

**Effectiveness of Using Criteria Sheet on Learning some Track
and Field Events for Students of the Faculty of Physical
Education at Yarmouk University**

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Received: 02/01/2017.

Accepted: 16/04/2017.

Abstract

This experimental study aimed at identifying the effect of using reciprocal style (criteria sheet) on learning events performance of long jump, triple jump, and high jump for the students of track and field course. The study sample consisted of (30) male students of track and field course in the Faculty of Physical education, at Yarmouk University, during the second semester of the academic year 2014-2015. The study sample was selected by the purposeful method, and students were distributed over two equal groups. The first was the control group (taught by the traditional style), and the second was the experimental group (taught by the criteria sheet). Skill tests were conducted to measure the level of the students' performance, in the pre/posttests. The study concluded that, there are statistically significant differences for the effect of the use of criteria sheet, in learning the performance of certain events of, long jump, triple jump, and high jump. The researcher recommends the necessity of the use of criteria sheet, on learning certain performance events of the long jump, triple jump, and high jump.

Keywords: Reciprocal Style, Criteria Sheet, Traditional Style, Long Jump, Triple Jump, and High Jump, Track and Field Events.

المخلص

هدفت الدراسة التعرف الى تأثير استخدام الاسلوب التبادلي (ورقة المعايير)، في تعلم أداء مهارة الوثب الطويل، الوثب الثلاثي والوثب العالي لطلبة مساق العاب قوى، وتكونت عينة الدراسة من (٣٠) طالباً من الذكور المسجلين لمساق العاب القوى في كلية التربية الرياضية في جامعة اليرموك في الفصل الدراسي الثاني للعام الدراسي (٢٠١٤-٢٠١٥م)، وتم اختيار عينة الدراسة بالطريقة العمدية، وتم استخدام المنهج التجريبي اذ قسمت العينة إلى مجموعتين متساويتين العدد الأولى ضابطة تدرس

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بالطريقة التقليدية والثانية تدرس باستخدام الاسلوب التبادلي (الورقة المعيارية) وبلغ عدد العينة في كل مجموعة (١٥) طالب، وتوصلت نتائج الدراسة إلى وجود فروق ذات دلالة إحصائية لتأثير استخدام الاسلوب التبادلي (الورقة المعيارية) في تعلم أداء بعض فعاليات الوثب الطويل، الوثب الثلاثي، والوثب العالي، وتوصلت ايضا الى ضرورة استخدام الاسلوب التبادلي (الورقة المعيارية) في تعلم بعض أداء الفعاليات الوثب الطويل، الوثب الثلاثي والوثب العالي.

الكلمات المفتاحية: الاسلوب التبادلي، الورقة المعيارية، الاسلوب التقليدي، فعالية الوثب الطويل، الوثب الثلاثي، والوثب العالي، فعاليات العاب القوى.

Introduction:

Educational institutions seek to achieve the purpose of the educational process, with a high degree of effectiveness, perfection and attention to the learner. They look for new teaching styles, to help student's positive participation in the educational process. Such renovation and development in the teaching styles, aim at getting the learner approach high efficiencies, and achieving the desired goals (Mohammad, 2006).

Learning is influenced, to a wide extent, by the teaching methods and styles, which the teacher applies. Therefore, the effect of the learning based on experimentation and application, moves easier and quicker than learning made through initiation to the learner. New methods emerged that will help to shift the focus of interest in the learning process, from the teacher and the student matter to the learner, which will help him/her acquire the basic learning skills performance (Al-Labani, 1991).

Mosston (1981) indicated that there is a necessity to employ more than one method to transfer the information to the student, through diversifying and developing the physical education teaching methods, and to address the individual differences with better methods. In this connection, there is no single ideal teaching method for physical education; and the selection of the teaching method primarily depends on the educational situation of every educational environment.

With the development of the educational field, many various methods and styles emerged to deal with the students, which may raise their teaching and perfection levels, physically, psychologically and cognitively. This may be

achieved through applying the basic principles already known for education, for which the advance thinking and planning are its most important features, to define "what and how the teacher teaches" (Oudat, 2006).

