



Learning Opportunities of Physical Education at Primary and Secondary Schools in Amhara Regional State of Ethiopia

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Abstract

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The purpose of this study was to examine the learning opportunities of physical education at primary and secondary schools in Amhara regional state of Ethiopia. The accessibility and opportunity on physical education program in schools were not equally treated as well. In this work, the researchers examined the level of opportunity to learn quality physical education program. Descriptive survey research design was employed. One sample t-test were used to compare the average accessibility and opportunity of adequacy of equipment, accessibility of equipments, safeness of equipment, safety of facility, sufficiency of facility and access of ICT with standard value. 590 schools were selected by simple random sampling technique from the total population of 5171 primary and secondary schools in the study by calculating with sample determination formula. The data were gathered by questionnaire, deep interview and observation checklist as tools. Method of data analysis applied terms of mean, standard deviation and t- test with P – value of less than 0.001 by using SPSS version 21 software. Therefore, the researcher drawn the following major findings; The average opportunity of adequacy of equipment (mean= 2.45, SD=1.25, p-value<0.001), accessibility of equipment's(mean= 2.49, SD=1.22, p-value<0.001), safeness of equipment (mean= 2.45, SD=1.15, p-value<0.001), safety of facility(mean= 2.64, SD=1.33, p-value<0.01), sufficiency of facility(mean= 2.52, SD=1.29, p-value<0.001) and access of ICT (mean= 1.87, SD=1.18, p-value<0.001) were significantly lower than the standard value. The result showed that average of accessibility and opportunity on physical education program in the study was below the standard. So that the researchers concluded that the primary and secondary schools have less opportunities and accessibilities' of physical education learning facilities like sport equipment and sport fields in general. Therefore the researchers recommended that the regional education bureau would consider maximizing the opportunities and accessibilities in terms of sport equipment, facilities, sport related ICT and safety measures.

Keys: Accessibility, Opportunity, t-test and Facilities

Background of the study

To ensure that the full benefits are achieved, public investment, a supportive environment

and high quality program delivery are required (United Nation Educational Scientific and Cultural Organization

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[UNESCO] 2015). Therefore, every student should have the opportunity to participate in a quality physical education program. It is the role of quality physical education programs to help students develop health-related fitness, physical competence in movement activities, cognitive understanding, and positive attitudes toward physical activity so that they can adopt healthy and physically active lifestyles. Quality programs are also important because they provide learning experiences that meet a student's developmental needs, which in turn helps to improve the mental alertness, academic performance, readiness, and enthusiasm for learning (Byaruhanga, 2009).

In most of primary and secondary schools in Ethiopia lacks sport facilities and equipment to conduct physical education program effectively and to maintain its quality physical education provision as per the standard of school setting program. According to NASPE 2017, Learning Opportunities is one of the quality indicators in physical education program. In this regard the researches will answer the following question to indicate the level of learning opportunity that ensure quality physical education program.

It also implies the existence of facilities, contents, learning environments that are healthy, safe, protective and gender-sensitive and child centered. A short survey of Ethiopia's nationwide efforts to ascertain quality education at primary

and secondary education level may be assessed as a case in point. In fact, similar scenario was observed by the researchers in Amhara regional state schools in general.

Tirusew (1998) concluded that since teaching learning process depends almost entirely on communication between teachers and students, the number of students in a class determines the amount and quality of knowledge imparted to and gained by the students. Thus, the large the size of the students' number in a class, the more difficult communication between the teacher and students becomes, the more the effectiveness of teaching will be hindered, and the lower the quality of education will be.

Research shows that habits formed in childhood are likely to be kept going into adulthood and therefore it is important to understand the purpose of quality primary school sport and Physical Education (PE) provision wisely is crucial for the all-round development and wellbeing of the county's children ("Get Berkshire Active", n.d).

One of the major objectives of the Ethiopian education and training policy (1994) is stated as "the development of the physical and mental potential and the problem-solving capacity of individuals by expanding education and in



particular by providing basic education for all” (EEP-88 1994, 7).

