



The implementation of continuous assessment in practical and theoretical class of physical education in secondary school of Jimma Zone, Ethiopia

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Abstract

The purpose of this study was to investigate the implementation of continuous assessment in theoretical and practical class of physical education in secondary schools of Jimma Zone. Crosse sectional survey research design was employed. The sample of data was 58 school leaders and 48 teachers from 18 weredas and they selected by simple random sampling technique. Data for the study were collected through questionnaires, interviews, and document analyses. The data collected were analyzed by using percentages, means and weighted means and an independent sample t-test used by computing the data on SPSS version 20. The data gathered through open ended questions, interviews and document analyses were analyzed qualitatively through narration for the purpose of triangulation. The findings of this study revealed that there is an inadequate knowledge about how to implement continuous assessment, the teachers' understanding about purposes of continuous assessment were insufficient. Even though there are various assessment types in assessing students, only a few of them were implemented in Physical Education class. High workload of teachers, large class size, lack of resources and time constraint are major conditions that influence to implement continuous assessment.

Keywords: Physical education, continuous assessment, school leaders, assessment techniques, assessment tools

Introduction

The history of assessment shows a long line of structural changes designed to inject quality control into education. It uses a testing system, which is designed to measure students' performance and hold school accountable. In a modern society, education is increasingly viewed as the primary means of solving social, economic and political problems. In line with this, (Kapambwe, 2010) [7] stated, "One of the recent directions of educational reform has been the emphasis of assessment in the teaching learning process".

Continuous assessment is part and parcel of instructional process that has to be taken as a key tool in educational quality assurance endeavor and it is one of the most significant areas of an educational system. It defines what students take to be important, how they spend much of their academic time and in many ways, how they value themselves. (Abejehu, 2016) [1] says of assessment "If we wish to discover the truth about an educational system, we must look into its assessment procedures." Assessment and grading do not take place in a vacuum. Professional judgments about the quality of student work together with interpretations of such judgments are always made against some background framework or information" (Unit, 2006) [10]

The current research is stated as "the implementation of continuous assessment in practical and theoretical class of physical education in Jimma zone". Assessment is one essential component of curriculum practice that greatly contributes to effective curriculum operation and implementation. Pedagogically, it is advisable for teachers to assess their students' performance periodically so that they

can have an accurate picture about the instructional process. Different studies have been conducted on the practice of continuous assessment in teaching and learning in various institutions from the lower to the higher education. Results indicate a variety of recommendations in line with varied problems of the institutions. For instance, a research conducted by (Hayford, 2007) [6] focusing on the implementation of continuous assessment among Dilla University EFL teachers identified lack of adequate knowledge, limited use of assessment devices and different challenges during implementation identified. In the same year, (Beyene & Wolde-mariam, 2014) [2] was also concerned with the practice of continuous assessment in Jimma Teachers' College and came up with the findings that the teachers did not always use continuous assessment in order to assess students' English language performance. In connection with this, teachers did not get adequate training on it. Other research, which was conducted (Merello-Giménez & Zorio-Grima, 2017) [8] called Status of and factors affecting its implementation, (Castillo Tabares, Hernández Valencia, Mesa, & Portilla, 2014) [3]. Moreover, from the experience and observation of the researcher, most of the teachers lack a clear understanding about the implementation of continuous assessment. Most teachers interpret Continuous assessment as continuous testing. This wrong understanding of the term will affect to apply different assessment techniques. However, none of the above researchers addressed continuous assessment as it relates to its existing implementation in the context of secondary schools. Therefore, this study was designed in order

to examine the gaps related to the implementation of continuous assessment currently in secondary schools of Jimma zone. Moreover, this study will suggest alternative solutions to improve these existing practices.

Methodology

Description of study Area

Jimma Zone is located in the Southwestern part of Ethiopia. It found 346 km from Addis Ababa to administration center (Jimma town). Jimma zone is bordered on the south by southern Nation, Nationalities and Peoples Region, the northwest by Illubabor, on the north by West Welega, and on the northeast by East Shewa; part of the boundary with West Shewa is defined by the Gibe River. The researcher selected this study area because the work place of the researcher is in Jimma zone and thus has access to transport and availability of time to collect the data.

Research design

Cross sectional research survey design was employed which employed both qualitative and quantitative methods to investigate and assess the current situation in secondary school level classrooms in terms of the continuous assessment most frequently used.

Population of the study

The study population included secondary school physical education teachers, school supervisors and school principal of the jimma zone selected woredes. Purposive sampling was used to select School principals based on their experience and cluster supervisors were selected by using availability sampling because of small in numbers. Since their positions are important in describing the implementation of continuous assessment.

