GAS Journal of Education and Literature (GASJEL)

Volume 2, Issue 7, 2025 Journal Homepage: https://gaspublishers.com/gasjel-home/ ISSN: 3048-6777
Email: gaspublishers@gmail.com

Adequacy of Physical and Health Education Curriculum in Meeting the Learning Needs of Special Needs Students in Lagos State, Nigeria

Adande A.D[1]; Taiwo A.B[2]; Setonji N.A[1]; Azanor, F.O[4]; Onifade O.T[1] & Alade F.Y.

[1]Department of Human Kinetics, Sports and Health Education, Sports Management Unit, Lagos State University Ojo
[2]Department of Human Kinetics, Sports and Health Education, Exercise Physiology Unit, Lagos State University Ojo
[4]Department of Educational Foundations and Counselling Psychology, Special Education Unit, Lagos State University Ojo, Oyo State Ministry of Education, Science and Technology, Ibadan, Oyo State

Received: *25.08.2025* | ***Accepted:*** *22.09.2025* | ***Published:*** *26.09.2025*

***Corresponding Author:** *Adande A.D*

DOI: *10.5281/zenodo.170186708*

Abstract **Case Studies**

The study explores the adequacy of Physical and Health Education (PHE) curriculum in meeting the learning needs of students with disability. The population of the study consist of PHE teachers and students with disability in Lagos State, Nigeria, from which 200 respondents, PHE teachers (n=62) and students with disability (n=138) were selected using a purposive sampling technique. Self-developed questionnaire, tagged Adequacy of Physical and Health Education Curriculum Questionnaire, with a reliability coefficient of 0.73, was used to collect data from the respondents. The instrument was validated by four panels of experts in PHE and Special Education. The regression output suggested that the current PHE curriculum aligns and can lead to achievement of educational objectives for students with disability $F(1, 40) = 6.708$, $p < .005$, with an R^2 of .564. Also, there is no significant relationship between implementation of PHE Curriculum and Meeting the Learning Needs of Students with Disability ($F(1, 40) = .421$, $p > .05$), with an R^2 of .003. The study concluded that the current PHE curriculum aligns with the educational objectives and can lead to achievement of educational objectives for students with disability if properly implemented.

Keywords: Physical and Health Education, curriculum, students with disability, Educational Objective.

INTRODUCTION

Physical and Health Education (PHE) is a part of total education that deals with all-round development of an individual through carefully selected physical activities and acquiring health knowledge necessary for maintaining healthful living. Physical Education is "education through the physical", which aims to develop students' physical competence and knowledge of movement and safety, and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle. Abass and Angba (2020) stated that Physical and Health Education help to develop students' confidence and generic skills, specifically, collaboration, communication, creativity, critical thinking, and aesthetic appreciation skills. Physical Education can also be conceptualised as an educational process that uses physical activity as a means of acquiring skills, knowledge, and attitudes that contribute to the optimal development and well-being of man. According to Okuneye (2013), Physical and Health Education emphasised that the correct economy of movement is crucial to the provision of an all-round development of man. Through Physical and Health Education, students learn physical activities that can improve their cognitive ability, acquire health habits that lead to total fitness, acquire knowledge of good nutrition essential for proper growth and development, and knowledge of personal hygiene and drug use, among others.

According to Lafiaji-Okuneye et al. (2024), Physical and Health Education is viewed as a phase of education that contributes maximally to the optimum development of the individual's potentialities through physical activities such as games, sports, callisthenics, gymnastics, dance and related activities.

The objective of the Physical and Health Education curriculum in Secondary Education in Nigeria goes beyond just creating an avenue for students to release pent-up energy or indulge in sports and games; it includes developing Physical and Health literacy in students. Physical literacy is the ability to move and use movement to prevent sedentary and health literacy is the ability to recognise and apply health information to promote

healthy behaviour. Taiwo et al. (2023) stated that school-based physical activities through Physical and Health Education improve cognitive skills of students by improving their academic performance, it also improve the affective and psychomotor skills of students.