But the emphasis given for one of the means which may facilitate the achievement of the overall goal of the education (quality physical education) seems received little attention. Without due attention given for quality physical education in schools of the nation, the realization of major educational goal of the nation is doomed to fail.

Statement of the problem

The potential areas of sports talent are found in schools and it needs serious investment for sport development by considering national sport policy as equally as education too. The researchers stated that the gap of study was mainly focusing on the learning opportunities and accessibilities in terms of adequacy, safeness and standard based learning outcomes.

The accessibility and opportunity on physical education program in schools were not equally treated as well; Berhanie A. Bekele (2017) stated that there was no uniformity across the schools on the implementation of inclusive physical education.

Primary and secondary school students level of participation in physical education class and in different sport is low, disability issues are not considered in high schools’ curriculum to give

chance for special need students; students’ and school administrators’ attitude towards physical education were low, instructional materials and facilities were inadequate, the allotted time to physical education was not enough, physical education was not considered as basic subject, physical education teachers were not competent to teach physical education, and large class size based on the findings, recommendation was made towards the curriculum to minimize the existing problem.

Tadesse Gizachew (2012). Therefore, he recommended that the concerned body at the Arba Minch city level should plan to build additional classes for secondary schools to give solution for large class size.

Regarding to the time allocation, since most high schools in Ethiopia, the time allotment reduced to one period per week, the number of students participating in daily education is declining and some researchers show that, daily participation in physical education by high school students decreased. Similarly, Physical education is commonly faced with the challenge of inadequate facilities and poor maintenance of teaching sites.

The study found that the challenges related with teacher (personal) and the administrator. And other factors like large class size, time management, lack of material, lack of skill

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attitude, experience etc. for further improvement of teaching effectiveness those challenges must avoid and suggested as potential solutions to the proper implementation of effective teaching of Physical education. (Ejigayehu Kebede, 2013), due to these in many schools the schools' environment are not appropriate for the instruction of health and physical education. This is because most schools lack an appropriate training field, bathroom, dressing room, shower, and store.

The study was intended to examine the opportunity to learn quality physical education program in primary and secondary public schools in Amhara region, to evaluate the existing physical education program with respect to content, instruction and assessment in primary and secondary public schools in Amhara region and to explore the practice and challenges of physical education teachers' capacity building packages on quality program assurance in primary and secondary public schools in Amhara region.

General Objective

To examine the level of opportunity to learn quality physical education program at primary and secondary schools

Specific objectives

- To identify whether physical education program ensured the participation of all

students, including students with disabilities.

- To compare the compatibility of instructional time allotment with the international standards of physical education program.
- To disclose the appropriateness of class size with the instructional nature of physical education program.
- To verify the presence of qualified physical education teachers in both primary and secondary schools.
- To look at the availability of adequate and safe equipment and facilities of physical education in primary and secondary schools.

Research questions

- Do physical education program ensured the participation of all students, including students with disabilities?
- To what extent the instructional time given for physical education aligned with the international standards?
- To what extent the class size of physical education aligned with the nature of physical education program.
- To what extent the qualified physical education teachers fulfilled the

national and international program in primary and secondary requirements. schools of the region?