Methods of data collection

Table 1: Summarized methods of data collection

S. No	Research method	Methods of data collection	Total individuals participated in
1	Qualitative study	In depth interview	For the school supervisors
		Document analysis	recorded sheets, daily lesson plans, tutorials given formats and mark transfer sheets of the teachers
2	Quantitative study	Questionnaire	48 teachers and 36 school principals

Methods of Data Analysis

In order to analyze the gathered data the researcher designed both descriptive and inferential statistics. Therefore, mean and standard deviation was used for quantitative data. The researchers have used one sample T-test for testing different variables between the respondent groups. The data that

obtained through interview and document analysis were analyzed within descriptive statement and also supplemented the quantitative finding.

Result and Discussion

Table 2: Teachers and School leaders mean scores on implementation of Continuous assessment

No	Items	Respondents	N	Mean	SD	WM	T-obt	P-val
1.	The instructions on how to Continuous assessment are clear and understandable	PE teacher	48	3.73	1.31	3.72	0.68	.946
		Leaders	52	3.71	1.27			
2.	Learners from different classes in the same school are assessed in the same way in continuous assessment	PE teacher	48	2.96	1.35	3.24	-2.22	.028
		Leaders	52	3.52	1.16			
		Leaders	52	3.62	1.10			
3.	continuous assessment provide opportunity to learners to evaluate their weakness and strengths in the learning process	PE teacher	48	4.13	.93	4.16	-0.32	.744
		Leaders	52	4.19	1.10			
4.	I use a computer to enter marks and analyze learners results	PE teacher	48	2.21	.922	2.26	-.471	.639
		Leaders	52	2.31	1.16			
5.	Giving immediate feedback for the learners about their achievement is used to evaluate my instructions.	PE teacher	48	4.00	1.09	3.89	.945	.347
		Leaders	52	3.79	1.14			
	<i>Av mean</i>	PE teacher	48	3.47		3.51		
		Leaders	52	3.54				

Key: Mean value ≥ 4.50 = Strongly Agree, 3.50-4.49= Agree, 2.50-3.49= Undecided, 1.50-2.49= Disagree and ≤ 1.49 = Strongly Disagree at $p > 0.05$ $t_{cr} = 1.98$, $df = 98$

PE-Physical education

The t-test result of the t-value (0.68) is below the table value (1.98) at $(P (0.946) > 0.05)$ confirm that there is no statistically significant difference between the responses from teachers and leaders. Thus, there is an agreement between the two groups in responding to the instructions on whether conducting continuous assessment is clear and understandable.

The t-test result of the t-value (-.327) is below the table value (1.98) at $(P (0.744) > 0.05)$ confirm that there is no statistically

significant difference between the responses from teachers and leaders. Thus, there is an agreement between the two groups in responding to whether the continuous assessment provides opportunity to learners to evaluate their weakness and strengths in the learning process was high.

Table 3 (item 5) is rated as disagree performance level. The majority of teachers normally keep learner's marks in hard copies. This was concluded from the respondents mean value

from teachers and leaders of (2.21 and 2.31) with the weighted mean of (2.26). However, the result obtained from the t-test (-.471) is less than the table value (1.98) and the p value (0.639) is also greater than that of t criticals' 0.05 which denotes that there is significant difference between the two groups of respondents. This therefore, shows that use of computer in assessing and entering students' assessment marks for the proper implementation of continuous assessment was low. According to (Fry, Ketteridge, & Marshall, n.d.) Using computer to record students' academic progression is very essential to assess student's gradual change in the teaching learning process.

On item 6, the calculated t-test result (0.945) was less than the table value (1.98) at $(P(0.347) > 0.05)$ level of significance with 98 degrees of freedom. Thus, there is an agreement between the two groups in responding on the issue of giving immediate feedback for the learners about their achievement being used to evaluate instructions was high. In addition to that (Beyene & Wolde-mariam, 2014) [2] supports an assessment done formally and informally on a regular and continuous basis by integrating it with instruction. Again (Zinab, 2018) [11] states that the majority of education institutions around the world have adapted the use of continuous assessment to support learners' learning and guide teachers' instructions.

Table 3: Teachers and School leaders mean score on types of assessment most frequently used.

No	Items	Respondents	N	Mean	SD	WM	T- obt	P-val
1.	Objective type of test	PE teacher	48	2.73	.844	2.7	.325	.746
		Leaders	52	2.67	.879			
2.	Subjective type of test	PE teacher	48	1.63	.789	1.78	-1.672	.098
		Leaders	52	1.94	1.074			
4.	Group work	PE teacher	48	2.29	.874	2.37	-.958	.340
		Leaders	52	2.46	.896			
5.	Practical exercise	PE teacher	48	2.65	.729	2.75	-1.282	.203
		Leaders	52	2.85	.826			
		Leaders	52	3.25	.905			
	<i>Av mean</i>	PE teacher	48	2.35		2.38		
		Leaders	52	2.46				

In table 3 item 1, the t- test (.325) result was less than the table value (1.98) at $(p(0.746) > 0.05)$ significant level, and 98 degrees of freedom. Therefore, it is concluded that, there is no statistically significant difference observed between the two groups. This shows that teachers use objective type of test sometimes.