More so, the relevance of Physical and Health Education curriculum can be viewed from the lens of curriculum design, content selection, and the art of effective teaching. The bedrock of Physical and Health Education effectiveness in secondary schools lies in its curriculum design and content. This process entails meticulous planning, organisation, and sequencing of educational experiences, all to achieve specific learning outcomes (Gallahue & Ozmun, 2018). PHE curriculum serves as both a roadmap and a compass, guiding the educational journey of students through a terrain of physical activities and health and knowledge acquisition. A well-structured PHE curriculum starts with clearly defined educational objectives (Lund & Tannehill, 2016). These objectives serve as beacons, illuminating the path of what students should know and be able to do by the culmination of their physical and health education studies. These objectives are aligned with broader educational goals and may include physical fitness, motor skill development, Health literacy, Wellness, Healthful living and even socio-emotional growth (National Association for Sport and Physical Education (NASPE), 2019).

Students with disability are students with one form of disability or another. They are students who have growth or development abnormalities or challenges. These challenges can be physical, mental, intellectual, social, and emotional and may require special education services. These students may not be able to benefit from the conventional classroom because they require special attention (Megan, 2020). These sets of students are faced with a myriad of challenges in accessing and benefiting from PHE programs. These challenges, according to Obiakor and Offor (2011), include inadequate facilities, lack of adaptive equipment, and insufficiently trained personnel. For instance, many schools lack the necessary infrastructure, such as ramps and specialised sports equipment, to support students with mobility impairments, and also some of the teachers often lack the requisite knowledge and skills to implement adaptive physical education techniques that address the diverse needs of these students (Ogunyemi, 2014; Abang, 2011).

Therefore, the curriculum must be flexible and adaptive to accommodate the needs of these sets of students. The Physical Education curriculum should be designed to meet the unique needs of students with physical disabilities to ensure inclusiveness and equitable physical education opportunities. Such inclusion will enhance the physical abilities, prevent secondary health conditions associated with disabilities such as obesity, diabetes, cardiovascular diseases, among others. It will also encourage and give the students a sense of belonging, and ensure they participate within their capability. Different studies have reported the physical and mental gains of adaptive physical activity programmes to physically challenged students. Adebiyi (2017) found that participation in adapted physical education programs significantly improves motor skills and overall physical fitness of physically challenged students. Similarly, Ogunyemi (2014) reported improved self-esteem and social interaction among physically challenged students engaged in inclusive physical activities.

The Nigerian educational framework, as articulated in the National Policy on Education, strives to provide equal opportunities for all students, including those with disabilities (Federal Republic of Nigeria, 2014). Although there is a policy for inclusive education in all aspects of education in the country, the main question is, are students with special needs fully integrated into PHE programs? How relevant is the current curriculum in meeting the needs of students with disability? Can the current PHE curriculum be modified to effectively address the diverse needs of physically challenged students? Are PHE teachers in secondary schools well-equipped with the skills and knowledge to meet the needs of students with special needs? To what extent is the content of the current PHE curriculum incorporate education on disability-specific health issues, such as nutrition, mobility management, and mental health, and empower students with the knowledge to manage their conditions more effectively? Unfortunately, the relevance of the current Secondary School Physical and Health Education curriculum in meeting the needs of physically challenged students is not well documented, and this created a knowledge gap which needs to be addressed. Therefore, this study aimed at investigating the relevance of secondary school Physical and Health Education in meeting the needs of physically challenged students in Lagos State, Nigeria.

METHODS

The study adopted a descriptive survey research design, and the population includes all Physical and Health Education Teachers and students with disability in Lagos State, Nigeria. The respondents were Physical and Health Education teachers who are presently teaching or have experience in teaching students with disability (n=62) and students with disability (n=138). In total, 200 Physical and Health Education teachers and students with disability were conveniently selected to form the sample size using a convenience sampling technique. Data were collected through a self-developed structured questionnaire, and the questionnaire was structured to elicit demographic information of the respondents and also contained items measuring the adequacy of the current PHE curriculum in meeting the needs of students with disability. The instrument was validated by a four-member panel of Physical and Health Education and Special Education Professionals. To ensure the instrument is reliable, a pilot test was conducted the data collected with computed using Cronbach's alpha, and a reliability coefficient of 0.73 was recorded. Hence, the instrument was declared reliable and suitable for data collection.

