The Development of Technical Training Method Module and Tactic of Tennis Based on KKNI Curriculum in the Field of Techniques and Tactical Training Methods

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Abstract. The purpose of this study intends to develop a field training module based on KKNI in lectures on Technical Training Methods and Field Tennis Tactics that are suitable for use as learning resources in the Faculty of Sports Science. This research was conducted at Unimed sports science faculty student training department.In this study using a quantitative approach, a quantitative approach in research is characterized by testing hypotheses and using standardized test instruments and types of experimental research. Express a relationship between two or more variables and also to find the influence of a variable on other variables.

Keywords: Modules, techniques, tactics and curriculum of KKNI.

1 Introduction

From the data search results in the odd semester through lecturers who have strengthened the Technical Training Methods and Field Tennis Tactics in the last 3 years. Student grades in the 2014/2015, 2015/2016 and 2016/2017 school year show students who are PASS are 100%. But this graduation occurred with almost 90% of graduations with Remedials. This can be seen in table 1.1 below;

Table 1.1 Percentage of the value of the Coaching Department's passing level in the Technical Training Method and Field Tennis Tactics.

Source: Recap of course scores Team of Compassionate lecturers from Unimed's Communication Center)

Based on observations and data that have been collected in the Technical Training Method and Field Tennis Tactics, there are still many students who have not been able to graduate normally, but must be remedial for graduation. The cause is one of the absence of training models for training independently for students. For this reason, it is necessary to have an independent training model module for students, which can facilitate and assist students in doing independent training. For this reason, with the research testing the effectiveness of the Goenrich Tennis technique training model, students will learn on their own outside the lecture hours with the modules developed. With the hope of students using the Goenrich Tennis technique training model module, there will be fewer students who graduate through Remedial 1 and Remedial 2.

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No	Semester value	Pass	Remedial 1	Remedial 2	Amount
1	Gasal, 2014/2015	10 (80 mhs) 12,5%	70 (80 mhs) 87,5%	10 (70 mhs) 14,29%	78 mhs (97,5%) 2 mhs Lulus Polri/TNI AD
2	Gasal, 2015/2016	12 (86 mhs) 13,95%	74 (86 mhs) 86,05%	15 (74 mhs) 20,27%	82 mhs (95,35%) 4 mhs Lulus Polri
3	Gasal, 2016/2017	8 (76 mhs) 10,53%	68 (76 mhs) 89,47	20 (68 mhs) 29,41%	70 mhs (92,11%) 4 Lulus Polri& 2 Lulus TNI AD

2 Ease of Use

2.1 Concept of Module

According to the Directorate of Vocational High School Guidance (2008: 4) revealed that "Modules have the following characteristics: (1) Allows a person to learn independently and not depend on another party (self instruction), (2) Contains all the material needed in learning (Self Contained), (3) Does not depend on teaching materials / other media, or does not have to be used together with teaching materials / other media (Stand Alone / Stand Alone), (4) Have a high adaptability to the development of science and technology (adaptive), (5) Friendly / familiar with the user (user friendly) ".

This can be concluded by researchers, that the module is a form of teaching material that is packaged systematically and interestingly so that it is easy to learn independently. As a unit of independent learning program outlined in detail consists of: 1) Instructional objectives to be achieved, 2) Topics that will be used as the basis of the learning process, 3) Principles of the material being studied, 4) Position and function of modules in more unified programs broad, 5) The role of the teacher in the learning process, 6) The tools and sources to be used, 7) Learning activities that must be carried out and lived by students in sequence, 8) Worksheets that must be filled by students and 9) Evaluation program which will be implemented.

2.2 Concept of Field Tennis

According to (Yudo prasetyo, 1981: 43) argues "The basic principle in the game of tennis is not just hitting the ball over the net and dropping it into the opponent's playing field, but in hitting the ball it is attempted to make a good punch that can direct the ball and can put the ball carefully in the desired place so that the results can make it difficult for the opponent to return it, so that the opponent's punch goes out of the field or is on the net. Thus, it will get the value due to the wrong punch done, because every mistake in the blow results in the acquisition of value for the opponent.

Presented (Jones & Angela Buxton, 2006: 15) in his book that "basic skills in field tennis games are divided into three categories, which include: (1) service (2) groundstrokes (forehand and backhand), (3) volleyball basic tennis court. No points start with: Service: the basic way this movement is to 'throw' towards the ball. Once the ball is played, the rally takes place with: groundstroke. this is the blow you make after the ball hits the ground once. The blow without waiting when you touch the ground is called: Volley. The basic way for a volley is to hit the ball with the surface of the racket.