The t- test (-1.672) result was less than the table value (1.98) at $(p(0.098) > 0.05)$ significant level, and 98 degrees of freedom for the item 2 in the above table.. Therefore, it can be concluded that, there is no statistically significant difference observed between the two groups. From the above item, we conclude that teachers do not use subjective types of test.

With regard to item 3 which focuses on the types of assessment most frequently used in schools, the mean of the two groups were 2.46 and 2.29 with weighted mean values is 2.37. These values indicate that leaders and teachers in the sampled schools were conducting group work rate as never. The t- test (-.958) result was less than the table value (1.98) at $(p(0.340) > 0.05)$ significant level, and 98 degrees of freedom.

So, it can be concluded that, there is no statistically significant difference observed between the two groups. From the above table's result analysis, one can realize that leaders and teachers were not totally using group work.

Table 3 item 5 shows, the weighted mean (2.75) these indicated that the types of assessment most frequently used in schools is Practical exercise rate as sometimes. From the above table result analysis, one can realize that leaders and teachers were use practical exercise sometimes. The t- test (-1.282) result was less than the table value (1.98) at $(p(0.203) > 0.05)$ significant level, and 98 degrees of freedom. Therefore, it can be concluded that, there is no statistically significant difference observed between the two groups. From the above item, we conclude that teachers use Practical exercise sometimes. But (Taylor, 2007) [9] states that to motivate our students through assessment practical exercise recommended because when we invite students to practice rather than listening they can improve their skill academic performance.

Table 4: Teachers and School leaders mean scores on purpose of Continuous assessment in the school.

No	Items	Respondents	N	Mean	SD	WM	T- obt	P-val
1.	Build the whole mind of the student	PE teacher	48	3.48	1.384	3.41	.493	.623
		Leaders	52	3.35	1.312			
2.	Gives time to correct mistake	PE teacher	48	4.31	.854	4.32	-.088	.930
		Leaders	52	4.33	.785			
3.	Students perform better in final examination	PE teacher	48	4.23	.857	3.98	2.28	.025
		Leaders	52	3.73	1.270			
4.	To develop students confident	PE teacher	48	4.48	.850	4.51	-.389	.698
		Leaders	52	4.54	.670			
	<i>Av mean</i>	PE teacher	48	3.71		3.89		
		Leaders	52	4.08				

In table 4 of item 1, the calculated t-test result (0.493) was found less than the table value (1.98) at (P (0.623)>0.05) level of significant with 98 degree of freedom revealed that there is no significant difference between the two groups of respondents regarding the issue. Therefore, from result obtained it is not possible or moderate to suggest that, continuous assessment helps to build the whole mind of the student.

With regard to item 2, which focuses on the purpose of continuous assessment as it, gives time to correct mistakes the two groups responded accordingly. The result of the two groups with the mean value of 4.31 and 4.33 of teachers and leaders responses respectively and the weighted mean value of (4.32). The t-test result of the t-value (-.088) is below the table value (1.98) at (P (0.930)>0.05) confirm that there is no statistically significant difference between the responses from teachers and leaders. Thus, there is a high agreement between the two groups in responding to this items.

When the teachers and leaders were asked to indicate whether continuous assessment is useful for students performing better on final examinations, table 4 (item 3) is rated as agree performance level. This was concluded from the respondents

mean value from teachers and leaders of (4.23 and 3.73) with the weighted mean of (3.98). However, the result obtained from the t-test (2.28) is greater than the table value (1.98) and the p value (0.025) is less than that of t critical 0.05, which denotes that there is no statically significant difference between the two groups of respondents. This, therefore, reveals that continuous assessment is useful for a student performing better on final examinations was high.

With respect to the other purpose, in item 4 of table 5, respondents were asked to indicate their level of agreement regarding whether it develops students' confidence. Leaders and teachers with 4.48 and 4.54 mean scores were obtained with (4.51) mean respectively that indicated that they agreed strongly. In short, the major purpose of continuous assessment is to develop student's confidence. The calculated t-test result (-.389) was found less than the table value (1.98) at (P (.698)>0.05) level of significant with 98 degree of freedom revealed that there is no significant difference among the two groups of respondents regarding the issue. This, therefore, reveals that continuous assessment develops students' confidence was high.