The application of the modern teaching methods contributes positively to achieve the teaching outcomes, and increases the success and accomplishment of the students positively. In addition, it contributes to upgrade the physical and skill characteristics of the students; and helps in thinking and experimentation to find new teaching methods that may add to the ways to overcome the difficulties and obstacles facing the physical education teacher (Al-Sayyad, 2005).

In spite of the diversity and multiplicity of the physical education teaching methods, yet teaching physical education through the traditional way still exists. Meanwhile, the modern educational trends are calling for the need to develop and update teaching methods, and for paying attention to the learner, to become an active and positive participator in the learning process. This can be achieved through taking the implementation and evaluation methods, so that every student will depend on himself in taking responsibility; and will be positive and seek to obtain the information. By applying of the standard sheet, every learner can depend on himself in learning and affirming the motor skills. He will be provided the motor duties through a sheet that contains multiple levels teaching steps, graded in difficulty, which the student has to implement to reach the desired objective (Al-Dairy & Al-Hayek, 2011). By contrast, Khazaleh & Harahshah found that the need to use the criterion degrees in the evaluation and interpretation the results of fitness tests for students in schools to encourage students to improve their levels in fitness (Khazaleh & Harahshah , 2016).

Track and field events are among the multiple skills sports, in which athletes compete in running, walking, jumping, throwing and jogging. The track and field competitions may be held in closed doors or outdoors. Men and women separately compete in the championship meetings. This sport is one of the most common sports all over the world. There are about 180 countries members in the International Association of Athletics Federations, which is the authority that manages and organizes the track and field events. The International Federation accredits the records of the world champions of both men and women contests.

- Reciprocal Style: the role of the teacher is to make all subject matter , criteria and logistical decisions and to provide feedback to observer , one learner is doer and the other one is observer (Mosston & Ashworth , 2002).

- The Criteria Sheet: is designed to enable the Observer and the Oeder to interact Reciprocally ,to assure the standers of success or failure and to be agreed upon , and to be used for self-check for future behavior modifications when needed **(Mosston & Ashworth , 2002)** .
- Long Jump: an event that depends on the high ability of the athlete in speed, ascending and long jumping to reach the maximum distance through horizontal jumping.
- Triple Jump: an event depending on three consecutive jumps. The first is hopscotch on one leg, the second with the second leg, and the third is the final jump, in which the player ascends with it so as to land with both feet in the pit.
- High Jump: an event largely depends on the athlete's ability to jump upwards from over a crossbar, provided that he/she shall not cause the fall-down of the crossbar from over the holder. This jump occurs through approaching and ascending with one foot, the one that is far from the crossbar.

The researcher noticed, through his work as a teacher of track and field events courses at Yarmouk Univirsity, the decline of the students' performance, as well as the low level of their physical fitness in performing the basic skills of the different athletics activities and events. In addition, he noticed that the students often request exclusion of participation in physical performance, and they show fatigue and boredom. These conditions motivated the researcher to consider employing some modern styles in teaching physical education to refresh and revive the students; upgrade their physical abilities level, and the skill performance level in the different skills. The researcher ascribes this weakness to the inadequate and insufficient time allocated for teaching, the excessive numbers of the students, and employing traditional teaching methods and styles.

Teaching using the criteria sheet is among the modern methods that take account to the individual differences among the learners, and provide the skills in the form of written motor movements, graded in difficulty; through employing concrete instruments that bring the ideas and facts to the mind of the learner. They further simplify the procedures and activities of the lesson, and aim to enhance the strengths and remedy the weaknesses of the learner **(Halas, 2004)**. Consequently, this study, will hopefully, provide teachers modern simple strategies for teaching athletics which will in turn help students to learn better.

Objectives of Study:

Identifying the effect of using criteria sheet in learning the long jump, triple jump, and high jump events performed by the students of the track and field courses at Yarmouk University.

Hypotheses of Study:

- 1- There are no statistically significant differences at $p \leq 0.05$ level, between the pre and posttests means of the control group, which employed the traditional method in teaching the events of the long jump, triple jump, and high jump.
- 2- There are statistically significant differences at $p \leq 0.05$ level, between the pre/posttests means of the experimental group, which employed the criteria sheet in teaching the events of the long jump, triple jump, and high jump, in favor of the posttest.
- 3- There are statistically significant differences at $p \leq 0.05$ level, between the pre/posttest means of the two groups (control and experimental) in teaching the events of the long jump, triple jump, and high jump, in favor of the experimental group.

