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Adaptive Sports Learning in Physical Education: Theory and Practice for Physical Education (PE) Students

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Abstract

Objective. The primary goal of this study is to create and evaluate the viability of electronic module instructional resources designed for teaching adaptive sports theory and practical courses.

Materials and methods. The study adopted Borg and Gall's research and development theory, which comprises 10 sequential stages. These stages are: (1) research and data collection, (2) planning, (3) initial product development, (4) preliminary field testing involving expert judgment from material experts, media experts, and learning experts, (5) major product revision, (6) large-scale field testing, (7) operational product refinement, (8) operational field testing, (9) final product revision, and (10) dissemination and implementation. However, due to constraints in time and costs, the research only progressed to stage 4, the preliminary field testing. Data was gathered through observations, questionnaires, and interviews. The research employed descriptive qualitative statistics for data analysis. The outcome of the study is an e-module designed for adaptive sports learning theory and practice courses.

Results. The feasibility test results for developing e-module teaching materials for adaptive sports learning courses are as follows: media experts found the materials to be very valid and usable, while material experts found them to be valid but needing revisions. The learning experts also found the materials to be valid but needing revisions. The test subjects, consisting of physical education students at PGRI University in Palembang, gave the materials a 62% score, categorizing them as "Decent/Attractive/Good".

Conclusion. The e-modules created for courses on the theory and practice of adaptive sports learning have produced results that make them highly suitable for use as teaching materials for students.

Keywords: Teaching Materials, Adaptive Sports Learning, Module

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Introduction

Physical education is a vital part of education (Kuswoyo et al., 2020) that focuses on improving physical fitness, movement abilities, emotional resilience, and good habits, and providing a structured introduction to the environment (Bulqini et al., 2021). Its purpose is to help achieve educational objectives. Sports designed for specialized schools are different from those in mainstream schools (H. A. Hermawan, 2000). Individuals with impairments require comprehensive acknowledgment and significant consideration to effectively maximize their full potential. Exceptional schools are institutions that specialize in providing education for children with exceptional needs (ABK) (Hornby, 2014). These schools are designed for children with exceptional needs who typically have below-average intelligence indications and adaptive conduct, both in academic subjects and in sports activities. Individuals with impairments must be acknowledged and given significant consideration to fully maximize their potential, particularly in the realm of athletics (Odom et al., 2009).

As individuals, crew members are entitled to thrive and advance within the context of their family, culture, and nation. They are entitled to receive an education, just like their siblings who do not have any anomalies or are considered typical. There is no justification for special schools (SLB) to exclude ABK from attending the school. In collaboration with specialized educators possessing expertise in special education, schools can develop tailored special education programs that cater to the unique qualities and requirements of these children (Rieser, 2012).

The necessity for the child to receive specialized lessons, programs, or services is contingent upon the child's degree of competence and the nature of their handicap. Providing them with the chance to engage with peers at an early age will enhance their mental resilience while confronting environmental difficulties. They will also experience greater development in comparison to individuals who are socially isolated and do not attend school. Obtaining educational assistance at an early stage yields more favorable outcomes (Kauffman et al., 2018).

Adaptive physical education is essentially the same as standard physical education (Steadward et al., 2003). It is a part of the overall education process and is specifically designed to address issues in the psychomotor domain. This study aims to improve the acquisition of adaptive sports skills in physical education and create educational materials that cover both theoretical and practical aspects to aid students studying physical education. The goal is to make a significant contribution to adaptive sports learning in physical education (Disabilities (U.S.) & Kelly, 2006).

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Adaptive learning involves modifying ordinary learning methods to meet the specific educational needs of Children with Special Needs (ABK). It is a specialized form of education tailored to individuals with learning disabilities, focusing on class management, programs, and services. Special education involves modifying regular education to meet the specific needs of children with disabilities, encompassing classrooms, programs, and services. It aims to cater to the educational needs of children with distinct features that cannot be met by the standard school curriculum (Nancy & Jannine, 2015).

