

Effect of Mastery Cooperative Studying and Individual Inquiry on Attaining the Technical Aspects of the Stages of Shot Put and Digital Achievement Using the Linear Procedure Among Vietnam University Students

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ABSTRACT

Physiological indicators say a lot about the preparedness and performance of students. This study investigates the influence of mastery cooperative studying generalship and individual inquiry in using the linear procedure among female students of An Giang University, the study sample consisted of (57) female students enrolled in track and field course (1) at the Department of physical education at An Giang University during the first quarter. The sample was divided into three equal groups. The first group (n=19) taught using the mastery cooperative studying generalship, the second group (n=19) taught using the individual inquiry generalship, while the third group (n=19) was taught using the traditional procedure. Results showed that there were statistical differences in favor of the mastery cooperative studying generalship and individual inquiry generalship over the traditional way.

KEY WORDS: MASTERY STUDYING; INDIVIDUAL INQUIRY; SHOT PUT; LINEAR WAY.

ARTICLE INFORMATION

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Received 11th Oct 2019

Accepted after revision 15th Dec 2019

Print ISSN: 0974-6455 Online ISSN: 2321-4007

CODEN: BBRCBA

A Society of Science and Nature Publication, Bhopal India
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Online Contents Available at: <http://www.bbrc.in/>

DOI: 10.21786/bbrc/12.4/11

INTRODUCTION

The mastery cooperative studying and what accompanying of sequentially procedural steps and organized prepare the students for individual work and the division of students into heterogeneous groups to work together using dialogue and discussion and exchange of information and classification and interpretation and analysis, and evaluate and make comparisons and draw conclusions and generate ideas and guidance from the teacher; important in highlighting the role of student and refine her personality and the ability to cooperate and communicate with others and acceptance and access for students to the point of perfection in the acquisition of skills and motor abilities (Walid Hammouri et al, 2016). Strategies and teaching procedures have evolved as a result of the inevitable evolution of contemporary democratic societies based on modern educational psychology and educational research that took on the increase, because of the awareness of teachers and their need to change the traditional teaching procedures in education process (Mosston & Ashworth, 1986).

And the creation of modern teaching strategies to help students achieve their objectives through the creation of procedures of teaching alternative consistent with the scientific development and technological progress, which has made the world a small village; which worked to increase the acceleration of knowledge transmission rapidly surpassing distances and overcome as soon as possible and with less effort than the global openness easy and follow-up all new and sophisticated (Walid Hammouri et al, 2016). Many studies agree that cooperative studying has many benefits that distinguish it from the rest of the strategies through the development of the capacity of students to creative thinking and thinking skills over knowledge and capabilities of different thinking and take advantage of learners' attitudes towards themselves and others and curriculum, teacher and educational institution, Carol suggested a model for mastery of studying which is based on three concepts.

1. The ability to understand (Understanding),

it means learner's ability to absorb and understand the nature of the educational mission and understand it, and try to decode and analyze their symbols and try to integrate them in the proceeds of knowledge in order to mastery.

2. The concept of educational mission (studying task) associated with the success of the learner in the amount of time it takes to learn that task, or how much they actually takes the learner to learn and interact with the task.

3. The quality of teaching (instructional Qualities), this concept confirms to follow a variety procedures of teaching providing content to suit the majority of students, from these procedures that have extreme importance in Carol model for mastery studying is cooperative studying procedure. The mastery studying from the teaching strategies, which must be arranged and sequenced on the pyramid, to be taught segmented into clear phases of studying in an educational skill or more than , then testing students after they finished, if they do not reach to the Mastering, they must provide additional time to perform Mastering in testing, and control of the main phases of skill before moving on to the other skills (Mosston & Ashworth, 1986).

As for the generalship of directed individual inquiry, it is a way to search and investigate individually that means every individual looking for the answer to a specific question and research and investigation to find the best ways and the shortest to explore the situation or a problem concern to all students, then determined this situation and the problem and the questions that will discuss for an answer to it, then everybody is integrated in the activity that is being sought during the discussion of the results that have been reached between the students them self, and the teacher on the other hand. The research results examines the effectiveness of maturing collaborative studying and personal studying strategies in achieving the technical aspects of digital shooting and achievement stages by linear procedure among students of An Giang University, the survey is a more modern teaching generalship that is effective in developing scientific thinking in students, because it creates opportunities for students to practice teaching

procedures and practice surveys. about their own skills, so students will think and search for their teaching results, the survey generalship depends on establishing the processes applied on the basis of facing student problems, to give him the opportunity to create independent thoughts and demand the implementation of design procedures To consider achieving solutions and implementation, students collect data and sort it, then reach conclusions under the supervision of teachers.

