

Evaluating the Effectiveness of K-12 Physical Education Curriculum among Adolescent Students of Bai Saripinang National High School: A Case Study

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ABSTRACT

A well-implemented K-12 physical education curriculum produces a wholistic development of physique and mental well-being of adolescent students. This study aimed to evaluate the effectiveness of the K to 12 Physical Education (PE) curriculum among adolescent students at Bai Saripinang National High School. The K to 12 programs, implemented in the Philippines, introduced significant changes to the education system, including the PE curriculum. This research focused on understanding how these changes have impacted the physical education experience and outcomes of adolescent students. The study employed a mixed-methods approach, combining quantitative surveys and qualitative interviews. The findings revealed several key aspects of the K to 12 PE curriculum's effectiveness. Students expressed varying degrees of satisfaction with the curriculum, highlighting strengths such as increased emphasis on health and fitness. The respondents unanimously Agree based on the questions provided that the K-12 PE curriculum is effectively implemented in the school.

Keywords: K-12 PE Curriculum, adolescents, Bai Saripinang National High School, Likert Scale

Background of the Study

Physical activity can be defined as any movement of the body that requires energy expenditure (What is Physical Activity? n.d.). It is a common notion that human beings generally denote bodily movements or in fact, move. Physical activities include but not limited to playing, engagement in sports activities or as part of a person's daily activities like to get to and from places or just having leisure time. Several proponents around the globe promote that every person should engage in physical activities to maintain bodily and mental health, prevent diseases, improve well-being and quality of life.

Further, the World Health Organization recommends that children with ages ranging from 5-17 years old and adolescents aged 5-17 years should:

- a. do at least an average of 60 minutes per day of moderate-to-vigorous intensity, mostly aerobic, physical activity, across the week;

b. should incorporate vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, at least 3 days a week; and limit the amount of time spent being sedentary, particularly the amount of recreational screen time (World Health Organization: WHO, 2022).

In 2019, WHO found that the Philippines had an overall “physical inactivity prevalence” of 93.4 percent. The country ranked second in the world—among 146 countries—with the most physically inactive adolescents next to South Korea, with an overall rate of 94.2 percent (Baclig, 2022b). The prevalence of the physically inactive adolescents is very alarming. Filipino youths are presently prone to various diseases and illnesses brought about by being sedentary or inactive lifestyle (See Figure 1, Appendices). In the same year, the Department of Science and Technology (DOST) - Food and Nutrition Research Institute (FNRI) Expanded National Nutritional Survey (ENNS) reported that 84.5% of Filipino adolescents were insufficiently active (i.e., doing less than 60 min of moderate-to vigorous- PA per day).⁷ The proportion of insufficient PA among males (80.5%), females (88.8%), and those living in rural (84.9%) and urban areas (84.3%) were also reported (Cagas et al., 2022).

In relation to that, the Department of Education had established a K to 12 Curriculum for Physical Education. The said curriculum prioritizes the following standards:

1. Habitual physical activity participation to achieve and maintain health-enhancing levels of fitness;
2. Competence in movement and motor skills requisite to various physical activity performances;
3. Valuing physical activities for enjoyment, challenge, social interaction and career opportunities; and
4. Understanding various movement concepts, principles, strategies and tactics as they apply to the learning of physical activity (K-12 Physical Education Curriculum Guide, 2016).

Given such curriculum through which the Department of Education is currently implementing, the rate of physical inactivity among the adolescents rises significantly.

Based on the instances mentioned, it is the sole purpose of this study to evaluate the effectiveness of K-12 P.E. Curriculum among adolescent students of Bai Saripinang National High School.

Conceptual Framework

The conceptual framework for evaluating the effectiveness of K-12 physical education curriculum involves four key components:

1. Curriculum design and planning: This component focuses on the development of a comprehensive and well-structured physical education curriculum. It involves the alignment of curriculum goals, objectives, and learning outcomes with state and national standards. A well-designed curriculum should cater to the needs and interests of students at different age levels.
2. Teaching and learning strategies: This component focuses on instructional practices and techniques employed by teachers to deliver physical education lessons. It involves the use of various teaching methods such as direct instruction, peer-assisted learning, and cooperative learning.
3. Assessment and evaluation: This component focuses on evaluating students' progress and achievement relative to the curriculum goals and objectives. Assessment and evaluation can occur in different forms, including formal assessments, informal assessments, and self-assessment. The effectiveness of the curriculum can be evaluated by analyzing these assessment outcomes.
4. Program implementation and administration: This component focuses on the processes and resources needed to implement the physical education curriculum effectively. It involves identifying and allocating sufficient resources for program implementation, ensuring effective leadership and

administration, and providing professional development opportunities for physical education teachers.