Methods:

The researcher applied the experimental method on two equal groups (i.e. control and experimental). The study population consisted of the students of the track and field course in the Faculty of Physical Education, Yarmouk University- Jordan during the academic year 2014/2015 (n=30). The study sample was selected intentionally among the students of the track and field course.

Table (1): Equality of the Study Sample in certain development averages (age, height and weight) and skill variables (n=30)

Variables	Control Group		Experimental Group		T	Sig
	Mean	SD	Mean	SD		
Development Rates:						
Age	19.21(year)	0.21	19.45	0.38	0.238	0.814
Height	179.22(cm)	5.57	178.16	4.23	0.426	0.673
Weight	72.44(kg)	3.82	75.5	4.31	1.36	0.185
Skill Variables :						
Long jump	4.48(m.)	.439	5.00	.178	0.52	0.607
Triple Jump	8.15(m.)	.290	8.26	.369	0.56	0.580
High Jump	1.47(m.)	.070	1.54	.061	0.37	0.714

Table (1) shows no significant differences between control and experimental groups at pretest measures.

Study Instruments

The researcher relied on three main resources for data collection required for this study: document analysis, appliances and tools (rest meter, to take the height for the nearest cm, the medical scale to measure the weight for the nearest kg, a measure tape to measure the distance for the nearest cm, stopwatch to measure the time for the nearest second, some hurdles and balls), and the skill test.

The validity of the study was verified through the content validity, which was submitted to five experts specialized in physical education. The study instrument reliability was further verified for the physical characteristics and skill variables tests through applying the "test/retest" procedures. It was applied on 10 students, (other than the study sample students), of the track and field course (1) at the Faculty of Physical Education, Yarmouk University. Then the students were retested one week later after applying the first test, on the same sample.

Table (2): illustrates the reliability degrees of each of the physical and skill variables element

Skill Variables	Control Group		Experimental Group		R
	Mean	SD	Mean	SD	
Long jump	4.53 m.	.434	5.26	.223	0.87
Triple Jump	8.29 m.	.321	8.50	.398	0.93
High Jump	1.54 m.	.061	1.61	.062	0.92

Table (2): Means, Standards Deviations, and Correlation Coefficient between the First and Second Test Applications for the Skill Variables (n=10).

Table (2) indicates that the reliability degrees of the physical variables ranged between (0.83-0.91), and between (0.87-0.93) for the skill variables. This means that there is a correlation between the first and second applications of the physical and skill tests, indicative of the reliability of the physical and skill tests.

Experiment Application:

Pretest Measures:

The pretest measures of the physical and skill tests were taken between 23/02/2015 and 02/03/2015. The basic experiment was made in conformity with the timetable of the study unit duly applied at the Faculty of Physical Education, Yarmouk University, Jordan. It was carried out during the second semester of the academic year 2014/2015 over 8 weeks, at the rate of two units weekly for the same skill during the period between 9/3/2015 until 4/5/2015. The control group (n=15) was taught the units using the traditional style, meanwhile the experimental group (n=15) was taught a study unit using the criteria sheet. The introductory and final parts were applied according to the prescribed curricula of the two groups. The posttest measurements of both the physical and skill tests were taken, which were prepared by the researcher during the period from 11/5/2015 until 18/5/2015.

Results and Discussion:

First: Results of the hypothesis one (H1) providing: "There are no statistically significant differences at $p \leq 0.05$ level, between the pre/posttests means of the control group, which employed the traditional style in teaching the skills of the long jump, triple jump, and high jump." The researcher obtained the means and standard deviations, as well as the calculation of the significance of the differences between pretest/posttest of the control group.

Table (3) Illustrates this.

Table (3): Difference Significant between the Pretest/Posttest in the Skill Variables of the Control Group (N= 15).

Tests	Pre – Test		Post - Test		T	Sig
	M	SD	M	SD		
Long Jump	4.48 m.	.439	4.53	.,437	-2,415	0.000
Triple Jump	8.15	.290	8.29	.,321	-3.540	0.003
High Jump	1.47 m.	.070	1.50	.,052	-3.674	0.000

T Tabulated Value= 2.05 at $\alpha \leq 0.05$ level.

