



# Development of the Basic Langga Movement Manual

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**Abstract.** This study aims to develop an E-Book-Based Guidebook for Gorontalo Langga Martial Arts Movement. Gorontalo itself is a province located in Indonesia, precisely on the northern island of Sulawesi. This research uses research and development methods. The experimental subjects used in this research and development were Gorontalo cultural experts, 10 small group trials, and 20 large group trials. The data obtained in this research and development are qualitative and quantitative. Quantitative data obtained from the results of the questionnaire which will be divided into product trials, the questionnaire used is an assessment questionnaire. This development model includes product analysis, product development, expert validation and revision, product testing, and final product manufacture. As a result, this book was declared feasible in a large-scale trial with 90% results. In conclusion, this book can be given and circulated widely to the general public.

**Keywords:** basic Langga · movement manual

## 1 Introduction

Martial arts are a form of one's self-defense, martial arts have existed and developed until now and were created from human movements that naturally have instincts to protect themselves [1, 2]. Apart from being self-defense, martial arts are also studied as body processing to maintain health [3, 4]. Mastering martial arts makes us ready with self-defense moves, physically and mentally ready [5]. Martial arts are usually prepared for attacks that threaten personal safety.

Martial arts is a combination of physical activity with elements of art, self-defense techniques, sports, and mental exercise [6–8]. in various parts of the world and countries have their martial arts, including the State of Indonesia which has a very familiar martial art to hear, namely Pencak silat [9], but especially in the Gorontalo area it has an ancient martial art that young people today rarely know, namely Langga [10].

Langga is one of the martial arts that developed in the Gorontalo community during the kingdom period by experiencing a golden period after Gorontalo's independence in 1942 [11]. In its development, the martial art of Langga became a manifestation of the resilience of the Gorontalo people's fighters when facing the Dutch and Japanese colonialists.

At the end of 2016, Langga became a traditional martial art recognized by the government as an intangible cultural heritage. Recognizing langga as Gorontalo's original identity, culture, and martial arts, the Gorontalo provincial government through the Department of Education, Culture and Sports (Dikbudpora), took the initiative that langga be included in school subjects from elementary to high school levels, this was marked by workshops and printing of textbooks for teachers at all levels of education.

This Langga martial art is a martial art that grew and developed during the reign of the kingdom, because of this background, the Langga martial art is not well known at this time, many factors that influence the Langga are difficult to recognize and learn at this time, one of which is the lack of books or lessons that discussing this martial art, in connection with the government program that wants to make Langga one of the lessons in school, this fact has not been realized with evidence that only one book about Langga was made by Hartono Hadjarati.

The book discusses the history of the establishment of Langga to the development of Langga in Gorontalo and also introduces the basic movements, but this cannot be used as a reference for studying Langga because the book only introduces them without any descriptive instructions for basic movements to learn the basic movements themselves [12].

Thus, the author is interested in carrying out research related to this matter entitled "Development of an E-Book-Based Guidebook for Gorontalo Langga Martial Arts Movement".

