnaire include the content aspect (the suitability of the questionnaire statements to the product being assessed, namely the booklet) and the language used in the questionnaire.

The data in the form of validator response scores obtained in the form of categories consisting of five assessment scales on the quality of the developed questionnaire instrument product are converted into interval data. The scores obtained are then converted into qualitative data on a five-point scale, with reference to the formula adapted from Azwar (2011). As in the table below.

Table 2.
Validity Criteria of the Practicality Questionnaire

Interval	Criteria
$Mi + 1{,}5\ Sdi < x$	Very Valid
$Mi + 0{,}5\ Sdi < x \leq Mi + 1{,}5\ Sdi$	Valid
$Mi - 0{,}5\ Sdi < x \leq Mi + 0{,}5\ Sdi$	Quite Valid
$Mi - 1{,}5\ Sdi < x \leq Mi - 0{,}5\ Sdi$	Less Valid
$x \leq Mi - 1{,}5\ Sdi$	Invalid

Information:

$$Mi = Rerata\ skor\ ideal = \frac{skor\ min + skor\ maks}{2}$$

$$Sdi = Standar\ deviasi\ ideal = \frac{skor\ maks - skor\ min}{6}$$

$$x = Total\ skor\ aktual$$

Based on the conversion formula above, the criteria score interval is obtained to convert assessment scores from quantitative data to qualitative data in order to determine the practicality of the booklet being developed.

Table 3.
Validity Criteria of the Practicality Questionnaire

Interval	Criteria
$4{,}005 < x$	Very Valid/ Very Good
$3{,}335 < x \leq 4{,}005$	Valid/ Good
$2{,}662 < x \leq 3{,}335$	Valid Enough/ Good Enough

$1{,}995 < x \leq 2{,}662$	Less Valid/ Less Good
$x \leq 1{,}995$	Invalid/ Not Good

Practical Data Analysis Techniques

Booklet practicality data were obtained from the results of student assessments of the Booklet practicality questionnaire. The developed booklet is said to be practical if the assessment of the booklet's practicality by students is at least in the good/practical category. The student response questionnaire to the Booklet's practicality consists of 5 statement items about attractiveness, convenience, and practicality. Statements about the Booklet's attractiveness consist of 5 statement items, statements about convenience consist of 5 statement items, and statements about usefulness consist of 2 statement items in the student response questionnaire to the practicality of the Booklet as a promotional medium for the TMM Study Program. Booklet practicality data were obtained from the results of student assessments of the Booklet's practicality questionnaire. The developed booklet is said to be practical if the assessment of the booklet's practicality by students is at least in the good category, if the practicality category is in the good/practical category. The student response questionnaire to the Booklet's practicality consists of 5 statement items about attractiveness, convenience, and practicality.

The data in the form of student response scores were obtained in the form of categories consisting of five assessment scales on the quality of the developed booklet product, converted into interval data. The scores obtained were then converted into qualitative data on a five-point scale, with reference to the formula adapted from Azwar (2011), and can be seen in the data analysis technique for the validity of the student response questionnaire on the practicality of the booklet. Based on Azwar's (2011) conversion formula, the interval score criteria were obtained to convert assessment scores from quantitative data to qualitative data in order to determine the practicality of the developed booklet.

Table 4.
Practicality Criteria Mathematics Education Study Program Booklet

Interval	Criteria
$4{,}005 < x \leq 5$	Very Practical
$3{,}335 < x \leq 4{,}005$	Practical
$2{,}662 < x \leq 3{,}335$	Quite Practical
$1{,}995 < x \leq 2{,}662$	Less practical
$x \leq 1{,}995$	Not Practical

Booklet design draftConsists of Cover, Table of Contents, Campus Location, About Mathematics Education at IAIN Curup, Vision and Mission of the Mathematics Education Study Program at IAIN Curup, Profile of Lecturers of the Mathematics Education Study Program at IAIN Curup, Curriculum in the Mathematics Education Study Program at IAIN Curup, Student Activity Units, New Student Admissions System, Scholarships, and Facilities. The following image shows the parts of the booklet:

