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Derrick Alvarez
Valparaiso University

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How Increased Motivation Levels Can Lead to Increased Levels of Muscular Strength and Cardiovascular Endurance

D.P. Alvarez¹, B.A. Tyree², and D.H. Gillispie³

¹Physical Education and Secondary Education Student; ²Department of Physical Education; ³Department of Education; all at Valparaiso University, Valparaiso, IN 46383

Abstract

Through differentiation of physical education curriculum, teachers are able to increase levels of student autonomy, therefore increasing their motivation to choose to participate in regular physical activity. A peer-reviewed questionnaire was administered to the class in order to obtain a baseline reading of the students’ motivation levels before a strength and conditioning unit involving Fartlek Training began. After both the educator and the students completed the differentiated curriculum and physical activities, the questionnaire was administered again. By comparing the results of the post-instruction motivational questionnaire and the recorded progress of each student in their individual fitness logs, the effectiveness of the differentiated curriculum was assessed.

Methodology

The instructional program this project was based on took place in a mandatory physical education class in a high-school setting. The sample population consisted of 27 African-American, unmotivated students (18 boys and 9 girls). All but five of them were enrolled in Freshman Academy; the remaining students were enrolled in regular classes, but were enrolled in PE again after failing the class their first time through. This high school is located in a highly developed town in Northwest Indiana. The demographics of this school are illustrated in the following diagram:

Data

Data for this project was collected at a local high school where I served as a student teacher during the Spring semester of 2013, from January 7 to May 1. Figure 1 shows the pre-instruction results to selected questions from NASPE’s Participation Motivation Questionnaire (PMQ) that measure the motivation levels of the test-taker. Figure 2 compares the results of students’ pre-instruction 12-minute run times with NASPE’s criterion standards for their age group (13-15 years old). Figure 3 shows students’ pre-instruction average strength levels by male and female and male and female test strength results compared to NASPE’s criterion standards for the same 13-15 year old age group.

Results

The instructional program began with a discussion involving Fartlek Training. After both the educator and the students reviewed the NASPE’s Participation Motivation Questionnaire (PMQ) and the recorded progress of each student in their individual fitness logs, the effectiveness of the differentiated curriculum was assessed.

Discussion

The comparison of the pre-instruction PMQ results with the post-instruction PMQ results displayed a significant increase in the effectiveness of instruction on all students to increase their motivation levels.

Conclusions

Through differentiation of physical education curriculum, teachers are able to increase levels of student autonomy, therefore increasing their motivation to choose to participate in regular physical activity. A peer-reviewed questionnaire was administered to the class in order to obtain a baseline reading of the students’ motivation levels before a strength and conditioning unit involving Fartlek Training began. After both the educator and the students completed the differentiated curriculum and physical activities, the questionnaire was administered again. By comparing the results of the post-instruction motivational questionnaire and the recorded progress of each student in their individual fitness logs, the effectiveness of the differentiated curriculum was assessed.

Analysis

- Overall score data indicated a nearly 100% increase in students’ motivational levels after the differentiated curriculum was put into place by the educator. - Both males and females greatly increased the proximity of their average scores to NASPE’s 13-15 year-old standards for both cardiovascular endurance and muscular strength after the installation of the Fartlek Training program. - Each PMQ question showed a sharp, positive increase in value during the post-instruction distribution of NASPE’s PMQ. These increases ranged in value from 1.3 (Question 5) all the way up to 2.0 (Question 11).

Implications

- This research project had a significant impact on the field of education because it clearly illustrated how increased student autonomy lead to increased motivation levels, and as a result increased student performance levels.
- Based on the post-instructional results of both the PMQ and fitness tests, I believe I possess a respectable level of teaching efficacy and thoroughly understand the principles and knowledge within my content area.

References


Contact Information

Derrick Alvarez
T: 724-766-5551
E: Derrick.alvarez@valpo.edu

Dr. Tyree
E: Barbara.Tyree@valpo.edu

Dr. Gillispie
E: De.Gillispie@valpo.edu

Valparaiso University
Department of Education, Meier Hall
Valparaiso, Indiana 46383