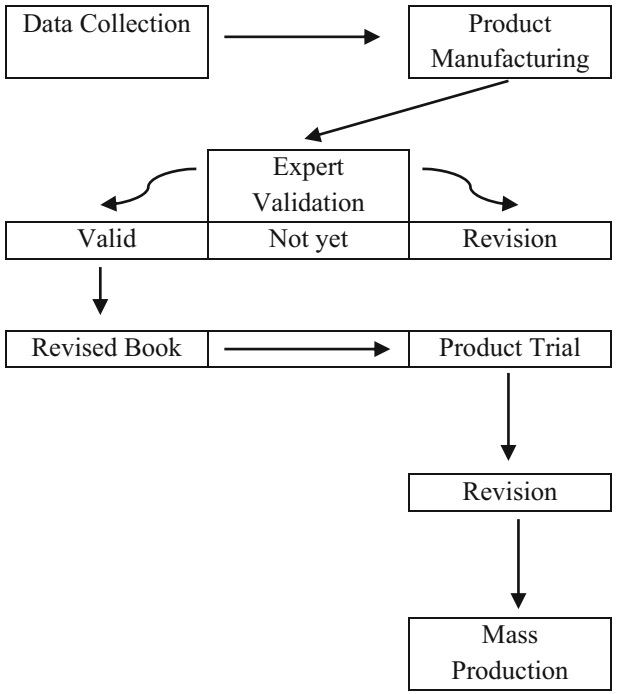
## 2 Research Method

This research uses research and development methods, which are research methods that can produce new products and test the effectiveness of these products. This development research was conducted to produce an E-Book-based manual for the basic practice of the Langga martial arts. Research and Development is a process used to develop and validate educational products, both products in the form of material objects such as textbooks, and learning CDs and products in the form of processes and procedures found such as teaching methods or methods of organizing teaching (Fig. 1).

The experimental subjects used in this research and development were: Gorontalo cultural experts, small group trials, which were distributed or shown to 10 students of the Langga Course, large scale trials, which were distributed to the National Sports Teachers Association (IGORNAS) in Tilamuta District with Maximum target is 20 people. The technique of determining the subject, in this case, uses simple random sampling.

The data obtained in this research and development are qualitative and quantitative. Quantitative data obtained from the results of the questionnaire which will be divided into product trials, the questionnaire used is an assessment questionnaire in which the answers will be presented using the formula:  $\text{Percentage} = \frac{\text{Total Scores Obtained}}{\text{Total Score Maximum}} \times 100\%$

After the book is presented, it will be categorized into 4 eligibility categories (Table 1).



**Fig. 1.** Research Steps

**Table 1.** Eligibility Category

No	Percentage	Appropriateness
1	76%–100%	Worthy
2	56%–75%	Decent enough
3	40%–55%	less worthy
4	<40%	Not feasible

### 3 Results and Discussion

The type of research used by the researcher is development research with the Research and Development model. This development model includes product analysis, product development, expert validation and revision, product testing, and final product manufacture.

1. Data Collection. In this stage the researcher collects data in the form of references related to the manufacture of manuals and of course about the Langga itself, not forgetting that the researcher will also take pictures and videos related to the basic movements of Langga which in this case will be practiced by the teacher of Langga

or pelanggan so that in describing the steps of the basic movement will be more descriptive.

2. **Product Manufacturing.** After seeing and understanding the references that have been collected by various media such as photos, then the background of the photo is removed and edited to be as attractive as possible in the Photoshop CS6 application then the book is compiled, at this stage, the book is written in the Microsoft Word 2010 application which has a writing format with a book content size of 12 cm, in subtitles 16 cm, 28, and 36 on the cover of the book with Calibri and Algerian writing for the cover, size A4 with 2.5 cm top margin, 2.5 cm bottom, 3 cm left and 2 cm right. While the materials for the cover and background are taken from the internet. After typing is done in the Microsoft Word 2010 application, the book will be converted to a PDF (Portable Document Format) application.
3. **Validation and Revision.** In this stage the researcher will go to the expert to ask for an assessment related to the book that has been made, later the results of the expert assessment will develop if there are deficiencies in the book, while in this study validation is in the form of a questionnaire (Score). The result of this stage is the quality of the book in terms of the application of the format to the clarity of the material in the book. After being validated, a revision will be made of the results of the questionnaire stating whether or not the book is worthy or not. The results of expert validation in the first stage of the author got several things as follows, the size of the letters in the contents of the book was enlarged slightly or changed the type-face, some words were corrected according to good and correct writing procedures, background images in the contents of the book were removed or transparent, and writing Gorontalo language is written in italics. While the assessment score obtained in the first stage of validation is 49, which is entered into the formula to produce a percentage of 87.5% with the acquisition of this number, the Gorontalo Langga Community Martial Arts Basic Movement Manual is declared worthy. However, the validator concludes that the book can be tested but needs to be revised first.
4. **Revision.** Based on the results of expert validation, the author changed the book that was developed based on criticism and suggestions in the first stage of validation, the results of the changes were as follows: increasing the font size or changing the font from the contents of the book, correcting some words in writing, writing the Gorontalo language in italics, pictures Back Ground removed or transparent.
5. **Product Trial.** In this trial the researchers tried to expand the distribution and introduction of books that have been made to the National Sports Teachers Association (IGORNAS) in Tilamuta District, this forum is a forum consisting of sports teachers at all levels whether it is elementary, junior high, MTS or high school/SMK. Researchers distributed questionnaires to 20 sports teachers, along with the names of the schools where the questionnaires were filled. As for the results, the assessment score is 976 points which are divided by 1040 is the maximum number, and multiplied by 100, the score gets a percentage of 93%. It can be concluded that the Gorontalo Langga Community Basic Movement for Traditional Martial Arts is "WORTH" to be disseminated.
6. **Mass Production.** The mass production of the Gorontalo Langga Community Basic Movement Guidelines for Traditional Martial Arts will be published for distribution.