Table (3) shows statistically significant differences at the $p \leq 0.05$ level, between the pretests and posttests in the skill variables of the control group, who used the traditional teaching style. The researcher ascribes this result to that the traditional style satisfies the students' needs.

This was further supported by Oudat (2010); Lin (2005) and Al-Shah hat (2002), who all emphasized that the traditional style does not lead to high results, or to a noticeable improvement with the students. Accordingly, the researcher suggests that it is necessary to diversify the use of the methods and styles that most fit the trends and needs of the students.

Results of hypothesis two (H2) providing: "There are statistically significant differences at $p \leq 0.05$ level, between the pre/posttests means of the experimental group, which employed the criteria sheet in teaching the events performance of the long jump, triple jump, and high jump, in favor of the posttest." The researcher obtained the means and standard deviations, as well as the calculation

of the significance of the differences between pretest/posttest of the experimental group. Table (4) Illustrates this.

Table (4): significant Differences between the Pretest/Posttest in the Skill Variables of the Experimental Group (N= 15)

Tests	Pretest		Posttest		T	Sig
	M	SD	M	SD		
Long Jump	5.00 m.	.176	5.26	0,223	-7.316	0.000
Triple Jump	8.26 m.	..369	8.50	.,398	-8.779	0.000
High Jump	1.54 m.	.061	1,61	.,062	10,693	0.000

Table (4) shows statistically significant differences at the $p \leq 0.05$ level, between the pretests and posttests in the skill variables of the experimental group, who used the criteria sheet teaching style. The researcher ascribes this result to that the use of a new teaching style achieved better results.

The results of this study are in line with those of Hussein (2006) and Schilling & Mary (2000), which assured the necessity to use new and diversified teaching styles, as this has a good effect on the students' performance and the improvement of their level. The researcher is further in agreement with Izzeddin (2005) who maintained that this result is due to the use of the criteria sheet; which takes account to the individual differences among the learners. In addition, the student, in this new style, is who chooses the starting level, as per his/her abilities and readiness. He/she further evaluates his/her performance and remedies his/her errors personally, which will lead to better results in the learning process.

Third: Results of hypotheses three (H3) providing: "There are statistically significant differences at $p \leq 0.05$ level, between the pre/posttest means of the two groups (control and experimental) in teaching the events of the long jump, triple jump, and high jump, in favor of the experimental group." The researcher obtained the means and standard deviations, as well as the calculation of the

significance of the differences between pretest/posttest of the second experimental group. Table (5) Illustrates this.

**Table (5):
Differences between the Pretest/Posttest in the Skill Variables of the Two
Experimental and Control Groups (N= 15)**

Tests	Post – test Control group		Post – test Experimental group		T	Sig
	M	S	M	SD		
Long Jump	4.53. m.	.43	5.26	.223	-5.809	0.000
Triple Jump	8.29 m.	.321	8.50	.398	-1.565	0.129
High Jump	1.50 m.	.051	1.61	.062	-5.265	0.000

Table (5) shows statistically significant differences at the ($p \leq 0.05$) level, between the pretests and posttests in the skill variables of both the control and experimental groups. The researcher ascribes this result to that the use of criteria sheet method had a positive, vivid effect in improving the skill performance level, through availing the opportunity for positive and active participation, as well as the continuous feedback, because the performance of the correct styles are viewed for the longest possible period.

This agrees with the study of each of Hussein, 2006; Osthuizen & Griesel, 1992 who indicated that the use of the criteria sheet is much better than the use of the traditional style. The researcher imputes this result to that the traditional style does not produce high results, nor does it produce noticeable improvement with the students; and that the use of the activity sheet had a clear, positive effect in the improvement of the skill performance level. Accordingly, it is inevitable to employ the teaching methods and styles that best fit their abilities.

