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**INTERNASIONAL  
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SERANTAU Ke-6**

*Kualiti dan Kecemerlangan Dalam Pendidikan*

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**Anjuran:**

**Fakulti Pendidikan, Universiti Kebangsaan Malaysia &  
Fakultas Keguruan dan Ilmu Pendidikan, Universitas Riau**

**Dengan Kerjasama:**

**Universiti Malaya**

**Universitas Negeri Yogyakarta**

**Universitas Pendidikan Indonesia**

**Universitas Negeri Padang**

**Universitas Ekasakti Padang**

**Kolej Universiti Perguruan Ugama Seri Begawan**

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# THE DIFFERENCES BETWEEN RECIPROCAL AND COMMAND PATTERN TOWARD STUDENT'S RESULT OF DISCUSS THROWING LESSON IN COACHING DEPARTMENT SPORT SCIENCE FACULTY STATE UNIVERSITY OF PADANG

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## Abstract

This research titled the differences between reciprocal learning systems with command to the study result of disk throwing for student in coach education department, faculty of sport sciences Padang State University. This research is caused by low result of athletics subject especially in low disk throwing. Many factor caused low result in disk subject, one of them is maybe caused by learning system imply by lecturer. This research classify into Quasi Experiment research, where researcher treated two type of learning system by learning program design. Population of this study is every coach education department's student in Sport Science Faculty, Padang State University, meanwhile the sample of this research is student who taken basic of athletic subject in January-July 2011 with total sampling technique. Research samples are already divided into two group, the first group is treated by design of reciprocal learning system and other treated by command learning system. This research use primary and secondary data. Data extract from final test in the last of learning schedule. Then, data is processed by differences testing using Anava with the F as the result. The results of this research accept the hypothesis where the result of data analyze using SPSS

15 is  $F_{10,21} > 3,96$  where  $0,05$ . It means there have significant different between reciprocal learning system and command learning system in the result of disk throwing.

**Keywords:** Resiprocal Learning System. Comand Learningnng System, Disc Throwing Learning Out Comes

## Introduction

In every country, education is one of most important factor to make them moving forward. If a country does not pay an attention to the education, it will be less developed than others. It means, education hold an important role to make them have bright future. In order to make it better, education should have become main priority on it. It has correlation with Indonesians' 22nd legislation (2003) that announces education is a aware and planned process in creating study circumstance and learning process in order to develop student's own potential have religion spiritual strength, self-control, personality, perspicacity, good-attitude, and also competency are needed by itself, public, and nation.

As one of education institution, State University of Padang serves deliberately to develop science, problem solving, appreciation for achievement, and advance training for employment education (Buku Pedoman 2007/2008: 20). It means as one of members of public community, it should dedicate itself into development of science and technology. Therefore, it should able to read and solve daily problem by conduct researches.

In order to realize dedications above, State University of Padang toward faculties explains tangibly the responsibility to supervise a faculty. One of them is Sport Science Faculty. As one of members of faculty in State University of Padang, it decides the strategy framework and efforts in order to apply optimally those main purposes. They both are taking a part into faculty's missions and targets.

In order to achieve targets that explained above, Sport Science Faculty have been designing and describing lecture curriculum. There are practice lecture subjects that should taken by every students. They are athletic, gymnastic, swimming, football, basket ball, pencak silat, sepak takraw, volly ball. In other hand, there are two catagory of subjects that must taken by students. They are individual (athletic, gymnastic, swimming, and pencak silat) and Team (footbaal, basketball, volleyball and takraw ball) sports.

These subjects are the members of mata kuliah keilmuan dan keterampilan (MKK). It means this subjects should be taken by sports science faculty students. The content of this subjects is complex natural movement that make power, speed, durability, flexsibility and another coordination of physical movement is necessary.

There are some activities to optimize sports practice lecture subject. Every members of team in this subject should prepare the syllabus. The lesson delivered by single team that constantly do discussions about teaching, increasing students's will power to study, implementation of evaluation. However, the student's practice score is below the standard line in athletic sports, especially in discuss trowing. This problem raise some oppinion. They are quantity and quality of practice tools is not good enough, the basic skills of students to follow the subjects are very low, the learning mehod that lecturer applies to them is not suitable, students capability in social and economical aspects is not enough, and students willpower is low in order to get better result to finisih discus throw subjet.