The basic technique of playing tennis tennis aims to get per point points by hitting and skipping the ball from the net in the opponent's space without being able to return the ball, considering the main purpose of tennis is to score points by entering into the opponent's field. Then the basic technique has a vital role and must be owned by all tennis tennis players. Therefore, the basic technical skills of American tennis must get more attention in training. Researchers here put forward more basic punch techniques with models developed for improving the techniques of field tennis players in North Sumatra Province.

2.3 Concept of Goenrich Model

According to (Sukadiyanto and Dangsina 2011: 6) "Understanding exercises derived from the word exercises is the main tool in the daily exercise process to improve the quality of the function of the human organ system, making it easier for athletes in improving their movements. The definition of training derived from the word training is the application of a plan to improve the ability to exercise which contains material theory and practice, methods, and implementation rules in accordance with the goals and objectives to be achieved ".

Furthermore (Ria Lumintuarso, 2011: 99) which "shows in practice practice, the two training methods are used in combination". Consideration of combining training methods is based on technical training that is intended to master the standard form of skill movement. While the method of playing approach is intended for problem solving in real game situations which aims to better master basic techniques in playing tennis. So this goenrich exercise model is based on the approach to playing in development.

2.4 Curriculum Based on IQF

Perpres No. 8 of 2012 each study program is required to clarify the "graduate profile" which is expected through the activities of tracking studies, feasibility studies and needs analysis in the community. The graduate profile reflects the minimum ability that students must master after graduation which refers to four aspects of needs (1) attitude (attitude), (2) the field of work ability, (3) knowledge, and (4) managerial and responsibility. The four abilities must then be translated into a learning outcome in each subject in the study program. So that later, all learning plans or Semester Implementation Plans (RPS) must be based on learning outcomes that are in accordance with the needs of the graduate profile. [7]

According to Law No. 12 of 2012 article 29 explained that the National Qualification Framework is a level of learning achievement that equates the output of formal, non-formal, informal, or work experience in the framework of recognition of work competencies in accordance with the structure of work in various sectors. [8] So this KKNI curriculum invites students to innovatively and creatively think critically for learning every semester.

2.5 Research of Roadmap

This research was conducted to meet the needs of the learning process in the Techniques Method and Field Tennis Tactics courses, while the Roadmap for this study are as follows:

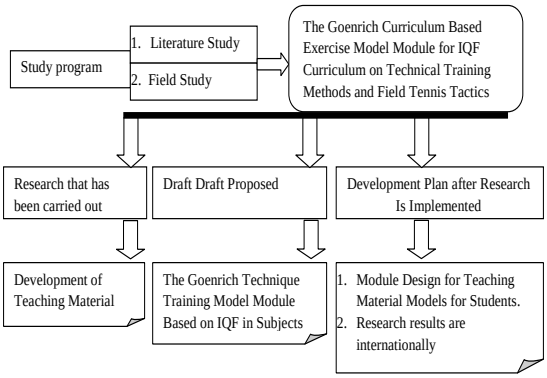

Fig. 1. Module research roadmap The Goenrich technique training model is based on the IQF curriculum in the Technical Training Methods and Field Tennis Tactics.

3 Prepare Your Paper Before Styling

This research is a research on the development of the Goenrich field tennis module based on the IQF curriculum. The research approach in this study is the development (Research and Development / R & D) of the Goenrich tennis field engineering module in the sixth step, namely the main group trial.

This type of research is an experimental study with the Goenrich engineering model module as a tennis treatment or treatment in experimental research. The design of this study is a rondomized control group pre test - post test which can be described as follows:

Table 2. Research design

Technique *Sampling*	**group**	***Pretest***	***Treatment***	***Posttest***
Random	Training model *Goenrich*	P01	X1	P1
	control	P02	-	P2

Information:
P01 : Pre-test experimental group 1
P02 : Pre-test of the control group
X1 : Treatment technique training model

: Goenrich developed
- : Conventional exercise treatment
P1 : Post-test experimental group 1
P2 : Post-test control group

3.1 Population and Research Sample

The population in this study were all students who took Athletics courses. The sample of this study was 52 students. The number of classes sampled were 6 classes, so the total number of research samples was 40 students.

