Audio Visual Learning Media Tutorial: Development for Basic Swimming Subject 
Sports Coaching Education at the Faculty of Sport Science, Medan State University

Zulfan Heri (1) 
Sports Coaching Education 
State University of Medan 
Medan, Indonesia

zulfan_heri67@yahoo.com

M.Nustan Hasibuan (3) 
Sports Coaching Education 
State University of Medan 
Medan, Indonesia

Puji Retno (2) 
Sports Science 
State University of Medan 
Medan, Indonesia

Abstract—This research aims to develop learning media audio visual tutorial for swimming lessons in Sports Coaching Education at the Faculty of Sport Science, Medan State University. Audio visual in question is in the form of VCD is an audio visual media that is able to convey information clearly through images and sound. The implementation of learning using media audio visual tutorial requires students to be able to carry out swimming learning activities independently and maximally by viewing and observing breaststroke learning videos that have been made and arranged systematically as demands in meeting the development of science and technology and the existing curriculum. This study uses Research and Development (R&D) that adapts the 4D model. The instruments used were assessment sheets or learning media assessment questionnaires for material experts, media experts, lecturers / teachers, and students. Qualitative analysis data in the form of criticism and advice from media experts, material experts, trainers and students. The results showed four 4D steps namely Define, Design, Development, and Disseminate. The results of the analysis of the research are developing tutorial learning media using audio visual tutorials on swimming subjects. The assessment of material experts is 3.8 in good category, and the assessment of media experts is 3.1 in good category.

Keywords: media tutorial, audio visual, swimming

I. INTRODUCTION

Learning is a process or effort that is carried out by each individual to obtain a change in the level of behavior toward maturity. "Learning is a change in behavior, whereas behavior is an action that can be observed. In other words, behavior is an action that can be observed or results that result from an action or several actions that can be observed"[1]. These limits are quite extensive and deep covering the understanding of resources, environment, people and methods used for learning purposes. Learning media are physical means to convey learning content/materials such as; books, films, videos and so on [2]. Swimming subject is a basic subject and must be followed and studied by every student of the Sports Coaching Education program, to be able to master the skills and knowledge of a student is required to have cognitive abilities and past motor skills in sports. In addition to the success of student learning is also determined by interest in learning, intelligence, motivation and educational background [3]. In the implementation of basic swimming lectures that require every student to have good swimming knowledge and skills and be able to study independently. For this reason, the effort is to provide learning resources that have not yet been maximally owned, in the form of structured learning books, swimming learning modules, whose findings are very limited besides the heavy demands of the work to be done for each subject as an embodiment of the implementation of the KKNI curriculum (Indonesian National Curriculum Qualifications).

These effects all result in swimming learning outcomes are still relatively low in terms of mastery of swimming skills. This can be the value of subjects obtained by students with an average level of success in mastering the swimming style taught is at 60%. Learning media audio visual tutorial swimming that displays learning techniques and basic movements of breaststroke swimming as outlined in the video, is increasingly popular in our society. The message presented can be factual or fictitious can be informative, educative or instructional. Learning media Audio-visual tutorial is one type of video media, in addition to the film which has been developed for learning purposes[4].

The Vision of the Faculty of Sports Science is to realize the Unimed Faculty of Sports Science which excels in the field of Education and Sports Science. The efforts to achieve that vision are elaborated through the mission:
To Organize Education, Research and Community Service
Organizing education to produce qualified and professional scholars in the field of Physical Education, Coaching and Sports Science.
Conducting the Faculty of Sport Science, Medan State University research as a sports science research center in the Sumatra region.
Conducting the Faculty of Sport Science, Medan State University as a Sports Achievement Study Center in Sumatra Region

Expected through this research are: (1) making swimming learning videos with tutorial methods as a guide in the application of science and technology (2) obtaining relevant swimming learning outcomes by studying audio-visual tutorials breaststroke swimming (3) produced a number of scientific publications in accredited national journals on instructional media using the audio visual tutorials for the Student creativity program Faculty of Sport Science, Medan State University basic swimming subject[5]. The results of this research are expected to be able to support the development and development of science and technology because they can be used for:

- As a reference in carrying out swimming teaching and learning process using learning media audio visual tutorial.
- Teaching material in learning and teaching breaststroke swimming.
- As material for student literature in completing lectures