- Is there enough and safe equipment and facilities for physical education

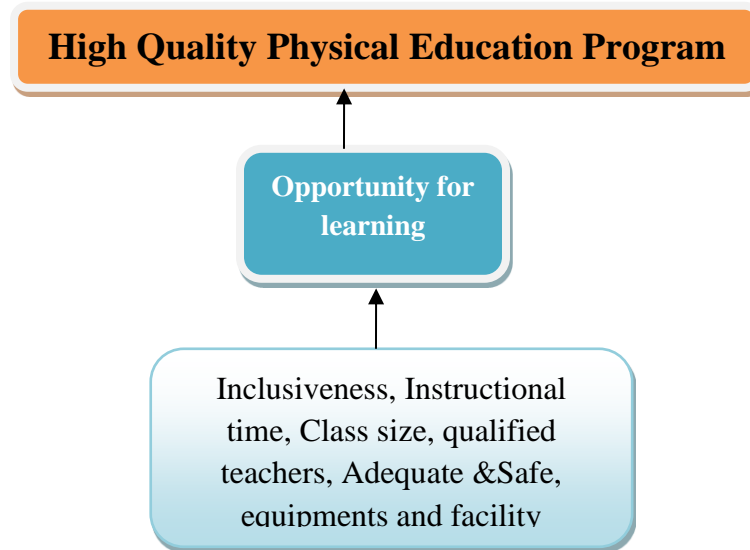


Fig 1.Theoretical framework Adapted from NASPE

Table.1. Schools and zone distribution Sample and Sampling technique

No.	Zone (districts)	Total No of primary schools (1-8)	Total primary schools (5-8)	Total secondary schools(9-10)	Representative sample primary school (5-8)	Representative sample secondary schools(9-10)
1	Bahirdar city admin.	74	(45)	15	3.54	7
2	Gonadr city admin.	80	(53)	17	4.17	8
3	Dessie city admin.	45	(24)	10	1.89	4
4	South Gondar	1019	(556)	55	43.78	25
5	North Gondar	1023	(558)	44	43.94	19
6	South Wollo	1230	(665)	49	52.21	22
7	North Wollo	763	(413)	52	32.52	23
8	West Gojjam	940	(518)	56	40.79	25
9	East Gojjam	936	(511)	61	40.24	27
10	North shewa	1063	(580)	57	45.67	26
11	Agew/awi	835	(457)	47	35.98	21
12	Oromo Nation	262	(147)	16	11.57	7
13	Wagehamra	261	(146)	19	11.49	8
Total		8642	4673	498	368	222

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Research Methods

Research design applied to achieve the objectives of this research project and meet the research questions, Descriptive survey research design was employed. Survey studies ask large numbers of people questions about their behaviors, attitudes, and opinions. Some surveys merely describe what people say they think and do.

Other survey studies attempt to find the relationships between the characteristics of the respondents and their reported behaviors and opinions (Ray and Ravizza, 1988). It is more applicable in relation to the nature of the thematic areas that were studied.

The number of woredas in each zone were different, (East Gojjam, 19), West Gojjam, 16), (Awi, 12), (South Gondar, 15), (South Wollo, 21), (Central Gondar, 13), (East Gondar, 4), (Oromiya zone, 7), (North Gondar, 7), (Wegemura, 7), (North Shewa, 24) and (North Wollo, 14).

Total number of primary schools were 8642 taken from (MoE Index, 2017), but public schools found in grade 5-8 at primary school level was 4673 taken as a total number of primary school and also in grade 9-10 level was 498 taken as the total number of secondary schools.

Research design, study population, sampling size and sampling techniques, source of data, procedures of data collection, and method of data analysis were incorporated.

Population size

The researchers intended to define the total population of schools and participants in the entire study. In the region there was totally 15 zones from these 3 was city Administrations and 12 was considered as a total number of Zones.

The number of students in the region, zone and woredas, urban and rural of primary and secondary schools were 1,847,078 (Male = 920,909 and Female = 926,126) and 517,460 (Male = 245,569 and Female = 271,891) respectively including Bahir Dar, Gondar and Dessie city administrations.

Simple random sampling was used to select representatives from all zones, proportional simple random sampling for woredas, kebeles and schools. And also stratified random sampling was employed on rural and urban schools.

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In order to select representative sample from the population the researcher used sample size determining formula developed by (Yamane, 1967:88). The total sample population was 590, level of precision or sample error was (5%) and 95% of confidence level then the sample size was determined.

$$n = \frac{N}{1 + Ne^2}$$

Accordinging the formula the sample of primary school that taken was 368 and secondary school was 222. Therefore, the total number of schools was 590.

Grade 5-8, 9-10 proportional simple random sampling teachers, school administrators and education bureau officers were selected purposefully.

590 PE department heads were taken purposively, 590 PE teachers were selected randomly from each schools, Students from primary and secondary schools.

Data Collection Instruments

A. Questionnaire was used as a data collection instrument, which was distributed to teachers on learning opportunities of physical education.