3.2 Data Analysis Techniques

Data from the pre-test and post-test on the experimental group and control group were analyzed using SPSS 17.0 for Windows with the following analysis according to (Sugiono, 2010: 112):

1. Prerequisite Test Analysis; Following are the steps taken by the researcher during the prerequisite analysis test:
    a. The normality test in this study was used to test the data obtained with normal distribution, carried out using the Kolmogorove-Semirnov test with a significant level of 5%.
    b. Homogeneity test in this study is used to test the data obtained whether homogeneous or not. Using the levenes'stest test.
2. Hypothesis Statistical Test: To find out the difference in the effect of treatment on the dependent variable results of Punch before and after treatment each group used Pairedt-test.

4 Results And Discussion

The development of the developed model module has 4 major components to be developed, namely: (1) development of forehand punch; (2) development of backhand punches; (3) developing volleyball; and (4) developing service punches.

After the stages of validation, evaluation and revision of the model modules that have been developed, the next stage is the implementation of the model by testing the effectiveness of the model. The effectiveness test of the model was carried out using a pre-experimental research design in the form of "one group control pretest-posttest design". The students who were the subject of the study were given a pre-test in the form of a technical test using the Hewitt test, then given the treatment in the form of the application of the Goenrich technique exercise model and again carried out a post-test using the same instrument.

On testing the average forehand difference simultaneously between groups to determine differences in the effect of treatment on increasing the dependent variable of Goenrich technique training on students with IQF curriculum before and after treatment between groups using Independent Samples Statistical Test From IBM SPSS21.0 for Windows calculations obtained results as following:

Table 1. Independent Samples Test Forehand Calculation Results Based on the above table it can be concluded that the sig value Equal variances assumed (2-tailled) 0.006 <0.05, it

can be concluded that there are differences in the influence of goenrich technique training and conventional engineering exercises on the ability of forehand techniques. Testing the Backhand average difference simultaneously between groups to determine the difference in treatment effect on the increase in the dependent variable goenrich technique training on students with the IQF curriculum before and after treatment between groups using Independent Samples Statistical Tests From the IBM SPSS21.0 for Windows calculation the following results are obtained :

Table 3. Calculation Results of the Independent Samples Test Forehand

Backhand	***Df***	***Mean Difference***	***F***	***Sig.***
Equal variances assumed	77	7,365	1,537	0,001

Based on the table above it can be concluded that sig Equal variances assumed (2-tailled) value 0.006 <0.05 can be concluded that there are differences in the effects of goenrich technique training and conventional technique exercises on forehand technique skills.

Different Backhand average testing simultaneously between groups to determine differences in the effect of treatment on increasing the dependent variable of goenrich technique training on students with IQF curriculum before and after treatment between groups using Independent Samples Statistical Test From the calculation of IBM SPSS21.0 for Windows the following results were obtained:

Table 4. Calculation Results of Independent Samples Test Backhand

Forehand	***Df***	***Mean Difference***	***F***	***Sig.***
Equal variances assumed	756	5.001	7,628	0,006

Based on the above table it can be concluded that the sig Equal variances assumed (2-tailled) value is 0.001 <0.05, so it can be concluded that there are differences in the effects of goenrich basic techniques and conventional techniques on the basic engineering skills of Backhand.

Volley mean difference testing simultaneously between groups to determine differences in the effect of treatment on increasing the dependent variable of Goenrich technique training on students with IQF curriculum before and after treatment between groups using Independent Samples Statistical Test From the calculation of IBM SPSS21.0 for Windows the following results were obtained :

Table 5 . Calculation Results of Independent Samples Test Volley

Volley	***Df***	***Mean Difference***	***F***	***Sig.***
Equal variances assumed	76	6,025	0,084	0,771

Based on the table above, it can be concluded that the sig Equal variances assumed (2-tailled) value is 0.771 <0.05, so it can be concluded that there are differences in the effects of goenrich basic techniques and conventional techniques on Volley basic engineering skills.

Testing service average difference simultaneously between groups to determine differences in the effect of treatment on increasing the dependent variable of Goenrich technique training on students with the IQF curriculum playing before and after treatment between groups using Independent Samples Statistical Test From IBM SPSS21.0 for Windows calculations obtained results as following:

Table 6. Results of Calculation of Independent Samples Test Services

Servis	***Df***	***Mean Difference***	***F***	***Sig.***
Equal variances assumed	79	7,128	0,091	0,001

Based on the table above it can be concluded that the sig Equal variances assumed (2-tailled) value 0.002 <0.05 can be concluded that there are differences in the effects of goenrich basic engineering exercises and conventional engineering exercises on basic service technical skills.

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