In the process of implementing swimming learning, the success of mastery of skills is determined by many factors including the student's self as a student, the instructor, the infrastructure facilities, environmental factors, learning strategy factors, etc. Learning media include tools that are physically used to convey the contents of learning materials, among others [6]: Books, tape recorders, cassettes, video cameras, video recorders, films, slides, photographs, pictures, bar charts, televisions and computers. The use of media, audio-visual namely the use of video in learning activities, is very useful[7], because with the use of this learning media students can provide feedback, comment and can also remember more about the material presented[8]. Learning media in the form of videos can be classified into types of Audio Visual Aids (AVA) or media that can be seen and heard.Error! Reference source not found.. Audio-visual media is a set of tools that can project moving and audible images. Audio-visual technology is a way of delivering material/messages using the help of mechanical and electronic devices, to present messages in audio visual. Along with the development of technology, almost all electronics companies produce video cameras, with various models and types. The learning media used are using audio-visual media in a breaststroke swimming tutorial[8]. The tutorial learning model there are characteristics that are characteristic of the tutorial learning model[9]. These characteristics include the following:

- The teaching objectives of the tutorial learning method are to provide opportunities for each student to develop the ability to solve problems rationally, develop social attitudes and mutual cooperation in life, dynamically group activities in learning, develop leadership skills skills to each group member in solving group problems.
- Students in this study have the following characteristics: (a) Each student feels self-consciously has a group member, (b) Each student is self-aware has a common goal in the form of group goals, (c) Have a sense of mutual need and dependence. (d) Interaction and communication between members. (e) There is joint action as an embodiment of group responsibility.

Educators play a role in group formation, group task planning, implementation, and evaluation stages of group learning outcomes.

II. RESEARCH METHODS

This research is research and development (research and development) means this research is research oriented on the product. Explained the 4 steps of development, namely the 4 D model[10].
A. Place of Research
The Place of research was conducted at the SCC Unimed swimming pool Jl. Willem Iskandar pasar V Medan Estate. When the research was conducted in the odd semester of the 2019-2020 school year at the FIK Unimed Sports Coaching Education study program.
B. Research
Subjects There are two research development subjects, namely, the subject of product validation, namely 2 lecturers or swimming experts and 1 media expert, which is related to learning media in the form of breaststroke VCD swimming products and product trial subjects, namely PKO FIK Unimed students.
C. Research Procedure
This research was conducted to produce teaching material products in the form of VCD learning media swimming tutorials breaststroke basic swimming subjects. The activities carried out include producing tutorial video learning based on needs analysis by collecting data from stakeholders, lecturers, swimming basic subjects related to the curriculum (Syllabus and RPS) used so far. Data was also collected from stakeholders, physical education and sports teachers, caregivers of basic swimming subjects. VCD development of instructional media tutorials still pay attention to the sequence (sequence) and the depth of the material being made. The data that has been compiled are then disseminated to produce teaching material in the form of a good swimming breaststroke VCD learning tutorial and in accordance with the competency demands that will be achieved[11].
D. Product Specifications
- Media audio-visual learning tutorial video form developed in this study is made in the form of a CD (Compact Disk).
- This learning media audio visual tutorial pool can also later be seen in YouTube swimming learning through the internet network.

The objectives in conducting this research is; to develop the audio-visual tutorial media basic swimming subjects Sports Coaching Education at the Faculty of Sport Science, Medan State University 2019.
The development of learning media audio-visual tutorials is complemented by training material that is packaged in the form of displaying the steps in body position techniques, leg movement techniques, arm movement techniques, breathing techniques and coordinating breaststroke swimming movements.

III. RESULTS AND DISCUSSION

The basic swimming subject taught in the Sports Coaching Education at the Faculty of Sport Science, Medan State University study program requires students to be able to master 4 (four) swimming styles, one of which is swimming style, breaststroke swimming. To get the results of students' breaststroke swimming so they can practice well, and continuously by carrying out several stages of swimming learning that have been prepared by the RPS (Semester Learning Plan). The steps taken are making a breaststroke learning product by developing a learning media audio visual tutorial on basic swimming subjects. The results of the research done is resulting the development of teaching materials in the form of VCD learning breaststroke swimming tutorial on basic swimming subjects Sports Coaching Education at the Faculty of Sport Science, Medan State University 2019.

IV. CONCLUSION

Based on the results of research on the development of instructional media audio-visual tutorial basic swimming subject it can be summed up as follows:

- Based on the data obtained, as well as material expert assessments that instructional media products in the form of audio visual tutorials from aspects of instructional media including "good" with an average score of 3.8
- While the data obtained from the assessment of media experts on aspects of the quality of instructional media are included in the "good" category with an average score of 3.1.
- Based on the data obtained, and the assessment of media experts that learning media products are in the form of audio visual tutorials from the aspect of video media display learning includes "good" with an average score of 4
- While the data obtained from the trial evaluation of the use of learning media product audio visual tutorials are included in the category of "good" with an average score of 4
- Learning media audio visual tutorials on basic swimming subjects Sports Coaching Education at the Faculty of Sport Science, Medan State University 2019 consisted of; body positioning techniques, techniques for learning leg movements, techniques for learning arm movements, breathing movement techniques and coordinating breaststroke swimming movements.

REFERENCES