Before the collection of data, the PHE teachers and the students were briefed on the objective of the study. The PHE teachers were given an informed consent form, and only those who filled out and returned the form were considered for selection as respondents of the study. Also, the students were given an informed consent form to be filled out by their parents or guardians, and only students who returned the informed consent

form signed by their parent or guardian were considered for selection to participate in the study. Data entry and analysis were done using IBM Statistical Package for Social Sciences (SPSS) version 26. Data collected were analyses using descriptive statistics of frequency count and percentage, and inferential statistics of regression analysis at 0.05 level of significance.

Results

Table 1: Demographic Information of the Student

	Age	Frequency	Percent
Age	8- 10 years 11-13 years Above 14 years Total	48.0 72.0 18.0 138	34.8 52.2 13.0 100
Gender	Male	51.0	36.9
	Female	87.0	63.1
	Total	138	100
Class	JSS 1 JSS 2 JSS 3 Total	49.0 44.0 45.0 138	35.5 32.1 33.6 100

Table 1 presents the demographic distribution of the students. From the table, 48 respondents representing 34.8% were between 8-10 years, 72 respondents representing 52.2% were between 11-13 years of age, and 18 respondents representing 13% were above 14 years old. The mean age of the students is 11.35 ± 0.167

On the gender distribution of the students, 51 respondents representing 36.9% were male, and 87 respondents representing 63.1% were female. The table also presents data on the class of the respondent. From the table, 49 respondents representing 35.5% were in JSS 1, 44, representing 32.1% of the respondents were in JSS 2, and 45 respondents representing 33.6% were in JSS 3.

Does the PHE Curriculum align with Educational Objectives for students with disabilities?

Table 3: Model Summary of Regression Analysis

R	R Square	Adjusted R Square	SEE
.751[a]	.564	.505	.48047

Predictors: (Constant), Curriculum Design, Curriculum Content

Table 3 presents the model summary, which shows the R, R-squared and adjusted R. From the table, the R value of .751, which indicates a strong positive correlation between the PE curriculum and content and alignment with educational objectives for students with disability. The coefficient of determination, R^2 value of 0.564, indicates that approximately 56.4% of the variance in the achievement of educational objectives for students with disabilities can be explained by the model. The high R value (0.751) and moderately high R^2 (0.564) suggest that the model has a strong linear relationship with the alignment of the PHE curriculum and explains a significant portion of its variance. This means that the predictors used in the model are relevant and contribute meaningfully to explaining how well the PHE curriculum aligns with educational objectives for students with disabilities. An adjusted R^2 value of 0.505 indicates that after adjusting for the number of predictors, approximately 50.5% of the variance in the alignment is explained by the model. The slight decrease from R^2 to Adjusted R^2 suggests that the model is robust but may include some predictors that do not contribute significantly to explaining the variance. A standard error of the estimate of 0.48047 suggests that the model's predictions of the alignment of the PHE curriculum are relatively accurate.

Table 4 ANOVA Summary Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	38.601	1	38.601	6.708	0.013*
Residue	230.184	199	5.755		
Total	268.786	200			

Table 4 shows that the regression model is statistically significant, $F_{(1,40)} = 6.708$, $p < .05$. This means that the model as a whole provides a significant explanation of the variance in the alignment of the PHE curriculum with educational objectives for students with disabilities.

Implementation of PHE Curriculum to Meet the Learning Needs of Students with Disability

Table 5: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.052[a]	.003	-.004	.48047

a. Predictors: (Constant), Availability of Specialised equipment, Teacher's Pedagogical Skills

Table 5 presents the model summary, which shows the R, R-squared and adjusted R. From the table, the R value of .052, which indicates a weak positive correlation between the implementation of PE curriculum and meeting the learning needs of students with disability. The coefficient of determination, R^2 value of 0.003, indicates that approximately 0.3% of the variance in the learning needs of students with disabilities can be explained by the model. This means that the predictors used in the model do not contribute meaningfully to explaining how well the PHE curriculum implementation meets the learning needs of students with disabilities.