MATERIAL AND METHODS

This study investigates the influence of mastery cooperative studying generalship and individual inquiry in using the linear procedure among students of An Giang University, the study sample

consisted of (57) under female students who were physical education at An Giang University. (M age = 19.6 sd =1.33) (Chanh Thuc Dao, 2018). All the subjects were enrolled in track and field course (1), they were divided deliberate into three groups, the first group (n=19) taught by mastery cooperative studying generalship, the second group (n=19) have been using their individual oriented inquiry in teaching, while the third group (n=19) taught by the traditional way in teaching, Permission to conduct this study was received from the study sample and head dean of faculty of physical education at An Giang University. The students were told the purpose of the study and their rights as participants and they were asked to sign a consent form. The evaluation test of technical phases of the shot put skill was designed by the author after consulting

Table 1. The average and standard deviation for the applied skills of shot-putting and its pre and post distances for the three groups

| Skill parts | Group | Pre measurement | | Post measurement | |
|------------------------------|-----------------------|-----------------|-----------|------------------|-----------|
| | | Average | Deviation | Average | Deviation |
| Preparation | Traditional | 2.24 | 0.44 | 2.87 | 0.23 |
| | Perfected cooperative | 2.13 | 0.66 | 8.13 | 0.72 |
| | Oriented survey | 2.43 | 0.48 | 8.51 | 0.79 |
| Crawling | Traditional | 2.21 | 0.34 | 2.76 | 0.30 |
| | Perfected cooperative | 2.19 | 0.42 | 7.81 | 0.11 |
| | Oriented survey | 2.56 | 0.74 | 8.03 | 0.79 |
| Power situation | Traditional | 2.37 | 0.22 | 2.83 | 0.42 |
| | Perfected cooperative | 1.99 | 0.56 | 7.73 | 0.78 |
| | Oriented survey | 2.66 | 0.60 | 8.02 | 0.67 |
| Basic accelerating situation | Traditional | 2.52 | 0.42 | 291 | 0.42 |
| | Perfected cooperative | 2.42 | 0.51 | 796 | 0.28 |
| | Oriented survey | 2.46 | 0.58 | 829 | 1.03 |
| Hand motion situation | Traditional | 2.31 | 0.81 | 297 | 0.29 |
| | Perfected cooperative | 2.46 | 0.53 | 833 | 0.09 |
| | Oriented survey | 2.81 | 0.67 | 929 | 1.07 |
| Covering | Traditional | 2.31 | 0.39 | 306 | 0.27 |
| | Perfected cooperative | 2.56 | 0.38 | 807 | 1.08 |
| | Oriented survey | 2.72 | 0.32 | 844 | 0.75 |
| Distance of Shot- put | Traditional | 5.53 | 0.59 | 606 | 1.01 |
| | Perfected cooperative | 5.19 | 0.42 | 713 | 0.21 |
| | Oriented survey | 5.52 | 0.46 | 840 | 0.34 |

Table 2. The average, standard deviation and the calculated (t) result between the pre and post measurements for the perfected cooperative generalship group

| Skill Parts | Measurements | Average | Standard deviation | t _{result} | P |
|------------------------------|--------------|---------|--------------------|---------------------|--------|
| Preparation | Pre | 2.32 | 0.67 | 24.79 | *0.000 |
| | Post | 8.11 | 0.71 | | |
| Crawling | Pre | 2.12 | 0.44 | 24.13 | *0.000 |
| | Post | 7.68 | 0.91 | | |
| Power situation | Pre | 1.83 | 0.62 | 18.54 | *0.000 |
| | Post | 7.39 | 0.95 | | |
| Basic accelerating situation | Pre | 2.05 | 0.56 | 25.06 | *0.000 |
| | Post | 7.85 | 0.87 | | |
| Hand motion situation | Pre | 2.26 | 0.56 | 27.87 | *0.000 |
| | Post | 8.31 | 1.02 | | |
| Covering | Pre | 2.72 | 0.21 | 18.76 | *0.000 |
| | Post | 8.02 | 1.18 | | |
| Distance of Shot- put | Pre | 5.61 | 0.38 | 18.03 | *0.000 |
| | Post | 7.09 | 0.29 | | |