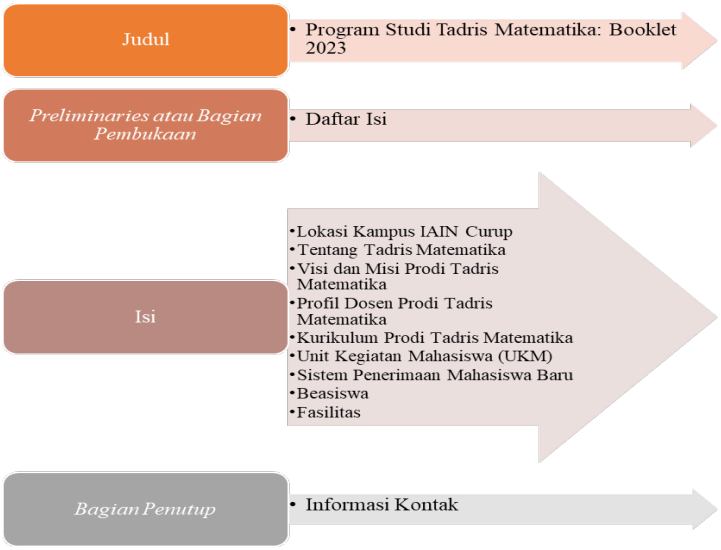

Figure 3.
Booklet Development Design

The data of the Booklet practicality assessment were obtained from the student response questionnaire on the practicality of the booklet. This student assessment questionnaire aims to determine the students' assessment of the practicality of the developed booklet. Before the questionnaire was distributed to the respondents, the researcher validated the student response questionnaire sheet on the practicality of the Booklet, regarding the statements in the questionnaire. The following are the results of the validation of the questionnaire on the practicality of the Mathematics Education Study Program Booklet Profile by 3 validators.

Table 5.
Results of Validation of Perception and Needs Questionnaire by 3 Validators

No.	Validators	Average
1	ILI	4,625
2	US	3,875
3	ZI	4

From the results of the validation of the student response questionnaire on the practicality of the Booklet, a questionnaire was obtained that could be used with several revisions. Revisions from 3 validators include: a) Improvements to the language, so that it is easy for high school students to understand and is not ambiguous, b) Improvements to the content, so that information regarding the practicality of the Booklet is presented.

After the student response questionnaire sheet on the practicality of the Booklet was validated by experts. The researcher revised the questionnaire according to input and suggestions from experts. Then the questionnaire was distributed to 120 respondents, consisting of 12 representative schools. In summary, the student assessment data on the booklet that has been implemented is presented in the following table:

Table 6.
Data on the Results of Student Assessment of the Practicality of the Mathematics Education Study Program Profile Booklet

No	Assessment Aspects	Total Score	Average
1.	Attraction	2,516	4,193
2.	Convenience	2.288	3,813
3.	Usefulness	895	3.68
	Total Score	5,699	**3,895**

Category	Practical

The results of the practicality questionnaire show that the profile booklet falls into the practical category in terms of attractiveness, ease, and usefulness.

Discussion

A booklet that has been designed, validated, and improved can then be tested for its practicality. The results of the practicality test can be used as a consideration, whether the Booklet that has been designed is suitable as a promotional medium for the mathematics education study program in overcoming the problem of low interest of high school students in choosing further education in the mathematics education study program. Choosing a major based on friends' influence is one of the fatal mistakes students make, because it does not match the talents and interests, they possess, and it will hinder the learning process later in higher education Masykur (2020).

The results of the questionnaire on students' perceptions and needs for the study program profile booklet show that students need promotional media that presents complete information. Students need information regarding the curriculum used, information regarding available scholarships, available facilities, and so on. From the results of the student needs questionnaire, the researcher designed a Booklet with complete information. Representative promotional media is expected to help increase understanding and interest among prospective students Rosantiaka (2025). The following is a picture of the contents of the Booklet regarding the available information:

Figure 4.
Information available in the Booklet

The design of the information designed by the researcher includes the cover of the Booklet, the Location of the IAIN Curup Campus, about the mathematics education study program, the vision and mission of the mathematics education study program, the profile of the mathematics education study program lecturers, the mathematics education study program curriculum, student activity units, the new student admission system, scholarships, facilities and closing. This design is an initial draft, which will later be validated by several experts.