Table 6: ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.292	3	.097	.421	.738
Residual	107.116	464	.231		
Total	107.408	467			

a. Dependent Variable: Learning Needs

b. Predictors: (Constant), Availability of Specialised equipment, Teacher's Pedagogical Skills

Table 6 shows that the regression model is not statistically significant $F_{(1,40)} = .421$, $p > .05$. This means that the model as a whole provides a significant explanation of the variance in the alignment of the PHE curriculum with educational objectives for students with disabilities. The low F-value (.421) indicates that the model does not have a good fit. It suggests that the variability explained by the model is not much more than what would be expected by chance. The high p-value (greater than 0.05) indicates that the overall model is not statistically significant. This indicates that the independent variables (Availability of Specialised Equipment, Teacher's Pedagogical Skills, and Teaching Experience) do not collectively have a significant effect on the Learning Needs of students with disabilities. This ANOVA table suggests that the regression model does not significantly predict the dependent variable, Learning Needs. The independent variables in the model do not explain a significant portion of the variance in Learning Needs, as indicated by the high p-value (0.738) and low F-value (0.421).

Table 7: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.52	.213		7.150	.001

Availability of Specialized equipment	-.007	.025	-.013	-.288	.773
Teacher's Pedagogical Skills	-.024	.046	-.024	-.516	.606
Teaching Experience	.049	.050	.045	.974	.330
a. Dependent Variable: Learning Needs					

Table 6 shows that the intercept (B = 1.52) is statistically significant (p = .001), indicating that when all predictors are zero, the expected value of Learning Needs is significantly different from zero. The coefficients for availability of specialised equipment (-0.007), teacher's pedagogical skills (-0.024) and teaching experience (0.049) are not statistically significant, indicating that they do not have a significant effect on Learning Needs. This implies that the implementation of the current PHE curriculum does not meet the learning needs of students with disabilities.

Discussion of Findings

The result of the study reveals that the current Physical and Health Education curriculum in Lagos State, Nigeria, aligns and can lead to the achievement of educational objectives for students with disability. The curriculum in terms of the design and content aligns with the educational objectives and is capable of meeting the learning needs of students with disability. The curriculum is aligned with broader educational objectives, as it incorporates elements that contribute to the overall educational goals for students with disability. The element of the current PHE curriculum includes promoting a healthy lifestyle, enhancing motor skills, fostering teamwork, and instilling values such as discipline and perseverance. Disability-specific health issues, such as nutrition, mobility management, and mental health, and adapted physical activities that empower students with the knowledge to manage their conditions, are well captured in the current PHE curriculum for Junior Secondary Schools in Lagos State, Nigeria. The result of this study agrees with Silverman and Subramaniam (2014), who emphasise the importance of aligning PHE curriculum with broader educational objectives to enhance overall student development. The authors argue that a well-aligned curriculum contributes to the holistic growth of students, addressing physical, cognitive, and socio-emotional domains. Similarly, Hastie and Curtner-Smith (2016) stressed the importance of individualised learning in PHE in addressing diverse student needs. They argue that incorporating varied content and instructional approaches caters to different learning styles and abilities, fostering a positive and inclusive learning environment.

The result of the study also reveals that there is no significant relationship between implementation of the PHE Curriculum through availability of specialised equipment, teachers' pedagogical skills and teaching experience and Meeting the Learning Needs of Students with Disability. The respondents reported that one of the impediments in meeting the needs of students with needs in PHE is non non-availability of specialised equipment to engage the students. Students with special needs, depending on their disability, require specialised equipment for learning and for engaging in physical activities organised within the school. The lack of this specialised equipment hinders the implementation of the PHE curriculum to meet the needs of students with special needs difficult. The result of this study agrees with Akinyi, Onyango, and Aluko (2015) found that the lack of teaching and learning materials such as textbooks, talking calculators, braille machines, large prints and compact discs, and other sports equipment makes inclusive education unsuccessful. Similarly, Azubuike, Obih and Okwarachukwu (2023), lamented that even though students with special needs need Physical and Health Education for their optimum growth and development, the inclusion of special needs children in physical and health education has not been possible because they are not able to participate in most of the sports activities in physical and health education largely due to lack of specialized equipment to aid their participation. Teachers' pedagogical skills and teaching experience in teaching adapted physical and health education to students with disability are cogs in the successful implementation of the PHE curriculum in Lagos State, Nigeria. Many of the teachers teaching students with disability PHE are not pedagogically competent; they lack the skills and experience to use available or improvised equipment to teach students with disability PHE effectively. Ojo (2015) corroborates this point with his statement that the major barrier to the implementation of PHE curriculum in Ekiti State, Nigeria, is teachers' pedagogical skills and experience.

