

Hockey Skills Book Development

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Abstract

This research and development aims 1) to develop a guidebook for basic techniques in the game of hockey and produce a new book that emphasizes the correctness of motion according to current needs as an instructional of basic techniques in the game of hockey. This study uses the Research & Development (R & D) method using the Willis R2D2 development procedure which consists of 3 focuses (1. Focus on determination, 2. Focus on design and development, 3. Focus on dissemination). The data collection technique used a summative evaluation questionnaire sheet. The instrument used was a summative evaluation questionnaire of media experts and material experts to determine the feasibility of the book. The data analysis technique used in research and development is descriptive quantitative to process data in the form of assessment scores by media experts and material experts. The results of the study were based on the assessment of media experts in the aspect of the book cover, 92% in the appropriate category, the content aspect in the book 86% in the appropriate category, the material expert in the foreword aspect with a percentage of 80% in the appropriate category, the content aspect in the book 91.6% in the appropriate category, the list aspect library 90% with decent category, 80% keyword aspect with decent category, 90% attachment aspect with decent category. Based on the results of the summative evaluation, the product developed is feasible to use. material expert for the foreword aspect with a percentage of 80% in the appropriate category, 91.6% in the book content aspect in the appropriate category, the bibliography aspect with 90% in the appropriate category, 80% in the keyword aspect in the appropriate category, 90% in the attachment aspect in the appropriate category.

Keywords

development; books; hockey skills



I. Introduction

Criteria for playing hockey are a sport that has many basic techniques. The development of the current hockey game being played in the synthesis field means that more and more basic techniques must be trained to be able to follow the development of the modern hockey game being played today. Judging from the classification of movements, the movement in playing hockey is an open skill argues that the basic skills of dribbling, passing, receiving, shooting, and tackling are skills that are needed by every player in every position in the field hockey game (Becky Swisler, 2003). To be able to carry out these skills, take the right body position. Not much comes naturally when learning to play field hockey, it takes time to get comfortable with a different body position than usual when using sticks and balls, training the body to perform in a good position from the start of practice will prevent the

development of bad habits which in the end will be improved again (Becky Swissler, 2003). The following is a list of books in Indonesian form that the researchers obtained, namely: 1. Primadi Tambrani. 1985. Hockey dan Kretivitas dalam Olahraga. Bandung ITB. 2. Primadi Tambrani 2002. Hockey Kretivitas dan riset dalam Olahraga. Bandung ITB. 3. Joko Purwanto 2004. Hockey. Yogyakarta: FIK UNY.4. Heryanto Nur Muhammad. 2018. Hockey Unesa university press.

Simamora in Rafida, T. et al (2020) explains that training is a systematic process of changing the behavior of employees in a direction in order to improve organizational goals ". So the training can be concluded as a systemic process in which there is an activity, which is intended for the development and improvement of the performance of the participants in order to improve organizational goals.

The process of technical training in sports requires supporting factors as a guide for practicing these techniques, one of which is a book, a book is a written material that presents the knowledge of the thoughts of an author. Books are an indispensable material in the training process, this can be seen from its function as a tool that can help facilitate a coach or coach in terms of delivery of what athletes will train, In the process of learning a technique, a person is not only required to be able to perform the correct form of movement, but is also required to be able to understand and understand the process of the movement of the technique (Meinel, 1977). Successful athletes generally have better skills, accuracy and spatio-temporal constraints on the acquisition of visual information (J. Shanmugaraja, and T. Radhakrishnan, 2013). Distinguishing a guidebook from a manual, a manual contains instructions on how to carry out or carry out a process or activity, while a guidebook is a book that contains various kinds of information about a problem or subject (Abdul Rahman Saleh and Janti G. Sujana, 2009). A guide book is a book that contains specific data, procedures and professional principles about an object, this book is often accompanied by this work is a guide, procedure or discussion of a field, so this book is aimed at those who want to deepen the field (Lasa, 2002). Qalyubi, Syihabuddin et al, 2007 in the journal Iqra' stated that Handbooks/Guidelines Handbooks/guidelines are publications that usually contain information about a field (certain fields), presented in a compact and practical form. The results of structured interviews on beginner athletes who take part in hockey activities are as follows:

Table 1. The results of the percentage of answers to the analysis of the needs of novice athletes

No	Question	Participation	
		A (YES)	B (NO)
1	Have you ever read a hockey book?	10%	90%
2	Have you ever read a book about basic techniques in the game of hockey	20%	80%
3	Do you have a hockey book on basic technique	0%	100%
4	Want to get a basic technique book in the game of hockey	100%	0%
5	Basic technique book as a guide to practice basic techniques developed	90%	10%

The results of the interview researchers concluded that all beginner athletes really need a technical training guide in the form of a book to make it easier for novice athletes when they want to practice basic techniques in hockey games independently. Following are the results of structured interviews with hockey athletes who are still active as athletes as follows.

Table 2. The results of the analysis of the needs of athletes participating in the National Championship

No	Question	Participation	
		A (YES)	B (NO)
1	Have you ever read a hockey book?	70%	30%
2	Have you ever read a book about basic techniques in the game of hockey	40%	60%
3	Do you have a hockey book on basic technique	25%	75%
4	Want to get a basic technique book in the game of hockey	100%	0%
5	Books on basic techniques in hockey games based on technological developments	100%	0%

The results of the interview researchers concluded that the statement of the athletes needed a training guide in the form of a book, especially regarding the explanation of basic techniques in the game of hockey related to the athletes wanting to be able to practice basic techniques themselves during additional training hours. The results of structured interviews with coaches who are actively coaching hockey in North Sumatra are as follows:

Table 3. The results of the answers to the needs of coaches & trainers

No	question	participation	
		A (YES)	B (NO)
1	Have you ever read a hockey book?	90%	10%
2	Have you ever read a book about basic techniques in the game of hockey	70%	30%
3	Do you have a hockey book on basic technique	35%	65%
4	Want to get a basic technique book in the game of hockey	100%	0%
5	Basic technique books can improve athletes' basic technical abilities	95%	5%
6	Basic technique book as a self-training guide for athletes	90%	10%

The results of the interview researchers concluded that the statements of the trainers needed an exercise guide in the form of a book, especially related to books to practice basic techniques in the game of hockey.