Then, from the results of the needs questionnaire, it was also concluded that students need promotional media that are attractive in terms of language, unobtrusive colors, and ease of

reading the information in the Booklet. From the results of the questionnaire, the researcher designed a Booklet promotional media with an attractive design, unobtrusive colors, and easy-to-understand language. Here is one of the pages in the Booklet regarding an attractive appearance and unobtrusive colors:

Figure 5.
Booklet design with an attractive appearance

The initial design of the Booklet was then assessed by several experts. The validators were 3 people, namely experts in material or content, appearance, and language. The results and suggestions from the experts will later be revised and tested for practicality by high school students.

Booklet which has been designed, validated, and improved, then tested for its practicality. The results of the practicality test can be used as a consideration, whether the Booklet that has been designed is suitable as a promotional medium for the mathematics education study program in overcoming the problem of low interest of high school students in choosing further education in the mathematics education study program.

From the results of the student response questionnaire on practicality, it was concluded that the Booklet is a practical promotional medium in terms of attractiveness, convenience, and usefulness. The results of the distribution of student response questionnaires showed that the attractiveness aspect obtained an average score of 4.1, the convenience aspect obtained an average score of 3.8, and the usefulness aspect obtained an average score of 3.6.

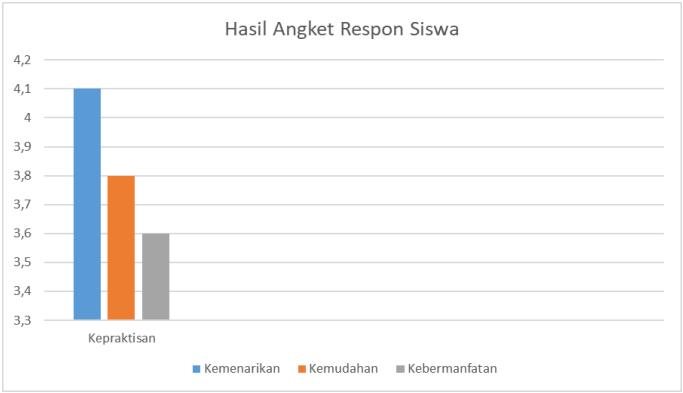

Figure 6.
Results of the Student Response Questionnaire on the Practicality of the Booklet

The results of the questionnaire showed that the most prominent point of interest was in the Booklet. This shows that the appearance of the study program profile booklet is interesting and makes students more enthusiastic to read it. The information presented makes students more curious and interested in finding out more about the mathematics education study program at IAIN Curup. Mathematics is an exact science that sounds intimidating to most students. Many students are less interested in mathematics because there are many formulas that are difficult to memorize. This results in a low number of applicants for mathematics study programs compared to other study programs, Chandra (2021). Therefore, there is a need for promotional media that is attractive and contains complete important information about the graduates of the Mathematics Study Program to the wider community.

In terms of ease of use, students feel that the information presented in the booklet is easy for students to digest. Likewise with the use of language in the booklet is easy for students to understand, in continuing their education to the college level. In addition, in terms of usefulness, students consider that the booklet that was developed has benefits for high school graduates who want to find information related to the mathematics education study program at IAIN Curup. Thus, the Booklet promotional media that has been designed is suitable to be used as a promotional medium for the mathematics education study program and is ready to be used in promotional activities.

Conclusion

The development process that has been carried out has obtained several conclusions, which are explained as follows: Student response questionnaire on Practicality *booklet* distributed after the revision of the Booklet design. The results of the student response questionnaire on the practicality of the Booklet obtained an average of 4.193 for the attractiveness aspect, an average of 3.813 for the ease aspect, and an average of 3.68 for the usefulness aspect. The overall average result obtained was 3.895 in the Practical category.

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