Base on the argumentation above, there is an importance to conduct a research to acknowledge the factors that make students' mark in discuss throw subject lesson is low ones. **Is there any difference between reciprocal and command pattern toward the result of discuss throw lessons?** This research will find the way to solve this problem.

## Review Related Literature

### Result of Learning

Learning is important thing for someone to get knowledge, even someone who already gifted as clever ones should have to study. Saffat (2009) says that learning definite as a process to gain knowledge that acknowledged by society, moral values that developed in the environment, or the form of skills. The activity of learning has purpose to get information, comprehend for something, and gain some skills. Winkel (1996) says that learning is a mental activity that takes place into active interaction to the environment

which resulting the changes in knowledge and understanding, skills and value. This change has constant disposition and hard to forget. Sadirman (2005) says that learning is done through the conscription of skills to know some knowledge, have some skills or able to act in specific behavior. Simanjuntak (1986) says that an ideal or not learning activity is not the interaction that happens between human and environment, even in this interaction individual achieve new experience. It means the definition of learning can conclude have correlation with the change of behavior even only applied into some aspects someone's personality such as; observation, emotion and physically.

Briggs (1974) says that the result of study that known as learning outcomes is all achieved result through learning and teaching process in school that explained through numbers or marks that measured by learning process. Meanwhile, Bloom (1981) definite that result of learning is the kind of behavioral changes that have three aspects such as; cognitive ones; (1) knowledge, (2) Comprehension, (3) Application, (4) Analysis, (5) Synthesis, and (6) Evaluation. First skills aspects such as knowledge, understanding and application usually categorized as low cognitive levels. Meanwhile the second last three, analysis, synthesis, and evaluation categorized as high cognitive levels. Affective aspects (1) acceptance, (2) attention, (3) perception, (4) adaptation, (5) appreciation, and (6) arrange. For psychomotor aspects; (1) imitate, (2) utilize, (3) carefulness, (4) coordination and (5) naturalization. Romiszowski (1981) says that there are four skills categories that students gain as the result of learning. They are; cognitive, psychomotor, emotional-reactive and interactive. Then, Surytasubrata (2005) says that the behavior characteristics that someone gains as the result of study are; (1) new behavior that formed as actual or potential skills, (2) new behaviors that occurs for a long time, (3) they need efforts to gain it. There are two factors that influence student's learning result. They are internal and external factors include; (1) physiologies factor such as sense organs condition, (2) psychological factor such as interest, inelegancy, gift, motivation and cognitive skills.

The factors that come from outside the students or external ones includes; (1) instrumental factor, such as curriculum, program, facility and teacher. There are two factors that give influence into student's learning results such as internal and external factors. They include; (1) physiologies factor and (2) psychological factors. Robb (1972) says that Margaret announce some re arrangement basic movement patterns that have result the change of movement behavior as the result of training. Kiram (1992) says that motoric-learning is a constellation from knowledge about mastery skill or technical in sports.

Base on the literature above, it can be concluding that the result of study is human effort or activity to change their behavior through training process. It means to be able to do some learning process. It also have correlation with another expert statements says that learning process will work by using method to gain wanted result as it necessity. Rooijakkers (1980) says that teaching method should support to the development attitude pattern and cultivate the behavior to develop ability to do some adaptation. In learning activity, especially in practice one, the lecturer give explanation about material of subjects that would be teaches by using every ways. Then the student implemented it. Then it gives the example of movement, the students practice it. Therefore, it needs a

packet of learning of activity that purposed to gain wanted result by using every learning pattern.

### **Discus throw**

Discus throw is one old Greeks of exhibition. Mc Mande (1985) said that discus is a wooden thing shaped like a plate, framed with wooden belt, its diameters 219 – 221 mm, has weight 1½ Kg for men, and has diameters 180 – 182 mm with weight 1Kg for women. The player throws it from a circle with diameters 2, 50 Meters.