Table 5: Teachers and School leaders mean scores on Conditions that influence physical education teacher's continuous practices in the schools

No	Items	Respondents	N	Mean	SD	WM	T- obt	P-val
1.	High work load of teachers	PE teacher	48	4.23	1.165	4.2	.268	.789
		Leaders	52	4.17	1.098			
2.	Large class size	PE teacher	48	4.38	.570	4.25	1.570	.120
		Leaders	52	4.13	.908			
3.	Lack of pedagogical center	PE teacher	48	3.17	1.521	3.26	-.630	.530
		Leaders	52	3.35	1.327			
4.	Time constraint	PE teacher	48	3.56	1.428	3.59	-.196	.845
		Leaders	52	3.62	1.270			
5.	Lack of resources	PE teacher	48	3.73	1.300	3.89	-1.41	.161
		Leaders	52	4.06	1.018			
	<i>Av mean</i>	PEteacher	48	3.53		3.59		
		Leaders	52	3.65				

The above table 6 (items-1) shows that high work load of teachers was a major factor that teachers encounter when using continuous assessment in secondary schools in Jimma zone. With regard to high workload of teachers, the response from teachers and leaders with mean of (4.23 and 4.17) with the weighted mean of (4.2) is rated as a high factor for implementing continuous assessment. The t-value (0.268) less than the table value (1.98) and p value (0.789) greater than t critics (0.05) with degree of freedom 98 implies that there is no significant difference between the responses of the two groups. The information from demographic background shows that 45% of teachers had greater than 17 periods per weeks. This, therefore, reveals that high workload of teachers the major factors that encounter continuous assessment.

With respect to the other factor, which deals with large class size, the calculated weighted mean value 4.25 of the two groups mean value (4.38 and 4.13) is rated as agreement or highest factor for implementing continuous assessment. However, the calculated t-value (1.57) is less than the table value (1.98) and the P- value (0.53) is greater than the t-critics (0.05). This implies that there is a no significant difference between the two groups of respondents. This,

therefore, reveals that large classes size the major factors that encounter continuous assessment. Furthermore, the study by (Kapambwe, 2010) [7] supported large class size is one the major problem to implement continuous assessment in the effective and sufficient way.

As it can be described With respect to the other factor, in item 3 of table 5, respondents were asked to indicate their level of agreement regarding the lack of a pedagogical center. Leaders and teachers with 3.35 and 3.17 mean scores were obtained with (3.26) mean respectively that indicated that they were undecided. In short, lack of a pedagogical center may or may not hinder the implementation of continuous assessment. The calculated t-test result (-.630) was found less than the table value (1.98) at (P (0.530) >0.05) level of significant with 98 degree of freedom revealed that there is no significant difference among the two groups of respondents regarding the issue. Therefore, it is difficult to conclude whether lack of a pedagogical center could be factor implementation of continuous assessment in Jimma Zone.

With respect to the other factor, in item 4 of table 5, respondents were asked to indicate their level of agreement regarding time constraint. Leaders and teachers with 3.62 and

3.56 mean scores were obtained with (3.59) mean respectively that indicated that they agreed highly. In short, time constraint is also a major factor that hinders the implementation of continuous assessment. The calculated t-test result (-.196) was found less than the table value (1.98) at $(P(0.845) > 0.05)$ level of significant with 98 degree of freedom revealed that there is no significant difference among the two groups of respondents regarding the issue.

On the other hand, lack of resource in the school is rated as a highly affecting factor for implementing continuous assessment. The response from teachers and leaders with mean values of (3.73 and 4.06) and weighted mean value (3.89) shows as the evidence. The computed t value (-1.413) also confirmed as there is no significant difference between the two groups of respondents on the issue. Tinning (2006, p.243) concurs that teaching physical activities outdoors offers special challenges that are often not faced in the classroom. "However, most school principals consider Physical education equipment and facilities to be very expensive to buy and to maintain. As Siedentop (1990, p.257) says, "Support for physical education often crumbles at the first sign of financial problems in a local school district."

For implementing continuous assessment the other factor is the overlapping of different programs with plan is also rated as an undecided effective. This is due to the average weighted mean result of 2.82 obtained from the two group respondents mean values of 2.73 and 2.92. The t-test result of the t-value (-.729) is below the table value (1.98) at $(P(.468) > 0.05)$ with degree of freedom 98 confirms that there is no statistically significant difference between the responses from teachers and leaders. According to (Gobena, 2014) [5]

Assessment in education is a challenge for students and teaching staff alike, Students frequently find themselves forced to leap-frog across what can seem like countless assessment hurdles in the course of their training.

Conclusion

This study shows that

- Most school leaders and teachers need training regarding on how to conduct continuous assessment.
- Due to some problems related to school factors and other factors (lack of school infrastructure, clear instruction on continuous assessment, lack of follow up and support from school supervisors) the implementation of continuous assessment is low.
- Regarding the factors hindering the implementation of continuous assessment in physical education class, all the teachers experienced problems with the large number of students per class.
- Teachers' teaching overload, lack of resources, lack of awareness, time constraints in physical education class were also identified as the most impeding factors to implementing continuous assessment during physical education class.

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