Table 3. The average, standard deviation and the calculated (t) result between the pre and post measurements for the traditional group

| Skill Parts | Measurements | Average | Standard deviation | t _{result} | P |
|------------------------------|--------------|---------|--------------------|---------------------|--------|
| Preparation | Pre | 2.22 | 0.57 | 14.19 | *0.000 |
| | Post | 2.91 | 0.61 | | |
| Crawling | Pre | 2.32 | 0.44 | 11.13 | *0.000 |
| | Post | 2.68 | 0.31 | | |
| Power situation | Pre | 2.21 | 0.62 | 9.54 | *0.000 |
| | Post | 2.32 | 0.55 | | |
| Basic accelerating situation | Pre | 2.25 | 0.52 | 15.06 | *0.000 |
| | Post | 2.88 | 0.37 | | |
| Hand motion situation | Pre | 2.23 | 0.46 | 17.37 | *0.000 |
| | Post | 2.31 | 0.22 | | |
| Covering | Pre | 2.72 | 0.21 | 14.56 | *0.000 |
| | Post | 2.02 | 0.18 | | |
| Distance of Shot- put | Pre | 2.60 | 0.28 | 11.03 | *0.000 |
| | Post | 2.09 | 0.21 | | |

scientific references of track and field federation and international coaches, the author designed an educational program based on the mastery cooperative studying generalship and another one based on individual- oriented in order to improve the performance of the shot put skill for the study sample, pre-test was measured to the three study samples for the variables of this study .the variables included the stages of the shot put and digital achievement after a warm-up ,the author recording the best of three tries, according to international law to the shot put using the legal tools approved by the International Association of track and field.. After applied the two months educational program which contained (10) units, twice units a week each unit was (90) minutes of training, the post-test were taken, The statistical processing included arithmetic mean, standard deviation, Analysis of variance, REGW comparisons Posterior.

RESULTS

Table (.2) shows the average and the standard deviation and the calculated (t) result between the pre and post measurements for the perfected cooperative studying students. (t) result shows the difference for the static significant in the applied skills of shot-put and its distance, in which all the calculated (t) result were higher than 2.878 (TM 2.878) for the level 0.01, where these differences in favor to the post measurement. Table (3) shows the result average and standard deviation of the calculated (t) result between the pre and post measurements for the traditional studying group, the calculated (t) result shows the difference for the static significant in the applied skills of shot-put as well as its distance, in which all the results were higher than 2.878 (T M 2.878) for the level 0.01, where these differences in favor to the pre measurement. (Chanh Thuc Dao, 2018). Table (4) shows the average and the standard deviation and the calculated (t) result between the pre and post measurements for the individual oriented survey group, the calculated (t) result shows the difference for the static significant in the applied skills of shot-put as well as its distance were higher than 2.878 (TM 2.878) for the level 0.01, where these differences in favor of the post measurement. (Chanh Thuc Dao, 2018).

Table (5) shows the results for analyzing the contrast unilateral for the stages of shot-put skill and the throwing distance in the pre measurement as well as the calculated (F) result which shows the difference for the static significant for the level 0.01 in the applied skills of shot-put and its distance, in which all the calculated results of (F) results were higher than 3.78 (FM 3.78). Table (6) shows the results for the REGW test for choosing the contrast source in the applied skills of shot-put and its distance. The results found that the difference between the traditional group and the perfected cooperative group and between the traditional group and singles oriented survey group, while there wasn't any difference with a static significant between the perfected cooperative group and the singles-oriented survey group in the applied skills or the distance of shot-put.

DISCUSSION

The results of this study was a positive influence in using the perfected cooperated studying generalship on the study variables in acquiring the technical stages for effective performance of shot-put in a linear way. There was a static significant in improving those variables. Attribute the author that the positive influence to the effectiveness of teaching generalship perfected cooperative studying and characterized by positive interaction and investment times of lectures fully effective and take into account individual differences among students on the one hand and the teacher on the other hand, and that can work on the access of all students to a high degree of workmanship skills for all technical stages of performance and enable students of the ability to The ability to make decisions for themselves after providing them with the necessary and required information after explaining the technical stages of the event, presentation to parts of effectiveness during the lesson, which led to increased digital achievement to the performance of the students and it is due to mastering the technical stages and their characteristics by taking into account individual differences among students and competition among them and help each other and perseverance in order to increase the degree workmanship and distinguish them from each

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other and their interaction outstanding with this procedure and the diversity of teaching procedures in achieving the objectives and so that the procedure of the effective role and influential in the educational process in the curriculum to be implemented and that the teaching procedures affect studying and the degree of saturation speed in studying and adaptation with the way depends on the proper understanding of, and the desired state of studying, and research and investigation. This will be the role of the student to take responsibility by harnessing all the educational possibilities, educational techniques and modern teaching procedures and indirect procedures of assessment, and these results are consistent with the findings of both studies (Rayyan, 2005). Researchers find that the traditional way had an influence on the acquisition of the technical stages in the shotput and digital achievement in the dimensional measurements, but the results of the REGW test showed that the differences were in favor of the perfected cooperative group over the traditional group This result is in agreement with the studies of (Mohammad,2000).