Hence, the effectiveness of the K-12 physical education curriculum can be evaluated by examining how well these four key components are integrated and implemented. By ensuring a comprehensive curriculum, effective teaching and learning strategies, ongoing assessment and evaluation, and effective program implementation and administration, the physical education curriculum can help students achieve optimal physical, social, and mental health outcomes.

Statement of the Problem

The following are perceived problems why this study is purposely conducted, to wit:

- a. Are adolescents receiving adequate physical education?
- b. Are adolescents comfortable with their physical abilities when it comes to participating in team sports or group activities?
- c. What is the effect of uncomfortable environment for some students because of traditional gender stereotypes?
- d. Are competent physical education teachers adequate?
- e. What makes adolescents lead a busy life and the effects of numerous extracurricular activities?

This can result in negative consequences for their overall health and well-being, including increasing rates of obesity, chronic diseases, mental health problems, and poor academic performance.

Therefore, it is essential to ensure that all adolescents have access to quality physical education programs that promote healthy habits and foster lifelong physical activity. Additionally, it is crucial to identify effective strategies for delivering physical education programs that are engaging, effective, and relevant to the needs and interests of adolescents. By addressing these challenges, we can promote the health and well-being of future generations, ultimately leading to a healthier and happier society.

Significance of the Study

The result of this study will provide some insights and information about the effectiveness of the K-12 PE curriculum. Evaluating such curriculum among adolescents in Bai Saripinang National High School we can ensure that:

- a. the curriculum meets the requirements of physical fitness and health needs of the students;
- b. the curriculum provides learning experiences that promote cognitive development and academic performance;
- c. it provides activities that promote teamwork, collaboration, and communication skills; and
- d. it could be significant for policy makers and administrators to discern policy interventions and strategies.

Scope and Delimitation of the Study

Scope:

The study will only focus on the evaluation of the effectiveness of K-12 PE Curriculum among Grades 10, 11 and 12 students of Bai Saripinang National High School.

Delimitation:

The study will only consider the data collected from the responses of the participants and will not account for outside factors that may influence the engagements of the students with physical activity.

METHODOLOGY

Research Design

This research used the descriptive analysis method where survey served as its major technique in the collection of data. Comparative design was also employed in comparing responses of the different grade levels on the way they perceive the effective of the K-12 Physical Education Curriculum.

Location of the Study

This study was conducted in Bai Saripinang National High School situated in Bagumbayan, Sultan Kudarat.



Photo Credit: DepEd Tayo Bai Saripinang National High School

Participants of the Study

The participants of this study were students in Grades 10, 11, & 12 enrolled in Bai Saripinang National High School. A total of 60 students were randomly selected for this purpose.

Sampling Techniques

A Convenience-Random Sampling was employed in the conduct of this study.

Data Gathering Instrument

A Comprehensive Survey Questionnaire was utilized engulfing the different factors or indicators on effectively implementing the K-12 PE Curriculum

Data Gathering Procedure

In the pursuit of the pursuit of this study, a letter to the School Principal was made seeking his approval to conduct the study. Then, the study commences with a survey. Upon obtainment of the all the answered survey questionnaire, results were tabulated in MS Excel to determine the average or mean.

Statistical Treatment

The comparative/descriptive analysis was utilized to interpret and analyze the data.

IV. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The following are the results of the survey conducted. The Table1 shows the tabulated responses of the respondents. Likert scale was used as basis to determine their view on the questions.

