

Bridging the Gap between Academic and Sports Performance of Student-Athletes using Self-Learning Kit

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Abstract

Aim: This study was conducted to evaluate the effectiveness of "SELF LEARNING KIT", an innovative material designed based on the content of student's module and learning competencies to help the students come up with the lessons they missed while in training and in sports competition. Alonzo (1999) defined that the self-learning kit refers to the instructional materials developed by researchers which pertains to self-independent learning package modules which a students would work at his own pace prepared for the purpose of training defined instructional objectives.

Methodology: This study used the descriptive-comparative method of research. This method attempts to accurately describe the remarkable difference in the pre-test and post-test of student-athlete respondents on self-learning kit in mathematics. Eight students from Gat Andres Bonifacio High School participated in the study. Purposive sampling or subjective sampling was utilized in the selection of participants. Interview guide with questions set beforehand was developed by the teacher. This interview guide was shown to the Division Supervisors and head teachers who were experts in teaching subject content for validation purposes.

Results: Result of the study showed that majority of the participants found out that the "SELF LEARNING KIT" is effective in bridging the gap between academic and sports performance of students-athletes in Mathematics.

Conclusion: The utilization of self-learning kit will give a big help to student-athletes to learn while they were away from the classroom or in sports practice and competition

Keywords: *Innovative module, Self-learning Kit, Level of performance, Student-athlete, Academic Performance, Sports Performance*

INTRODUCTION

Sports become so engrain in today's society. Newspapers, televisions, internet, mobile phones, events such as leagues have contributed to its explosive popularity. It is not surprising, therefore that sports have become a major attraction for the public including the students.

Sports enthusiasts were claiming that participation in any sports help the student-athletes to have a "sound mind and a body" individual. However, some people in the academe believed that sports participation hindered students' ability to excel in their academic's performance because most of their times were allotted into sports commitment such as trainings and competitions, (Ignacio, 2017). Thus, low academic performance of the student-athletes especially in Mathematics has been the clamor of the teachers. As Athletes excel in the playing fields, they too would exert effort to balance their academic subjects. Given that the DepEd also aims for holistic formation for the athletes, academics are also taken into consideration. Athletes who acquire two failing marks in more than two core subjects during the second grading period will be disqualified to join the competition, (Lozada 2012). DepEd order No.25. s. 2015 on the

Implementing Guidelines on the Special Program in Sports (SPS) was even conceived to address the needs of talented students in different sports disciplines and to identify and create a pool of athletes who will be trained to compete in National and International Sports competition. This program would even require student-athletes to maintain proficient 85-89 percent level of assessment at the specialized subjects and an approaching proficiency 80-84 percent level in all other subjects.

Thus, Students in Gat Andres Bonifacio High School do excel in sports competition from the city meet, division and the regional level. As of this year, their athletes joined in various sports like volleyball, futsal, swimming, arnis, taekwondo, football, and athletics, they garnered gold awards in the division level and even in the regional level. However, in terms of academic performance, the researcher found it as challenging. As the Division Screening Committee of Division of Taguig City and Pateros, the researcher identified the gap between sports performance with their academic performance. Thus, to bridge this gap, the researcher would propose to create a module based self-learning kit that would be study by the student-athlete for the lessons that he/she missed

due to training and even during the sports competition. In this module based self-learning kit, students will be able to process their own learning without the aid of the teacher, thus it will motivate them to develop their own study habits in their pursuit of having good academic performance.

Roles of Self-Learning Kit

A module – self learning kit is defined as a set of learning opportunities systematically organized around a well-defined topic which contains the elements of instruction-specific objectives, teaching activities and evaluation using criterion-reference measures (Cruces, 2018). In this study, this refers to teacher-made modules in Mathematics 9 intended for student-athletes within Taguig City. The Self-Learning Kit are designed based on effective teaching practices that conforms the ideas of Brophy (2016), Good and Brophy (2017) and Hawley (2017) which are: a) optimizing academic learning time, b) rewarding achievement in appropriate ways, c) utilizing interactive teaching practices, d) holding and communicating high expectations for student performance, and e) selecting the appropriate unit of instruction. Thus, this was a great help for student-athletes to cope up with their missed lessons at the same time they learn at their most convenient time.