Woods (2002) points out that those play an important role in triggering students' creativity as they represent the field of experts who are to judge the creative output. They introduce a shift in pedagogy, moving towards an inclusive approach, where the environment is permissive and safe and learners are in control of their learning process. Teachers should allow co-construction of knowledge, being reflective practitioners, supporters and facilitators and not bureaucrats, nor technicians applying governmental policies without questioning them or inhibitors by being overly didactic or prescriptive. (Ferrari et al., 2009) argue that students should not be considered merely receivers of information, on the contrary, it is important that they assume the role of discoverers, but support and guidance are needed in order for them to succeed. This can be enhanced when students are exposed to e-learning where electronic devices are used enabling them to control their learning. For this, teachers need to be prepared both on the pedagogical side, being aware of the means and ways to foster autonomy and student-centeredness and on

Table 4. The average, standard deviation and) calculated (t) result between the pre and post measurements individual oriented survey group

| Skill Parts | Measurements | Average | Standard deviation | t _{result} | P |
|------------------------------|--------------|---------|--------------------|---------------------|--------|
| Preparation | Pre | 2.65 | 0.49 | 36.09 | *0.000 |
| | Post | 7.67 | 0.85 | | |
| Crawling | Pre | 2.21 | 0.69 | 27.23 | *0.000 |
| | Post | 6.98 | 0.54 | | |
| Power situation | Pre | 2.57 | 0.43 | 34.12 | *0.000 |
| | Post | 7.89 | 0.65 | | |
| Basic accelerating situation | Pre | 2.31 | 0.39 | 25.91 | *0.000 |
| | Post | 8.19 | 0.99 | | |
| Hand motion situation | Pre | 2.65 | 0.51 | 19.06 | *0.000 |
| | Post | 8.76 | 0.95 | | |
| Covering | Pre | 2.72 | 0.59 | 28.45 | *0.000 |
| | Post | 8.12 | 1.04 | | |
| Distance of Shot- put | Pre | 5.45 | 0.42 | 12.23 | *0.000 |
| | Post | 7.01 | 0.60 | | |

the subject-knowledge. According to the REGW test results for choosing the contrast source in the applied skills of shot-put and its distance. We found that the difference were between the traditional group in one hand and the perfected cooperative group and singles oriented survey group in the other hand. Otherwise there wasn't any difference with a static significant between the two groups; perfected cooperative and the singles-oriented survey, in the applied skills or the distance of shot- put, these results are consistent with a study (Haidan& Ali 2010).

The result found a positive and special influence of the oriented survey stratify on the study variables in acquiring the technical stages for

the effective performance of shot-put in a hasty manner. It provided positive interaction and it was a good investment of lectures time, taking in consideration individual differences between students through discussion and dialogue which held between the students and the teacher the thing that helps them solve the preformance problems, Hassan (1989) noted that through discussion and dialogue which held between the students and the teacher, they investigated the most appropriate way for the completion and criticism of colleagues and sensitivity to detect problems and solve them in a scientific logical way, leading them to be creative in discovering the procedures and technical ways to check the level of advanced studying, guiding them to

Table 5. Results for analyzing the contrast unilateral for the stages of shot-put skill and the throwing distance in the post measurement for the three groups

| Skill Parts | Contrast Source | Sum of freedom | Degrees of freedom | Average squares | F result | P |
|------------------------------|-----------------|----------------|--------------------|-----------------|----------|--------|
| Preparation | Between groups | 272.12 | 2 | 132.12 | 289.12 | *0.000 |
| | In groups Total | 19.01 | 291.13 | 55 | 57 | 0.42 |
| Crawling | Between groups | 223.49 | 2 | 118.72 | 178.39 | *0.000 |
| | In groups Total | 23.09 | 246.58 | 55 | 57 | 0.34 |
| Power situation | Between groups | 251.71 | 2 | 119.56 | 182.13 | *0.000 |
| | In groups Total | 24.36 | 276.07 | 55 | 57 | 0.67 |
| Basic accelerating situation | Between groups | 276.34 | 2 | 132.23 | 201.09 | *0.000 |
| | In groups Total | 29.72 | 306.06 | 55 | 57 | 0.56 |
| Hand motion situation | Between groups | 253.23 | 2 | 123.56 | 178.65 | *0.000 |
| | In groups Total | 26.32 | 279.55 | 55 | 57 | 0.65 |
| Covering | Between groups | 243.45 | 2 | 125.56 | 181.09 | *0.000 |
| | In groups Total | 27.12 | 270.57 | 55 | 57 | 0.71 |
| Distance of Shot- put | Between groups | 14.27 | 2 | 9.08 | 45.56 | *0.000 |
| | In groups Total | 24.65 | 38.92 | 55 | 57 | 0.15 |