The physical health is the purpose of this activity. There are five aspect of physical health that has relation with biometric basic skills such as; it is power, endurance, speed, flexibility and coordination. PASI (1993) said that Sports like long jump needs physical condition such as speed, power to jump, and coordination. Then Jonath (1998) said that for sports like high jump needs power to jump, the feeling for rhythm, reaction, and effective movement. Meanwhile, Jonath (1998) also said that discus throw is one of athletic sports that have specific movement; it means discus throw is interesting subject to conduct a research.

Discus throw is a movement that formed to fling a wooden flat-circle, with metal edge thing in specific weight that done in single hand behind the body. In order to gain far distance as the accomplishment from this activity, someone need to release their fingers from the discus when fling by following rules. Discus is created from wood or solid soil that appropriate with its body, then, there is circle metal in its edge. Syarifuddin (1992) says that discus is dome-shapped with longitudinal section tp the edge or its edge formed full circle with radius less than 6mm. there are two kinds of discus that used. They are; it has 2 kg weight for men class, and 1 kg weight for women class. Discus throws needs ability of movement that known as technique. There are six basic movements in discus throws. They are: (1) the way to hold it, (2) the way to swing it, (3) The way to circle it, throwing attitude, throw's result and (6) reversion of body balance.

### **Learning Pattern**

#### **a) Reciprocal pattern**

Compatible learning pattern is necessary to gain optimal learning result. The good effect from learning theory is give an advice to logical teaching practice, supports and increases the learning process; therefore it would help to gain optimal learning result, especially the result of discus throw subject.

Reciprocal learning pattern is a pattern that discussed about structure and implementation of creation to gain new purposes. Mossoton (2008) said reciprocal learning pattern has purpose to have social correlation between chance and condition to gain feedback. In this pattern, class members need to organize into group. The every members of group has assignment to be a subject and researches. Lecturer have task to give appropriate explanation and information. The duty of subject is similar with training pattern, give information by only uses research. The duty of audience is gives feedback into the subject and has appropriate communication to lecturer.

Hamilton (2005) says that in order to implement reciprocal pattern in teaching process, students should be separated to some groups and need skills to work together.

Reciprocal pattern also explains about the thing that students suppose to do that will

observe accurately. There is interaction that supposes to be due to the change rule from lecturer into students. Each duty the member of class has arranged in order to accomplish this pattern that makes students become subjects and audience.

Reciprocal pattern helps to develop student's individual skill in sort; to work together and give constant feedback due to they have each duty. In this pattern, students become a subject and the member of class become audience. The audience gives constant feedback to the subject by using form that already lecturer made. Trooper (2005) says that lecturer gives feedback to audience that would help to keep good relationship to students. The total of student that makes into group in reciprocal pattern is relative. It distanced by the amount of member in the class. To make it simple, the amount of group member should be only at least three to five students Dougherty (1979) says that it would make the duty to give some feedback change from lecturer to the students. Lecturer has role in this reciprocal pattern such as; answer the question from audience, communicate only with audience and lecturer is able to watch students in the class when the subject is running. In reciprocal (2005) said that there are five factors that helps reciprocal pattern runs well such as (1) audience should communicate by using arranged criteria, (2) make sure the feedback is on the target based on the criteria; (a) in some case, audience has to be critical and should learn by following arranged criteria, (b) lecturer should give positive responsibility to audience and subject, (c) lecturer should give a help to subject and audience to communicate. Base on explanation above, it can be conclude that reciprocal pattern is learning pattern that makes student become active to accomplish discuss throw subject in groups. Meanwhile one students practice the technique, other students should be in group, able to give feedback on it and practice in their turn.

### **b) Command Pattern**

There is the difference between command and reciprocal pattern. Mossoton (2008) says that in command pattern, lecturer has full right to state an assessment, on other hand; every material in the subject should communicated by lecturer. It means the student is restricted and only has to follow lecturer's order. This pattern has characteristics such as; lecturer should do every technical explanation, demonstration, and training and give the example to the student by give it in many times. Lutan (1988) says that the important element in command pattern is lecture gives visual display in every material in period order and give students enough time to practice it for many times.