Teaching materials, as defined by Prastowo (2014), include all systematically arranged materials such as information, tools, or texts to aid in planning and evaluating learning activities. Instructional materials are unique and specific to particular objectives and audiences. Electronic learning modules are self-instructional and user-friendly, designed to be accessible through electronic devices, allowing students to access them conveniently. They can be validated by experts before implementation and are compatible with different learning models, providing a simple and efficient delivery strategy.

Materials and Methods

Study Participants.

Iterative field tests were conducted to achieve a viable design, encompassing both the material and the approach used. For instance, this examination is conducted in a range of 1 to 3 educational institutions, employing a total of 6 to 12 individuals as test subjects, specifically teachers. Throughout the trial, researchers conducted observations, interviews, and issued questionnaires. The data were gathered through the use of questionnaires and observations and subsequently subjected to analysis (I. Hermawan, 2019).

Study organization.

This study follows the Borg and Gall development framework, which consists of 10 distinct stages. However, due to time and financial constraints, the research was only able to complete 4 of these stages. To summarize, the process for conducting development research can be outlined as follows: (1) Conducting research and gathering information (collecting data and information). The initial phase encompasses needs analysis, literature review, small-scale research, and adherence to reporting standards.

To do a requirements analysis, numerous criteria must be considered, including the urgency of product development, the nature of the product development process, the availability of skilled human resources, and the adequate time required for development. The literature review is conducted as a preliminary step to gather research findings and relevant information about the creation of the intended product. Simultaneously, it is vital to do

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preliminary research on a smaller scale to get essential knowledge about the product that is to be developed. This includes meticulous planning and strategizing.

Create a comprehensive research strategy that outlines the necessary skills for doing research, sets clear objectives to be accomplished, defines the research design or methodology, and considers the feasibility of conducting limited-scale testing. Additionally, produce an initial draft of the product to be developed. This step involves establishing the hypothetical design of the product to be developed, identifying the necessary research facilities and infrastructure for the research and development process, determining the stages for conducting design tests in the field and defining the job responsibilities of the individuals involved in the research. This encompasses several activities such as the creation of educational resources, instructional methods, and assessment tools, as well as conducting initial testing in real-world settings. This step involves a restricted product test, specifically carrying out a first field test of the product design. The test is limited in terms of the design itself and the parties participating.

Statistical analysis.

The research uses qualitative descriptive analysis techniques as its analytical approach. Quantitative data analysis approaches, such as the usage of percentages, are employed to show data collected in needs analysis, expert evaluation, small group trials, and large group trials. As per (Sugiono, 2015), the formula employed for data processing is as follows:

$$P = \frac{X}{Xi}\ x100\%$$

Description:

P: Percentage of test subject evaluation results.

X: Number of score answers by test subjects.

Xi: Maximum number of answers in the assessment by test subjects.

100% : Constant.

To conclude the findings of the percentage study of the attractiveness and simplicity of product development, specific criteria for classification were established.

. **Table 1**. Percentage Analysis

Percentage	Categories	Description
80-100%	Very good	Can be used without revision
61-80%	Good	Can be used with minor revisions
41-60%	Enough	Not suitable for use, recommended not Used
21-40%	Poor	Can not be used
00-20%	Very Poor	Can not be used

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Results

The inferences that can be derived from this study are founded on the outcomes of this limited-scale product trial, which seeks to assess the preliminary viability of E-Module teaching materials for courses on the theory and practice of adaptive sports education. The participants in the study consisted of 20 students who were in their sixth semester of the physical education study program at PGRI University in Palembang. Below is a table evaluating the outcomes of a small-scale examination of the E-module instructional material product for the theory and application of adaptive sports education:

Table 2. Results of small-scale trials

No	Assessment Aspects	Σ*X* Aspects	Maximal Score	Score %	Eligibility Category *E-Modul*
1.	E-Module Eligibility	255	330	74,5%	Decent/interesting/good
2.	E-Module Language	116	130	76%	Very Decent/very interesting/very good
3.	Benefits of E-Modules	145	180	74,5%	Very Decent/very interesting/very good
4.	E-Module Graphics	259	330	73%	Very Decent/very interesting/very good
Total number			**795**		
Maximum Score			**1.011**		
Percentage			**62%**		
E-Module Eligibility Criteria			**Decent/interesting/good**		