- B. Observation (supervision) by check list, the primary advantage of the naturalistic observation approach was that it taken place in a natural setting, where the participants do not realize that they were being observed. Consequently, the behaviors that it measures and describes are likely to reflect the participants' true behaviors. (Ray & Ravizza, 1988) that will be done on learning opportunity.
- C. Document Analysis was focused on plan and teachers' profile.
- D. Interview. Interview was conducted with partners and expertise at each zone, regarding to learning opportunities related issues. Semi-structured interview was prepared for students.

Data Analysis Method

The SPSS (version 21) was employed for data management. The researchers were intend to apply descriptive statistics (in terms of mean, standard deviation, ratio and percentage) and inferential statistical analysis method for quantitative and qualitative data in which the narration form the data were undertaken, and also the data were analyzed as needed according to the nature of the objectives in the study.

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Table 2: Comparison of opportunity to learn physical education in Amhara regional state of Ethiopia with mean value

Keys: (*) the mean is significantly different from test value at alpha = 5% and (**) the mean is significantly different from test

Table with 7 columns: Opportunity dimension, N, Df, Mean(s. d), Tested value = 3 Mean Difference, T, P. Rows include Inclusiveness, Adequacy of equipment, Safeness of equipment, Access of equipment, Safety of facility, Sufficiency of facility, and Access to ICT.

value at alpha = 1%

Summary of statistical analysis of learning

opportunities were presented in Table 2.

Result and Discussion

As can be seen from above Table, the average opportunity of adequacy of equipment was 2.45 with standard deviation 1. 25. One sample t-test also showed that its mean score was significantly lower than average value or test value=3(t-value=-10.73, p-value < 0.001).This implies that the adequacy of the sport equipment were not as expected to fulfill the requirement of the standard. The average opportunities of safeness of equipment were 2.49 with standard deviation 1.22. One sample t-test also showed that its mean score was significantly lower than average value or test value=3 (t-value=-10.10, p-value <0.001).This implies that the safety is first principle in physical education to prevent

injuries, in this case the playing grounds of schools were not well furnished. Moreover, the average accessibility of equipments was 2.49 with standard deviation 1.16 and we noted that its mean score was significantly lower than test value=3(t-value=-10.65, p-value=0.000). Similarly, the average opportunity of safety of facility, sufficiency of facility and access of ICT were significantly lower than test value=3 (p-value<0.05). This implies that the opportunity of safety of facility, sufficiency of facility and access of ICT were not as expected to fulfill the requirement of the standard (See Table 2).

Therefore, Participation of all students including students with disabilities in physical education

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program was not equally benefited. The time allotment given for physical education instruction and class size for practical class management were not proportional to the standard.

Due to this reason the students could not participate to exercise the instruction properly. The qualified teachers issues in most of the schools were the major problem investigated in addition to availabilities and sport facilities found in schools were very low.

Conclusions and Recommendation

The researchers concluded that the average opportunity of adequacy of equipment (mean= 2.45, SD=1.25, p-value<0.001), accessibility of equipment's(mean= 2.49, SD=1.22, p-value<0.001), safeness of equipment (mean= 2.45, SD=1.15, p-value<0.001), safety of facility(mean= 2.64, SD=1.33, p-value<0.01), sufficiency of facility(mean= 2.52, SD=1.29, p-value<0.001) and access of ICT (mean= 1.87, SD=1.18, p-value<0.001) were significantly lower than the standard value.

The average of accessibility and opportunity on physical education program in the study was below the standard. Therefore the researchers recommended that the regional education bureau would consider maximizing the opportunities

and accessibilities in terms of sport equipment, facilities, sport related ICT and safety measures.

Overall, the t-test revealed that the average opportunity of adequacy of equipment, accessibility of equipment's, safeness of equipment, safety of facility, sufficiency of facility and access of ICT were significantly lower than the standard value, while the average opportunity of inclusiveness were not significantly lower than the standard value.

According to the result of the study, the researchers recommend that the concerned bodies would give emphasis to the quality education by reconsidering the appropriate learning equipment, accessibilities and safety facilities and utilization of ICT at school setting.

And also, the researchers recommended that the regional education bureau would consider to maximizing the opportunities and accessibility of physical education program in terms of sport equipment, facilities, and sports related ICT and safety measures.

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