Psikurich (2001) says that exemplifying and repeating are most important factor to make sure this pattern that student should to practice it in many times (drill) is running well, due to drill is form of action to repeat to gain better result. Training is systematical process that does in repetition which there is increasing number of responsibility in every day. In teaching activity that uses command pattern, lecturer is able to show the technique of discuss throw to entire student in class in once. Mosston (2008) said that to evaluate the result of learning in command pattern it done by using wrong and right criteria. If command pattern that applied in learning technique of discuss throw, the order to teach it such as; first stance to throw, the way to fling the discus, advance movement and final attitude. The way to take first move will help to increase students' skills and

ability to single movement by give duty to train it in many times. in pre- meeting period, the duty of lecturer is to prepare subject material about discus throw technique in right arrangement. The form of subject material that gives is formed as homework that contains discus throw technique from start to the end.

It means after students hear the explanation from the lecturer, they should do warming up, and imagine the explanation that gives, then practice the technique that already explained in many times.

### **Hypothesis**

Based on review of related literature above could be conclude the hypothesis of the research that “there is the difference between reciprocal and command pattern to learning result of discus throw subject”.

### **Methodology**

Based on the explanation above, the operational purpose of this study to enrich information about; **is there any difference between reciprocal and command pattern toward result of practice discus throw subject?** The research takes place in Sport Science Faculty, State University of Padang. It also takes time in the odd semester at January till July 2011. This research uses quasi experiment with test analysis that arranged to acknowledge is there any difference between free and constant variable.

Population that used in this research is entire students who take athletic subject in Sport Science Faculty, State University of Padang. Sampling technique that uses in this research is based on Allen that says in experimental research, the technique to get sample can use Multi stage sampling. First, there are two sections that amount of population takes the subject. There are 58 people in first sections and 62 people in second sections. Based on the total of this sample, it separated into two groups with uses different pattern; reciprocal and command. After the action is given in six times meeting, there is a test for both groups that uses different pattern.

Technique to collect data uses some research instrument that make compatible with necessary needed data. The instrument such as;

1. Learning program that uses as directive to give subject material data about reciprocal and command learning pattern
2. Final examination to collect data about the result of learning in discus throw subject as free variable.

Sudjana (1994) says that techniques of collected data analysis by using result of test in discus throw subject, and willpower instrument by use variant analysis technique (ANOVA) for factorial experiment design. Meanwhile Kadir (2006) says that the significance measure is  $\alpha = 0,05$ . Normality test is using Liliefors, meanwhile homogeneity test use Barlett's test, and for equability test using regression analysis.

### **Research Result**

#### **Data Description**

The object of this study is the difference of learning result of discus throws lesson as the result of reciprocal and command learning pattern toward student will power coaching

department year 2010/201. Based on research plan experiment of quasi, research data is make into; (1) learning result of discuss throw practice lesson by using reciprocal pattern, (2) result of learning discuss throw practice lesson by using command pattern.

**a. learning result of discuss throw practice lesson by using reciprocal pattern**

Based on the result of data analysis about student's learning result discuss throw practice lesson that gained from score that they gain in reciprocal pattern are 28 people. Empirically, it has average 11, 15, 11, 70 as lowest score, 22, 85 as highest score, average 16, 29, standard deviation 5, 26, modus 18, 14, and median 15,68. Trough frequentation distribution table, data is served with 6 total classes and 2 classes' interval such as;

**Table 4.1: Frequentation Distribution Result of Learning in Discuss Throw Lesson by using reciprocal pattern**

No.	Class Interval	Absolute Frequency	Relative Frequency (%)
1	11,15 – 13,14	6	21.43
2	13,15 – 15,14	7	25.00
3	15,15 – 17,14	4	14.29
4	17,15 – 19,14	4	14.29
5	19,15 – 21,14	3	14.71
6	21,15 – 23,14	4	14.29
	Total	28	100,00

Based on calculation above, it can be conclude that 46, 43% or 13 people from total respondents that get the score below on the average, 14, 29% or 4 people respondents get score which is equal with average, and 43,29% or 11 people get score above the average.