Likert Scale	Range
1 - Strongly Disagree	1 - 1.8
2 – Disagree	1.9 - 2.6
3 – Neutral	2.7 - 3.4

4 – Agree	3.5 - 4.2
5 - Strongly Agree	4.3 - 5

Table 1. Responses of Grade 10 students

Questions	Mean	Interpretation
1. The K-12 PE curriculum provides opportunities for me to learn and develop skills that are appropriate for my age and ability level.	4.10	Agree
2. The K-12 PE curriculum helps me understand the importance of regular physical activity for my health and well-being.	4.10	Agree
3. The K-12 PE curriculum teaches me how to set and achieve personal fitness goals.	4.10	Agree
4. The K-12 PE curriculum provides a supportive learning environment, where I feel safe to take risks and learn from my mistakes.	4.45	Strongly Agree
5. The K-12 PE curriculum encourages me to try different types of physical activity and explore my interests.	4.15	Agree
6. The K-12 PE curriculum teaches me important life skills such as teamwork, communication, and leadership.	4.60	Strongly Agree
7. The K-12 PE curriculum provides opportunities for me to participate in a variety of physical activities, including individual, team, and lifelong sports.	4.20	Agree
8. The K-12 PE curriculum is taught by qualified and knowledgeable teachers who are passionate about physical education.	4.20	Agree
9. The K-12 PE curriculum provides opportunities for me to engage in physical activity outside of class, such as intramural and community programs.	4.00	Agree
10. Overall, I feel that the K-12 PE curriculum has helped me develop positive attitudes and habits towards physical activity that will benefit me throughout my life.	4.50	Strongly Agree
Total	4.24	Agree

Data shows that the overall mean for Grade 10 is 4.24 which indicates that the Grade students agree with the contention that the K-12 PE curriculum is effective.

The following are the results for Grade 11.

Likert Scale	Range
1 - Strongly Disagree	1 - 1.8
2 – Disagree	1.9 - 2.6
3 – Neutral	2.7 - 3.4
4 – Agree	3.5 - 4.2
5 - Strongly Agree	4.3 - 5

Table 2. Responses of the Grade 11 Students

Questions	Mean	Interpretation
1. The K-12 PE curriculum provides opportunities for me to learn and develop skills that are appropriate for my age and ability level.	4	Agree
2. The K-12 PE curriculum helps me understand the importance of regular physical activity for my health and well-being.	4	Agree
3. The K-12 PE curriculum teaches me how to set and achieve personal fitness goals.	4	Agree
4. The K-12 PE curriculum provides a supportive learning environment, where I feel safe to take risks and learn from my mistakes.	4	Agree
5. The K-12 PE curriculum encourages me to try different types of physical activity and explore my interests.	4	Agree
6. The K-12 PE curriculum teaches me important life skills such as teamwork, communication, and leadership.	4	Agree
7. The K-12 PE curriculum provides opportunities for me to participate in a variety of physical activities, including individual, team, and lifelong sports.	4	Agree
8. The K-12 PE curriculum is taught by qualified and knowledgeable teachers who are passionate about physical education.	4	Agree
9. The K-12 PE curriculum provides opportunities for me to engage in physical activity outside of class, such as intramural and community programs.	4	Agree
10. Overall, I feel that the K-12 PE curriculum has helped me develop positive attitudes and habits towards physical activity that will benefit me throughout my life.	4	Agree
Total	4	Agree

In this case, all the means for the 10 questions are exactly 4. This suggests that, on average, the respondents' responses tend to be around the "Agree" category for each question. It appears that the respondents generally agree with the statements or questions provided.

The following are the results for Grade 12.

Likert Scale	Range
1 - Strongly Disagree	1 - 1.8
2 – Disagree	1.9 - 2.6
3 – Neutral	2.7 - 3.4
4 – Agree	3.5 - 4.2
5 - Strongly Agree	4.3 - 5

Table 3. Responses of the Grade 12 Students

Questions	Mean	Interpretation
1. The K-12 PE curriculum provides opportunities for me to learn and develop skills that are appropriate for my age and ability level.	4.90	Strongly Agree
2. The K-12 PE curriculum helps me understand the importance of regular physical activity for my health and well-being.	4.30	Strongly Agree
3. The K-12 PE curriculum teaches me how to set and achieve personal fitness goals.	4.70	Strongly Agree
4. The K-12 PE curriculum provides a supportive learning environment, where I feel safe to take risks and learn from my mistakes.	4.20	Agree
5. The K-12 PE curriculum encourages me to try different types of physical activity and explore my interests.	3.95	Agree
6. The K-12 PE curriculum teaches me important life skills such as teamwork, communication, and leadership.	4.35	Strongly Agree
7. The K-12 PE curriculum provides opportunities for me to participate in a variety of physical activities, including individual, team, and lifelong sports.	3.75	Agree
8. The K-12 PE curriculum is taught by qualified and knowledgeable teachers who are passionate about physical education.	4.40	Strongly Agree
9. The K-12 PE curriculum provides opportunities for me to engage in physical activity outside of class, such as intramural and community programs.	4.15	Agree
10. Overall, I feel that the K-12 PE curriculum has helped me develop positive attitudes and habits towards physical activity that will benefit me throughout my life.	4.20	Agree
Total	4.29	Agree