Discussion

The novelty of the research conducted by researchers is compared to the findings of previous studies conducted by Pagesti & Sudarsini (2015) and Jamaluddin, Dwiyogo, & Hariyanto (2018). These studies focused on the development of e-module teaching materials for science courses and adaptive sports learning practices. The products of these studies were accessible on smartphones or PCs/laptops and could be used independently by students. The content within the e-module is intricate, following the guidelines of RPS and SAP. In addition to its various advantages, this e-module teaching material for courses on the theory and practice of adaptive sports learning also has several limitations. These include the simplicity of the application used by researchers for implementing the e-module, as well as the lack of interactivity and interest in the developed teaching materials.

Conclusions

The product feasibility test for the development of e-module teaching materials for adaptive sports learning courses was conducted at PGRI University in Palembang. The feasibility assessment of the test subjects, who were students of the physical education study program, resulted in a score of 62%. This score falls within the "Decent/Attractive/Good"

category. Therefore, it can be inferred that the outcomes of the e-module course development on the theory and practice of adaptive sports learning are appropriate for instructional purposes and can be further explored in further experiments.

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References

Borg, W. R., & Gall, D. (1983). *Educational Research*. Longman.

Bulqini, A., Puspodari, P., Arfanda, P. E., Suroto, S., & Mutohir, T. C. (2021). Physical Literacy in Physical Education Curriculum. *ACTIVE: Journal of Physical Education, Sport, Health and Recreation*, *10*(2), 55–60. https://doi.org/10.15294/active.v10i2.47008

Disabilities (U.S.), N. C. for P. E. and R. for I. with, & Kelly, L. (2006). *Adapted Physical Education National Standards*. Human Kinetics.

Hermawan, H. A. (2000). *REVIEWING SUBSTANCE OF PHYSICAL EDUCATION CURRICULUM FOR CHILDREN AT PRE-SCHOOL (KINDERGARTEN) AND ELEMENTARY SCHOOL ON THE 1ST GRADE*.

Hermawan, I. (2019). *Metodologi Penelitian Pendidikan (Kualitatif, Kuantitatif dan Mixed Method)*. Hidayatul Quran.

Hornby, G. (2014). *Inclusive Special Education*. Springer US. https://books.google.com/books/about/Inclusive_Special_Education.html?id=UbJTBAAAQBAJ

Imansari, N., & Sunaryantiningsih, I. (2017). Pengaruh Penggunaan E-Modul interaktif Terhadap Hasil Belajar Mahasiswa pada Materi Kesehatan dan Keselamatan Kerja. *Jurnal Ilmiah Pendidikan Teknik Elektro*, *2*(1). https://jurnal.untirta.ac.id/index.php/VOLT/article/view/1478/1169

Irwansyah, F. S., Lubab1, I., I Farida1, & M A Ramdhani. (2017). Designing Interactive Electronic Module in Chemistry Lessons. *International Conference on Mathematics and Science Education (ICMScE)*. https://doi.org/doi :10.1088/1742-6596/895/1/012009

Kauffman, J. M., Hallahan, D. P., Pullen, P. C., & Badar, J. (2018). *Special Education: What It Is and Why We Need It*. Routledge.

Kuswoyo, D. D., Lahinda, J., & Syamsudin. (2020). The effects of high-intensity interval training (HIIT) in improving VO2 max football student activity unit, University of Musamus. *Enfermería Clínica*, *30*, 507–511. https://doi.org/10.1016/j.enfcli.2019.10.130

Nancy, M., & Jannine, T. (2015). *Quality Physical Education (QPE): Guidelines for Policy Makers*. UNESCO Publishing.

Odom, S. L., Horner, R. H., & Snell, M. E. (2009). *Handbook of Developmental Disabilities*. Guilford Press.

Rieser, R. (2012). *Implementing Inclusive Education: A Commonwealth Guide to Implementing Article 24 of the UN Convention on the Rights of Persons with Disabilities*. Commonwealth Secretariat.

Steadward, R. D., Watkinson, E. J., & Wheeler, G. D. (2003). *Adapted Physical Activity*. University of Alberta.

Sugiono. (2015). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.