**b. Learning result of discuss throw lesson by using command pattern**

Based on the result of data analysis about student's learning result discuss throw practice lesson that gained from score that they gain in command pattern are 28 people. Empirically, it has average 10, 50, 10, 70 as lowest score, 21, 20 as highest score, average 14, 61, standard deviation 2, 59, modus 13, 60, and median 14,13. Trough frequentation distribution table, data is served with 6 total classes and 2 classes' interval such as;

**Table 4.2: Frequentation Distribution Result of Learning in Discuss Throw Lesson by using command pattern**

No.	Class Interval	Absolute Frequency	Relative Frequency (%)
1	10,70 – 12,69	6	21.43
2	12,70 – 14,69	9	32.14
3	14,70 – 16,69	8	28.57
4	16,70 – 18,69	3	10.71
5	18,70 – 20,69	1	3.57
6	20,70 – 22,69	1	3.57
	Total	28	100,00

Based on calculation above, it can be conclude that 21, 43% or 6 people from total respondents that get the score below on the average, 32,14 % or 9 people respondents get

score which is equal with average, and 46,42% or 13 people get score above the average.

The recapitulation of both data description is appear on following table;

**Table 4.3 : Score recapitulation of learning result in discus throw subject**

Statistic Data	Sample (n)	Lowest Score	Highest Score	Average	Standard Deviation	Range	Modus	Median
Reciprocal	28	11,70	22,85	16,29	3,26	11,15	18,10	15,68
Command	28	10,70	21,20	14,61	2,59	10,50	13,60	14,13

### 1. Normality test

This test purposed to investigate the asumption about sample distribution is sourced from population has normal distribution. By using Lilliefors test that applied into every group in significane standard  $\alpha = 0, 05$ . It means, there are eight groups in normality test.

#### a. learning result of discus throw practice lesson by using reciprocal pattern

Test of error regression between learning result and reciprocal pattern in discus throw lesson is resulting  $L_o$  maximum is 0,192, in alpha signification degree ( $L_{table}$ ) is 0, 05 with  $n = 28$  that is resulting the value 0, 1666. Due to maximal  $L_o$  is less than  $L_{table}$ , it can be conclude that error – appraisal in reciprocal pattern have normal distribution.

#### b. Learning result of discus throw lesson by using command pattern

Test of error regression between learning result and command pattern in discus throw lesson is resulting  $L_o$  maximum is 0,099 in alpha signification degree ( $L_{table}$ ) is 0, 06 with  $n = 28$  that is resulting the value 0, 1666. Due to maximal  $L_o$  is less

than  $L_{table}$ , it can be concluded that error – appraisal in command pattern have normal distribution.

## 2. Homogeneity Test

Homogeneity test used Barlet test conducted to the two groups with treatment, namely, the reciprocal learning pattern group and the command learning pattern group. Variants homogeneity test through  $\chi^2$  approach with the criteria of acceptance test of  $H_0$  if  $\chi^2_{hitung} < \chi^2_{tabel}$  meaning that variants are homogen and reject  $H_0$  if  $\chi^2_{hitung} \geq \chi^2_{tabel}$  meaning that the variants are not homogeny. Tested on the trust level of  $\alpha = 0,05$ ;  $dk = k - 1$ . The result of significant data test of variants of each group is presented on table 4.4 below:

**Table 4.4: Result of Variants Homogeneity Test of The Data Groups**

Group	$\chi^2_{calculate}$	$\chi^2_{table}$	Conclusion
Learning Pattern	1,43	72,3	Homogen

## 3. Hypothesis test.

The way to test the hypothesis in this research is done by using variant analysis through testing F and get to difference between two different learning patterns as free variable toward the result of practice in discus throw subject as attached variable.