The results of this study are also in line with those of Al-Sayyad, 2005; Badawi & Hammoudeh, 2003; Beshnizen & Puthen, 2000 providing that employing new teaching styles has its clear effectiveness on the students more than that of the traditional style. This is because the latter ignores the students'

needs, which require plans and guidelines to overcome the difficulties and problems they encounter. Moreover, this study is in agreement with the study of Hussein, 2006; Fatunmbi, 2005 providing that the use of the different and various teaching styles works on modifying the teaching situation, and creates an atmosphere of change on the usual both of the traditional method.

Conclusions:

In the light of the data and the information the researcher obtained; the study sample and its characteristics; the objectives and goals of the study that were applied; the statistical processing, and the discussion and explanation of the results, we can conclude the following:

The use of the teaching styles, through employing the criteria sheet, had better effects, than that of the traditional style, in learning the events of the long jump, triple jump, and high jump, with the students of the Faculty of Physical Education, at Yarmouk University.

Recommendations:

Based on the results of the study, the researcher recommends the following:

- 1- The necessity of using the teaching style through applying the criteria sheet, for teaching the long jump, triple jump and high jump events.
- 2- Call for the teachers to employ the methods and styles that best fit the students, and diversification in providing the audio and visual stimuli.
- 3- Carrying out other studies similar to this study, so as to include more variables.

References:

- (1) Al-Dairy, A. & Al-Hayek, S. (2011). *Teaching Strategies of the Physical Education based on the life skills in the age of the cognitive economy and its practical applications*, Helal Center, Irbid, Jordan.
- (2) Al-Labani, S. (1991). *Effect of the use of problem-solving method on achieving the educational objectives of certain tennis skills*, Unpublished Doctoral Dissertation, Alexandria University, Egypt.
- (3) Al-Sayyad, H. (2005). *The effect of the two styles of harmony and construction and additional assignments on certain physical and skill variables in the physical education lesson*, Unpublished Master Thesis, Helwan University, Egypt.
- (4) Al-Shahhat, M. (2002). *Effect of the use of certain teaching methods on learning certain basic skills and the Hokey Sport, for the students of the Physical Education College, Al-Mansourah University, the Scientific Journal, 16(2)*.
- (5) Badawi, A. & Hammoudeh, N. (2003). *The effect of the use of the harmony, construction and demo in the learning of certain gymnastic skills, on the skill performance of the female pupils of the preparatory stage*, Helwan University, Egypt.
- (6) Beshnizen, M. & Van, P. (2000). *The use of video-tape broadcast and interactive teaching. British Journal of EduTech. 21(2), 40-44*.
- (7) Fatunmbi, O. (2005). *Effect of video tape presentation on senior secondary school students attitudes towards physical education. Journal of Teacher Education, 8(1), 56-64*.
- (8) Halas, S. (2004). *Analysis of the trends to the curricula*, Ed¹, Islamic University, Gaza.
- (9) Hussein, M. (2006). *Effectiveness of certain methods used to modify the teaching situation for the sake of the learner's characteristics*, Unpublished Doctoral Dissertation, Helwan University, Egypt.
- (10) Izzeddin, A. (2005). *Teaching in Physical Education (Methods, Styles and Strategies)*, Shajarat Al-Dorr Library, Egypt.

- (11) Khazaleh , W. & Harahsheh , E . (2016).*The transition from the standard levels to criterion reference on the effect of physical exercise self-directed to improve some elements of physical fitness and health to the female students in Basic Stages of Bani Obid Schools Irbid* .published research at An-Najah University,Journal for Research-B,Volume 30,Issue 8, 2016.
- (12) Lin, C. (2005). *The comparison of the teaching effects among Moston teaching spectrum apply to junior high school basketball camp*. National Taiwan College of Physical Education.
- (13) Mohammad, T. (2006). *Effect of the use of the multiform motor assignments style on learning certain aggressive skills in Handball, for the students of the Physical Education College (Comparative Study)*, Unpublished MA Thesis, Al-Mansourah University, Egypt.
- (14) Mosston M . & Ashworth S . (2002). *Teaching Physical Education* , Fifth edition .
- (15) Mosston, M. (1981). *Teaching physical education*, 2nd Ed. Columbus, London: Charles E. Merrill
- (16) Osthuizen, N. &Griesel, J. (1992). The effect of the command, reciprocal and inclusion teaching styles on realization of objective in physical education for high school boys. *Journal for Research in Sport Physical Education and Recreation*, 15(2): 27-32.
- (17) Oudat, M. (2006). Effectiveness of the physical education teachers' use of the remedial teaching style, for the motor learning disabilities students in the physical education lesson, Unpublished Doctoral Dissertation, Helwan University, Egypt.
- (18) Oudat, M. (2010). Effectiveness of the use of collaborative and reciprocal learning styles on the skill performance of certain skills of the Ping Pong (Table Tennis) sport for the higher basic stage students, *Journal of the Physical Education Science and Arts*, Assiut University, Egypt.
- (19) Publishing Co.
- (20) Schilling, L & Mary, L. (2000). The Effect of Three Style of Teaching on the University Students Sport Performance, <http://cricir.Sys.edu/plues>.