The use of teacher-made modules for classroom instruction is significant in the light of maintaining the students’ motivation despite their poor ability and lack of time in learning while in sports competition (Carroll, 2019). The modularized learning could allow the students to evaluate their own progress and utilize their spare time to read the lesson as many times as his ability to master requires. The actual use of the teacher-made modules in classroom instruction has been much desired by educators (Cruces, 2018). It could be an answer to the need of student-athletes to balance their academic and sports performance

Intervention/ Innovation/ and or Strategy

This self-learning kit material was design based on the contents of the student’s module and the learning competencies to help the students come up with the lessons they missed while in training and in sports competition. As defined by Alonzo (1999), Self-learning kit refers to the instructional materials developed by the researcher. It pertains to self-contained-independent learning package modules in which the student would work at his own pace and prepared to the purpose of attaining defined instructional objectives. Wesley and Wronski (1995) pointed out the importance of using the best and the most appropriate instructional materials in providing quality education. The design and development of self-learning kits through textbooks and other references materials are still considered the best instrument for enhancing positive transfer of learning.

Thus, the development of self-learning kit is considered as innovation because it caters to address the gap between the sports achievement and the academic performance of the students’ athletes. Due to the series of training and the schedule of competition in sports, student-athletes missed their lessons in the classroom. Thus, with the aid of self-learning kit, even without the presence of the teacher, the student-athlete can be able to study and understand their missed lessons at their most convenient time.

Objective

The study investigated how to bridge the gap between academic and sport performance of student-athletes using Self-learning kit in Mathematics.

As such, this study determine the Pre-test and Post-test mean scores of student-athletes in Mathematics and the remarkable difference in the pre-test and post-test mean percentage scores of student-athletes who utilized the self- learning kit.

Hypothesis

The pre-test has no remarkable difference to post-test mean percentage scores of student-athletes who utilized the self-learning kit.

METHODS

Research Design

This study used the descriptive-comparative method of research. This method attempts to accurately describe the remarkable difference in the pre-test and post-test of student-athlete respondents on self-learning kit in mathematics. Moreover, it is defined as a purposive process of gathering, analyzing, classifying, and tabulating data for making adequate and accurate interpretation about data with the aid of statistical method.

The respondents of the study were composed of 8 grade nine student-athletes that will participate in the study *purposive-sampling*. They are all active in the sports of athletics, football, and swimming and in which all are male.

GRADE AND SECTION	STUDENT-ATHLETES	
	F	%
GRADE 9 – JADE	3	37.5
GRADE 9 – EMERALD	3	37.5
GRADE 9 – PEARL	2	25
OVERALL	8	100

Table 1. Frequency and Percentage Distribution of Respondents

This student-athlete will be given the pre-test and post-test for the researcher to identify their knowledge, skills, and weaknesses regarding the

lessons that they missed due to sports training and competitions.

The researcher also collaborated with the grade nine subject teachers to identify missed lessons of the student-athletes. Parents were also informed about the conduct of the module based self-learning kit to their children.

Procedure

The method of collecting data used was based on adapted and modified questionnaire checklist. This will show if there is a remarkable difference in the pre-test and post-test mean percentage scores of student-athletes who utilized the self-learning kit in Mathematics. Furthermore, to bridge the gap between academic performance and sport performance.

1. Self-Learning Kit

This material was designed based on the contents of the student's module and the learning competencies to help the students come up with the lessons they missed while in training and in sports competition. This material was explored with the aid of the internet that provides sources of information and pictures that simplifies the presentation of the lesson.

2. Pre-Test/Post Test

The method of collecting data used in this research is through the conduct of the pre-test and the post test. There are twenty item teacher made tests designed to measure the weaknesses, knowledge, and skills of the respondents. Moreover, the validated test was finalized and administered to a group of respondents who are active in sports.

After the pre-test and post-test is being collected, the researchers proceeded to the tabulation of data and statistical analysis. The obtained data underwent statistical treatment and interpretation with the aid of necessary tools to address the problems of this study and to test if the hypothesis is being achieved or not.

Through this procedure the researchers were able to generate the necessary outcomes and present the findings where some suggestions or recommendations can be patterned.