This book has the big foundation of a book written by Hartono Hadjarati so that when reading this book most of the contents of the history and explanations of the basic movements will be similar to the book, the difference being that the author develops the basic movement pictures in the book to be more descriptive so that it is similar to other manuals, As for the initial purpose of making this book, of course, adding references for lecturers in teaching language to students and sports teachers at school if they want to introduce the traditional martial arts of the Gorontalo people to students. This book was created from the results of research and development, in which the manufacturing process went through several stages such as data collection, and product creation made on the Microsoft Word 2010 application, after which it was validated by experts which then finally tested the product on a small group scale or large scale in the field.

In the expert validation process, this book received an assessment of 87.5% which was categorized as FEASIBLE, but at the conclusion, the assessment had to be revised first and then tested, at the revision stage when the researcher showed it to the expert, the expert had confirmed it without giving a written statement so that the researcher immediately tested the product. What was made in this case the researchers tested the product in two stages, namely small group trials which got a score of 94% which was categorized as FEASIBLE, and field trials, which got a score of 93% which was categorized as FEASIBLE.

At this stage, the researcher only took one assessment with one revision, from the 14 points listed in the questionnaire for the assessment of the appearance and content of the material, the expert gave an assessment which added up to get a result of 87.5% which was categorized as FEASIBLE to be tested but had to be revised first.

In this case, the researcher distributed a questionnaire containing an assessment of the appearance and content of the material which was combined into 13 assessment points. The Small Group Trial consisting of 10 Sports Coaching Education Students got 94% results which were categorized as FEASIBLE. A field Trial consisting of 20 members of the National Sports Teacher Association Obtained 93% results which were categorized as FEASIBLE.

In the process of testing the product, the researcher analyzed the advantages and disadvantages of the Gorontalo Langga Community Basic Movement for Traditional Martial Arts as follows:

The advantages of the Guidance on the Basic Movement of Traditional Martial Arts for the Gorontalo Langga Community: easy to access, easy to carry anywhere, the book design is simple but interesting, the history explained is easy to digest, increasing public interest in learning and recognizing the Langga.

Weaknesses of the Gorontalo Langga Traditional Martial Arts Basic Movement Manual: it is still lacking if it is intended for independent study, the lack of pictures of variations in attack movements, and pictures of Mohudu and MohemetO are difficult to understand.

## 4 Conclusion

Based on the research and development of the Gorontalo Langga Community Basic Movement for Traditional Martial Arts, it can be concluded several things as follows:

Product creation begins with collecting data in the form of reference references related to Langga and examples of martial arts training manuals on the internet, as well as taking pictures of examples of basic movements as material in books, after that enter the manufacture of products written in the Microsoft Word 2010 application which in the cloud format is writing with a book content size of 12 cm, in subtitles 16 cm, 28, and 36 on the cover of the book, the type of writing is Calibri and Algerian for the cover, size A4 with a margin of 2.5 cm on the top, 2.5 cm on the bottom, 3 cm on the left and 2 on the right cm but at the expert validation stage, it was replaced with the size of the writing in the book 14 cm and the subtitle of the book 16 cm.

In the validation process, the expert on the feasibility of the Guidance on the Basic Movement of Traditional Martial Arts in the Gorontalo Langga community got a score of 87.5 which was categorized as feasible for testing, while the results of the small group trial got a value of 94% and the field trial of 93%.

From the results of the product trial, the guidebook for the Gorontalo Langga Community Basic Movement for Traditional Martial Arts is worthy of being used as a reference for learning the basic movements of the Langga.

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