The test result is appearing on following table;

**Table 4.5: Data of Learning Outcome of Discus Throwing Practice**

Sources of Variants	dk	Number of quadrate	Average of quadrate)	$F_{calculate}$	$F_{table}$		Conclusion
					= 0,05	= 0,01	
Treatment of Learning Pattern	1	39.61	39.61	10.21**	3,96	6,96	Very Significant

### Learning result in discus throw practice subject between using reciprocal and command pattern.

Description in calculation of the differences between reciprocal and command pattern toward student's result of discuss throwing subject controlling basic skills is resulting by using ANVA calculation above,  $F_{hitung} = 10,21 > F_{tabel} (\alpha = 0,05; 27) = 3,96$ . It means  $H_0$  that submitted which is result of learning discuss throw subject toward reciprocal and command pattern is lower than  $H_1$  is rejected. Thus, the hypothesis above that says learning result in discus throw lesson between students' group that applied in reciprocal pattern is higher than student's that applied in command pattern.

To identify the difference in implicating which pattern is having high value is continuing by using Turkey's test. Thus, it resulting  $Q_{hitung} = 6,39 > Q_{tabel} (\alpha = 0,05; 27) = 2,95$ . It means there is significance difference between discus throw learning result that is applied in reciprocal or command pattern. The learning result of student's group that applied in reciprocal pattern is higher than command ones.

It means the first hypothesis is rejected and alternative hypothesis is accepted, due to the significance different between results in both of these patterns.

## Discussions

The result of the test of main hypothesis proves that the learning result in discuss throw practice lessons between both pattern gives significance difference. Through advance testing, it proved that student's result of learning in discus throw practice subject that applied reciprocal pattern is higher than command ones.

The result of first hypothesis proves that, generally, students who study by using reciprocal pattern gain better result rather than command ones. It means, in order to achieve the purpose of reciprocal pattern is more effective rather than command ones.

From the result of calculation it appear that student's average score that applied in reciprocal pattern is 16, 29 and in command pattern is 14, 61. Students learning result that applied in reciprocal pattern is higher than command ones. it means reciprocal pattern is better than command pattern.

It appropriate with Meyer in Muhfida (2010) explains how to apply reciprocal pattern. It is; information, guidelines, and working the module in groups, and read-enclose. Students benefits in reciprocal pattern is having the information about lecturer's assignment, have guidelines when they do the homework even after done it, and they are able to give help to their companion in group about their duty in the class. It means the student is active give suggestion to their group member.

The weakness of command pattern is lecturer find difficulty to help the students who have low ability, and student's creativity is unable to develop well due to the subject material that given is similar with the technique.

## Conclusion and suggestions

### Conclusion

The conclusion of this study that formed as findings of research and the answer of faced problem. The conclusion are:

1. Students' learning result in discus throw practice lessons that applied in reciprocal pattern is higher than command ones, after controlling their basic skills.
2. Student's learning result for those who have high will power is higher than low ones, after controlling their basic skills.

### Suggestions

Based on research result, the lecturer in athletic lecture sholud to:

1. Uses reciprocal pattern in teaching discus throw to gain maximal result.
2. Gives ekstrintic motivation that able to increase students will power, because of willpower have influence toward the result.
3. Able to increase the knowledge abut reciprocal learning pattern through everty sources to applicate this pattern in discuss throw lesson.

## References

- Anarino, Anthony A.(1980) *Curriculum Theory and Design in Physical Education*. St Loius:The CV. Mosby Company.
- Baley, James A.(1986) *Pedoman Atlet, Teknik Peningkatan Ketangkasan dan Stamina*.Semarang: Effhar & Dahara prize, offset.
- Bompa, Tudor O.(1983) *Theory and Methodology of Training The key to Athletic Performance*. Canada: Hunt Publishing Company.