Figure (1) showed (B) Triple Jump

Name: _____ Date: _____ Reciprocal Style Strategy
Section: _____ Day: _____ Criteria Sheet (Card)
Event: Long Jump

Name of the doer:

Name of the Observer:

To the doer:

Practice the hop and jump 10 times; receive feedback from your observer after each hop and jump.

4. Observe the performance, use the criteria (below) to analyze the performance, and offer feedback to the doer.
5. Offer feedback after each hop and jump. Practice 10 hops and jumps.
6. At the completion of the task, switch roles.
Sample verbal behavior for the observer: First, acknowledge what was done well, and then offer corrective feedback about the errors.
4. Your jump from the board to the pit, well done.
5. Although you can jump with one foot, and bending your legs with landing.
6. Your arms swinging back with landing, move your body forward and land.

Task Description;

- Wearing sport clothes.
- Preparing jump pit.
- Taking off rings before starting your job.
- Doing all tasks without leaving any of them.

Tasks (warm up):

Technical

Stages:

- Running for two minutes. - Approaching steps.
- Running forward, and lifting legs 90° for thirty seconds. - Take off.
- Hoping on left foot 10 times. - Flight phase.
- Hoping on right foot 10 times. - Landing.
- Jumping on both feet 10 times.

Drills:

- Exploring take off leg.
- Take off on right foot 10 times.
- Take off on left foot 10 times.
- Jumping on both legs from standing position.
- Jumping forward 10 times.
- Jump into the pit from standing position.
- Jumping into the pit through approaching steps.
- Repeating all of drills 3 times.

- Developed by Muska Mosston and Sara Ashworth, 2002, and adapted by the researcher.

Figure (1) showed (C) High Jump

Name of the doer:

Name of the Observer:

To the doer:

Practice the hop and jump 10 times; receive feedback from your observer after each hop and jump.

7. Observe the performance, use the criteria (below) to analyze the performance, and offer feedback to the doer.
8. Offer feedback after each hop and jump. Practice 10 hops and jumps.
9. At the completion of the task, switch roles.

Sample verbal behavior for the observer: First, acknowledge what was done well, and then offer corrective feedback about the errors.

7. Your jump from the board to the pit, well done.
8. Although you can jump with one foot, and bending your legs with landing.
9. Your arms swinging back with landing, move your body forward and land.

Task Description;

Tasks (warm up):

- | | |
|--|---|
| - Wearing sport clothes. | - Running for two minutes. |
| - Preparing jump pit. | - Running forward, and lifting legs 90 ⁰ |
| - Taking off rings before starting your job. For thirty seconds. | |
| - Doing all tasks without leaving any of them. | |
| - Hoping on left foot 10 times. | |
| - Hoping on right foot 10 times. | |
| - Jumping on both feet 10 times. | |

Technical Stages:

- Approaching steps: from 7-9 steps (thru curves).
- Take off (rotate your back to the mattress while flying).
- Flight phase (passing the bar) .
- Landing.

Drills:

- Exploring take off leg.
- Hoping on right foot 10 times.
- Hoping on left foot 10 times.
- Vertical jump each foot 10 times.
- Jumping on both legs from standing position.
- Jumping over the bar 10 times, and land on the mattress.
- Jumping on the mattress, from standing position.
- Jumping over the bar, through approaching steps.
- Repeating all of drills 5 times.
- Developed by Muska Mosston and Sara Ashworth, 2002, and adapted by the researcher.