II. Research Methods

The R2D2 model development design from Willis (1995) quoted by Kastam (Syamsi, 2012) states that this model consists of 3 components, namely (1) determination, (2) design and development, and (3) dissemination. Determination activities are focused on: a. create teamwork, b. progressive problem solution, and c. understanding the problem contextually. Design and development activities are focused on business, a. learn the context of learning, b. choose the format and media, c. determine evaluation strategies, and (d) product design and development. Dissemination activities are focused on (a) authentic evaluation, and (b) making the final product package in context. Adaptation is related to the focus of product development and feasibility testing.

In the R2D2 model, there are three development focuses, namely (1) a define focus, (2) a design and development focus, and (3) a dissemination focus. the stages: The first focus, namely the definition of focus has three stages including: (1) creating and supporting a

participatory team, (2) progressive problem solution and (3) developing Phronesis or contextual understanding. The second focus, namely the design and development focus has four stages including: (1) selection of a development environment, (2), media and format selection, (3) evaluation procedures, and (4) product design and development. The third focus has four stages, namely the dissemination focus which has four stages including: (1) summative evaluation, (2) final packaging, (3) diffusion, and (4) adoption (Willis, 1995).

III. Result and Discussion

Based on the selection of this research model using the R2D2 model development design from Willis (1995) Adaptation related to the focus of product development and feasibility testing, Evaluation includes aspects of the feasibility of basic engineering book graphics based on the correctness of motion with indicators from book covers and book contents validated by media experts. The percentage of the book cover aspect is 92% in the decent category, the book content aspect is 86% in the decent category.

Table 4. Media Expert Assessment Results on Book Cover Aspects

Aspect	No	X1	Per	Per	Score	Score	
Evaluation			No	Aspect	Maximum	(%)	Category
Book cover	1	5	5				
	2	4	4				
	3	5	5				
	4	4	4				
	5	5	5	46	50	92	Worthy
	6	5	5				
	7	5	5				
	8	4	4				
	9	5	5				
	10	4	4				

Table 5. Revision Results of Media Experts on Aspects of Book Content

Aspect	No	X1	Per	Per	Score	Score	
Evaluation			No	Aspect	Maximum	(%)	Category
Book Contents	1	5	5				
	2	4	4				
	3	5	5				
	4	4	4				
	5	4	4	43	50	86	Worthy
	6	4	4				
	7	5	5				
	8	5	5				
	9	4	4				
	10	3	3				

Get results on the foreword aspect with a percentage of 80% with a decent category, 91.6% book content aspect with a decent category, 90% bibliography aspect with a decent category, 80% keyword aspect with a decent category, 90% attachment aspect with a decent category .

Table 6. Expert assessment of the foreword aspect

Aspect Evaluation	No	X1	Per No	Per Aspect	Score Maximum	Score (%)	Category
Say	1	4	4				
Introduction	2	4	4	8	10	80	Worthy

Table 7. Expert assessment of the material aspects of the book content

Aspect Evaluation	No	X1	Per No	Per Aspect	Score Maximum	Score (%)	Categor y
	1	5	5				
	2	4	4				
	3	5	5				
	4	5	5				
	5	5	5				
Book Contents	6	4	4	55	60	91.6	Worthy
	7	5	5				
	8	4	4				
	9	5	5				
	10	4	4				
	11	5	5				
	12	4	4				

Table 8. Expert assessment of bibliography aspects

Aspect Evaluation	No	X1	Per No	Per Aspect	Score Maximum	Score (%)	Category
References	1	5	5	9	10	90	Worthy
	2	4	4				

Table 9. Expert assessment of keyword aspects

Aspect Evaluation	No	X1	Per No	Per Aspect	Score Maximum	Score (%)	Category
Keywords	1	4	4	8	10	80	Worthy
	2	4	4				

Table 10. Expert assessment of attachment aspects

Aspect Evaluation	No	X1	Per No	Per Aspect	Score Maximum	Score (%)	Category
	1	5	5				

Stages, a. creating and supporting a participatory team, this stage is the stage of researchers seeking input and suggestions from the participatory which consists of discussions with writers and sports activists who have a career in coaching the unimed hockey club regarding the making of a basic hockey training guide book.

Progressive problem solving, at this stage the researcher observes, interviews and distributes questionnaires to users of the basic hockey technique manual, namely coaches and athletes. the design and development focus stages, this stage consists of several stages

consisting of environmental selection, the results of the environmental selection then the basic technique book for hockey games. Selecting the product format and product media developed in the form of a book containing guidelines for performing basic hockey game techniques with an emphasis on the correctness of motion in the guidelines through pictures and procedural explanations. The refinement process to be able to carry out summative evaluations, the data collection instrument must be validated by the validator.

IV. Conclusion

This research and development after going through the research process using the R2D2 model, this research produces a product in the form of a hockey sports book with special material related to basic techniques with an emphasis on the correctness of motion. The guidebook for basic hockey techniques based on the correctness of the motion developed is worthy of being used as a guidebook for practicing basic hockey techniques.

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