- Bernhard, Gunter.(1986) *Atletik. Prinsip Dasar Latihan Loncat Tinggi, Jauh, Jangkit dan Loncat Galah*. Semarang: Dahara Prize.
- Bloom, Benjamin S. (ed). (1981) *Taxonomy of Educational Obyective. Handbook 1: Cognitive Domain*. New York: Logman Inc.
- Briggs, J Leslie. (ed).(1979) *Intructional Design Principles and A Applications* Englewood Cliffs. New Jersey: Prentice-Hall, Inc.
- Bucher, Charles A.(1979) *Administrtion of Physical Education and, Athletic Program*. St Loius: The Mosby Company.
- Daniel, Kris. Peranan Keterampilan Gerak (<http://silat.blogspot.com/2006/03/30/memupuk-daya-juang-pesilat/trackback>). (Diakses 22 Februari 2010).
- Djamarah, Syaiful Bahri dan Aswan Zain,(2002) *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta.
- Dougherty, Neil dan Diane Bonanno.(1979). *Contemporary Approaches to the Teaching of Physical E cudation*. Minnesota: Burgers Publishing Compan.
- Edwars, Allen L.(1985) *Experimental Design in Physical Research* Fifth Edition. New York: Harper & Row, Inc.
- Gagne, Robert M & Leslie J. Briggs. *Principles of Instructional Design*. (1979). New York: Holt Rinehart and Winston.
- Hamilton,(2010 February 05) *Teaching Style* <http://Academics.Hamilton.edu/government/home/government375sp98/teachers/style.2005>.
- Kadir, (2010) *Statistika Untuk Penelitian Ilmu-Ilmu Sosial*. Jakarta, PT Rosemata Sampurna.
- Kiram, Yanur. *Belajar Motorik*.(1992). Jakarta: Direktorat Jenderal Pendidikan Tinggi Depertemen Pendidikan dan Kebudayaan.
- Krempel, Jonath R., U dan E. Haag. *Atletik I. Training, Tehnik, Taktik*. terjemahan bahasa Seoparmo.(1987) Jakarta: PT. Rosda Jaya Putra.
- McMane, Fred, *Dasar-Dasar Atletik*.(1985).Bandung: Angkasa.
- Mosston, Muska dan Sara Ashworth. (2008) *Teaching Physical Education*, New York. Mcmillan College Publishing Company.
- Muhfida. (2010 Juni 23) *Model Pembelajaran-Free Ebook Download(Bse)SD,SMP,SMA,SMK* <http://sumetris.co.cc>.
- Pedoman Akademik*.(2007/2008). Padang, Universitas Negeri Padang.
- Peraturan Perlombaan & Anggaran Dasar, Anggaran Rumah Tangga*.(1989) Jakarta: PASI.
- Piskuricch, Georgne. M. (2000) *Rapid Instructional Design Learning I.D. Fast and Right*. California, Jossy-Bass/ Pleiffer.
- Romoszowski. A.J (1981) *Designing Instructional System Decision Making in Course Planning and Curriculum Design* New York. Nicholas Publishing Company.
- Rooijackers, Ad (1990) *Mengajar Dengan Sukses, Petunjuk Merencanakan dan Menyampaikan Pengajaran*, Jakarta. PT. Gramedia.

- Shaffat, Idri.(2009) *Optimized Learning Strategy, Pendekatan Teoritis dan Praktis Meraih Keberhasilan Belajar*. Jakarta: Prestasi Pustaka.
- Syarifuddin, Aip. (1992) *Atletik*. Jakarta: Depertemen Pendidikan dan Kebudayaan, Proyek Pembinaan Tenaga Kependidikan.
- Simanjuntak dan I.L Pasaribu (1986) *Diktatik dan Metodik*, Bandung. Tarsito.
- Sudjana.(1994) *Desain dan Analisis Eksperimen*, Bandung: Tarsito.
- Triatmojo, Siswanto. (2010 Mai 01) *Peranan Keterampilan Gerak*  
[http://www.yски.info/index.php?option=com\\_content&view=article&id=144:perananketerampilan-gerak&catid=54:artikel-guru&Itemid=139](http://www.yски.info/index.php?option=com_content&view=article&id=144:perananketerampilan-gerak&catid=54:artikel-guru&Itemid=139).
- Thopper, (2010 Februari 05). *Resoprical Style of Teaching*. <http://Wib.Uvic.Ca/-Thopper/archive352/week8/Teachingstylereviewed/tsld.0.16htm>. 2005.
- Undang-Undang Nomor 20 Tahun 2003 Tentang "Sistem Pendidikan Nasional.
- Winkel, W.S, (1996) *Psikologi Pengajaran*, Jakarta : PT Gramedia.