Ethical Consideration

Before the conduct of the study, the researcher submitted a written request to the principal's office through the department head of mathematics of Gat Andres Bonifacio High School to ask a permission to conduct the study assuring there will be no risks involved in the execution of the study.

A letter of parent consent was also given to the students to get their parents' consent to authorize the researcher to include their children in this research.

Treatment of Data

All data gathered were arranged, tabulated, presented, and analyzed using Mean Percentage Scores to determine the level or degree of knowledge that the respondents have about the lesson as presented in the self-learning kit and Standard Deviation to determine the variation of the scores in the pre-test and of the post test. The higher the standard deviation the higher the variation of scores and the lower the standard deviation the lower the variation of scores which means that the respondents have almost closer scores got in the pre-test and the post test.

RESULTS and DISCUSSION

Gathered from the main context of this study, the specific problems to be handled were the following with results.

Pre-test and Post-test mean scores of student-athletes in Mathematics.

GROUP	N	MEAN	MPS	SD	PERFORMANCE LEVEL
A Pre-test	8	2.53	32.58	3.21	Low Mastery
B Post-test	8	3.98	54.3	4.76	Average Mastery

Table 2. Computed Mean Scores of Student-Athletes with regards to Pre-test and Post-test in Mathematics

Legend: 96-100 Mastered, 86-95 Closely Approximating Mastery; 66-85 Moving Towards Mastery; 35-65 Average Mastery; 15-34 Low Mastery; 5-14 Very Low Mastery; 0-4 Absolutely No Mastery

It can be inferred from the table that the Pre-test with performance level of Low Mastery had a positive result to the post-test of student-athletes who utilized the self-learning kit in mathematics with performance level of Average Mastery. The standard deviation was observed on the pre-test and post-test which is closer to the mean.

The results showed that the utilization of self-learning kit in mathematics was effective and gives help to those student-athletes who wants to learn and acquire knowledge while on training.

GROUP	N	MEAN	MPS	SD	DIFFERENCE	VERBAL INTERPRETATION
A Pre-test	8	2.53	32.58	3.21	21.72	Very Marked Improvement
B Post-test	8	3.98	54.3	4.76		

Table 2. Computed Mean Percentage Scores of Student-Athletes with regards to Pre-test and Post-Test in Mathematics

Legend: 16-above Very Marked Improvement, 11-15 Marked Improvement; 6-10 Moderately Marked Improvement, 1-5 Slight Improvement, 0 No Improvement

Pre-test obtained 2.53 while Post-test attained 3.98 and a Mean Percentage Score difference of 21.72 with a verbal interpretation of "Very Marked Improvement".

The results implied the use of self-learning in mathematics gives a big help to this student-athletes who utilized the materials to learn and acquire knowledge while on training.

Conclusion

Based on the findings of the study, the results showed that the Pre-test with performance level of Low Mastery had a positive result to the post-test of student-athletes who utilized the self-learning kit in mathematics with performance level of Average Mastery. The standard deviation was observed on the pre-test and post-test which is closer to the mean.

This only means that utilizing the self-learning kit in mathematics for student-athletes gives an opportunity for them to learn their missed topics while they were in training or in sports competition.

Findings also concluded that there was a remarkable positive difference in the pre-test and post-test mean percentage scores of student-athletes who utilized the self-learning kit in Mathematics with the difference of 21.72, Very Marked Improvement. This only showed that the utilization of self-learning kit will give a big help to student-athletes to learn while they were away from the classroom or in sports practice and competition.

For recommendation, the self-learning kit in Mathematics can be further examined to include other

grade levels to determine whether is a significant difference on students' performance of student-athletes exists or not. The researcher also recommends other grade 9 Mathematics teachers to use self-learning kit to bridge the gap of academic and sports performance of student-athletes. Also, an extension of the research be done to include more study groups to investigate whether the self-learning kit in Mathematics would lead to a significant improvement in student-athletes mathematical performance for the entire school.

For the regular class, the subject teachers or even the classroom advisers can apply the instructional materials, self-learning kit in Mathematics for those student-athletes who missed their lesson while in training or competition and for the family of the students, they can use the self-learning kit to address the missed lessons of their children at school and be able to guide their children at home.

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"In everything, I give thanks "
Thessalonians 5:18

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