CONCLUSION

Curriculum content, design and implementation are important indicators of adequacy of curriculum in meeting the learning needs of students with disability. The content of the curriculum was to be relevant, inclusive and address the needs of students with disability to bring about the desired change in behaviour, which is the goal of education. The current Physical and Health Education curriculum in Lagos State, Nigeria, contains topics nutrition, hygiene, diseases and pathogens, sports like football, table tennis, and badminton that can be adapted for students with disability. Hence, the curriculum is aligned with the educational objectives for students with disability. In the area of implementation of the curriculum, factors such as lack of specialised equipment, teachers' pedagogical skills and teaching experience hindered the effective implementation of the PHE curriculum to meet the learning needs of students with disability. Aligning the PHE curriculum with the educational objectives for students with disabilities requires thoughtful adaptation, robust teacher training, and overcoming implementation challenges. These efforts ensure that students with disabilities can benefit fully from PHE, supporting their overall development and inclusion in the educational system.

RECOMMENDATIONS

To ensure the Physical and Health Education curriculum aligns with the educational objective for students with disability and effectively implements the curriculum in meeting the needs of students with disability to ensure the adequacy of the curriculum, it is recommended that:

i. Government and other stakeholders in education should invest more in inclusive education, especially for students with disability by making available specialised equipment needed to teach students with disability.

ii. Teachers should make an effort to develop their pedagogical skills to effectively implement the content of the curriculum to achieve the learning outcome.

Regular refresher courses should be periodically organised for teachers teaching students with disability to update their skills on the latest pedagogical approaches in teaching students with disability.

REFERENCES

Abang, T. B. (2011). Special education in Nigeria. *International Journal of Disability, 29*(1), 13-18.

Abass and Angba (2020). Physical Education and Sport: Panacea for Educating the Mind Towards Achieving Sustainable Development Goals (SDG's), Faculty of Education University of Ibadan Ibadan, Nigeria ISBN: 978-2860-53-0

Akinyi, L. E., Onyango E. N., & Aluko, J. O. (2015). Challenges facing the implementation of inclusive education in public secondary schools in Ronyo Sub-County. Migori, Kenya: Mearcy Publication

Azubuike, A.S., Obih, O.A. & Okwarachukwu, A.C. (2023). Adapted Physical Education in Special Need Education: *The Way Forward. In Ademokoya, J.A., Akuma, N., Idiodi, E.O., & Obih, S. (Eds). Special Needs Education From The Lens of Interdisciplinary Dialogue: A Festschrift in Honour of Prof. Emeka D. Ozoji*. Citihall International 1(2) 487-497

Federal Republic of Nigeria [FRN] (2014). National Policy on Education. Abuja: NERDC

Gallahue, D. L., & Ozmun, J. C. (2018). *Understanding motor development: Infants, children, adolescents, adults* (8th ed.). McGraw-Hill Education.

Lafiaji-Okuneye, B.B; Taiwo A.B; Adande A.D. (2024). The Nexus between Entrepreneurship Education and Entrepreneurial Intention: Employment Among Physical and Health Education Students in Lagos State. *Africa Journal of Science and Technology and Mathematics Education 10*(1) 59-65

Lund, J., & Tannehill, D. (2016). *Standards-based physical education curriculum development* (4th ed.). Jones & Bartlett Learning.

Megan, M. (2020). Adapted physical education: Physical education for everyone. https://www.adaptedphysicaleducationforafrica

National Association for Sport and Physical Education. (2019). *Physical education standards*. SHAPE America.

Ojo, A.L. (2015).Teaching Physical Education in Nigerian Secondary Schools is a Barrier: An Implication For Future Generation, A Case Study of Ado Metropolis Secondary Schools in Ekiti State, Nigeria. *International Journal of Education, Learning and Development 3*(5) 38-53

Silverman, S., & Subramaniam, P. (2014). Integrating Physical Education with Educational Objectives. *Journal of Physical Education, Recreation & Dance, 85*(3), 29-35

Smith, M. (2020). *Special education needs in modern classrooms*. Education Press.

Taiwo, A.B; Apalara, F.A & Okuneye, R.O. (2023). Effect of Aerobic Exercise on Selected Cardiometabolic Risk Factors of Prehypertensive Adolescents in Lagos State. *Journal of Nigeria Association of Physical, Health Education, Recreation, Sports and Dance 2(1)*