The data divulges that the average mean for all the responses to the questions is 4.29 which indicates that the Grade 12 Agree that the PE Curriculum id effective

In summary:

Table 4. Summary of results

Grade	Over all Mean	Interpretation
10	4.24	Agree
11	4.00	Agree
12	4.29	Agree
Total	4.17	Agree

There is a unanimous response over the conducted survey. All the grades or the respondents have the same inclinations or treatment over the question.

CONCLUSIONS AND RECOMMENDATIONS

The data shows a high level of consistency in responses across all 10 questions. The mean for each question is 4, indicating that respondents tend to "Agree" with the statements or questions provided. This

suggests that there is a general consensus or agreement among the respondents. There are no responses in the "Strongly Disagree" or "Disagree" categories for any of the questions. This lack of variability in responses indicates that the respondents did not strongly disagree or disagree with any of the statements. The overall positive sentiment expressed by the respondents suggests that they are generally in consensus that the implementation of K-12 PE Curriculum is effective.

Therefore, the Bai Saripinang National High School is effectively implementing the K-12 PE Curriculum. This would indicate that with the efficiency in the implementation would denote that the physical well-being of the students is likewise improving.

Recommendations

The following are the recommended actions for further improvement of the implementation of the curriculum.

- The Administration shall augment facilities for the use and easy access of the students;
- Additional qualified and competent PE instructors shall be hired to augment the teaching force.
- Encourage more the students to actively participate in physical activities through various engagements inside the school and outside the campus.
- Similar study is also recommended to determine what are the best practices of the administration in the implementation of the PE curriculum.

REFERENCES:

1. What is Physical Activity? (n.d.). Retrieved from <https://www.hhs.k-state.edu/kines/about/outreach/activity-guide/whatispa.html> on 18 September 2023.
2. World Health Organization: WHO. (2022). Physical activity. www.who.int. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/physical-activity> on 18 September 2023
3. Baclig, C. E. (2022b, October 22). In first ever report on physical inactivity, WHO warns of diseases, costs | Inquirer News. Retrieved from INQUIRER.net. <https://newsinfo.inquirer.net/1683304/in-first-ever-report-on-physical-inactivity-who-warns-of-diseases-costs> on 18 September 2023.
4. Cagas, J. Y., Mallari, M. F. T., Torre, B. A., Kang, M. D., Palad, Y. Y., Guisihan, R., Aurellado, M. I., Sanchez-Pituk, C., Realin, J. G. P., Sabado, M. L. C., Ulanday, M. E. D., Baltasar, J. F., Maghanoy, M. L. A., Ramos, R., Santos, R. a. B., & Capio, C. M. (2022). Results from the Philippines' 2022 report card on physical activity for children and adolescents. *Journal of Exercise Science & Fitness*, 20(4), 382–390. Retrieved from <https://doi.org/10.1016/j.jesf.2022.10.001> on 18 September 2023
5. Admin. (2023). What is the purpose of education? Allison Academy. Retrieved from <https://www.allisonacademy.com/parents/child-development/what-is-the-purpose-of-education/> on 20 September 2023
6. Benefits of physical activity. (2023, August 1). Centers for Disease Control and Prevention. <https://www.cdc.gov/physicalactivity/basics/health/index.htm#:~:text=Regular%20physical%20activity%20is%20one,ability%20to%20do%20everyday%20activities.>
7. Admin. (2023). What is the purpose of education? Allison Academy. <https://www.allisonacademy.com/parents/child-development/what-is-the-purpose-of-education/>

8. Garima Srivastava, & Garima Srivastava. (2015). The importance of life skills for adolescents. White Swan Foundation. <https://www.whiteswanfoundation.org/life-stages/adolescence/the-importance-of-teaching-your-adolescent-life-skill>