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acquire scientific thinking and analytical and critical skills of the positions and the various educational missions, they had assigned to the various students who work with each other and debating among themselves, so each individual felt responsibility towards her group in order to develop the right direction towards the study and the development of skills and the ability to generate ideas to get to the good performance and constructive and valuable information to achieve their goals, the cooperative studying generalship is one of the strategies that needs to be art of leadership to reach the goals, and it is one of the influential strategies in the

educational experiences, which calls for attention in the teaching-studying process, and the thrill and attention and motivation to learn, and that the students who are working in accordance with cooperative groups can understand and accommodate educational materials, better than students who are working individually and these results are consistent with studies and (Mohammad et al, 2016). And the other studies in the field of science survey showed the effectiveness of the generalship, such as (Al-Zghool & Al-Mahameed, 2007). The current study and the results that have been reached, it is concluded the following:

Table 6. Shows the results for the REGW test for choosing the contrast source in the applied skills of shot-put and its distance. Through

| Skill parts | Students | Average | Deviation | Perfected cooperative | Oriented survey |
|------------------------------|-----------------------|---------|-----------|-----------------------|-----------------|
| Preparation | Traditional | 2.97 | 0.31 | -5.31 | -5.69 -0.39 |
| | Perfected cooperative | 8.12 | 0.67 | | |
| | Oriented survey | 8.58 | 0.88 | | |
| Crawling | Traditional | 2.19 | 0.26 | -4.91 | -5.09 -0.12 |
| | Perfected cooperative | 7.68 | 1.02 | | |
| | Oriented survey | 7.92 | 0.87 | | |
| Power situation | Traditional | 2.78 | 0.39 | -4.81 | -5.09 -0.27 |
| | Perfected cooperative | 7.17 | 0.97 | | |
| | Oriented survey | 8.01 | 0.78 | | |
| Basic accelerating situation | Traditional | 2.84 | 0.34 | -5.03 | -5.29 -0.30 |
| | Perfected cooperative | 7.94 | 0.88 | | |
| | Oriented survey | 8.29 | 1.01 | | |
| Hand motion situation | Traditional | 2.97 | 0.21 | -5.36 | -5.67 -0.29 |
| | Perfected cooperative | 8.33 | 1.04 | | |
| | Oriented survey | 8.68 | 1.01 | | |
| Covering | Traditional | 2.98 | 0.19 | -5.09 | -5.33 -0.34 |
| | Perfected cooperative | 8.02 | 1.21 | | |
| | Oriented survey | 6.02 | 0.56 | | |
| Distance of Shot- put | Traditional | 7.19 | 0.29 | -1.06 | -1.32 -0.27 |
| | Perfected cooperative | 6.09 | 0.31 | | |
| | Oriented survey | 7.46 | 0.59 | | |

+ The process of using the perfected cooperative studying generalship accelerate studying and the acquisition of motor skills and improve the level of technical performance of the stages of shot- put . The using individual survey directed generalship accelerates the studying process and improve the level of technical performance and achievement of the effectiveness of the distance achieved with the shotput.

+ The using perfected cooperative studying generalship helps achieve distance in the shot-put games for the study sample. Saves a lot of time and effort and the ability to acquire practical skills among the sample of the study; Raises the students thinking and accepting teamwork among students of cooperation and help each other and overcome them in all educational studying situations in groups.

+ The using individual survey orientated generalship raises the students thinking and acceptance of individual work between students by researching and investigating to find the best solution to solve the problems and to answer questions posed to students by the teacher.

Conflict of Interest: Author declares no conflicts of interests to disclose.

Ethical Clearance Statement: The Current Research Work Was Ethically Approved by the Institutional Review Board (IRB) of Vietnam National University Ho Chi Minh City, Vietnam.

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