Effectiveness Of Unified Approach in Practical Research Through Contextualization

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ABSTRACT

This quasi-experimental study highlights the effectiveness of unified approach in Practical Research through contextualization in Don Sergio Osmeña Sr. Memorial National High School Grade 11 students. Most of these students appear are required to take the required applied subjects but in a closer examination they are slow in the development of cognitive skills especially in research concepts. A control group is taught, tested and retested the same using the conventional lecture method and without emphasis on contextualization at the same time as the experimental group. Results showed that there are no significant differences on their achievement scores and context related problems with research-oriented and regular students. They are also well inclined at dimension of remembering while least at dimension of creating based on cognitive processes. This suggests that there should be an important value in effective and efficient instruction on the basics of research.

Keywords: Cognitive process, contextualization, research, unified approach,

Introduction

Many trials inhabit the academic area traumatic that instructional actors replace their practices and processes to teaching and learning, reworking and making them more adequate to societies' needs (Bolivar as cited in Mouraz, 2012). This requires, from schools and on the whole teachers, an effort to adapt their work modes and take into account all points associated with students and context. This is in line with a rising thought in academic discourses that seems in a position to respond to those demands: contextualization.

According to Moltz and Mayer (as cited in Moghaddas, 2013) contextualization is a form of "deep learning" which happens through linking ideas and concepts across courses. As far as language teaching is concerned, it refers to placing the target language in a realistic setting to make the learning process meaningful to the students. Referring to the contextual strategy as educational techniques cannot be separated from the context in which they are used. It is believed that contextualization is a promising manner in growing and adapting curricula to meet students and context, without neglecting curricula important aspects and traits however turning them into something comprehensible (Kalchik & Oertle, 2010). The findings revealed contrast in t-test substantiated and confirmed that the contextualization instructing framework had remarkably promoted the learners' performance and superior the participants' information of English in grammar, vocabulary, reading comprehension and writing (Moghaddas, 2013).

Today the conceptual scheme of applied subjects in the senior high school level particularly in Practical Research aims to transform these concepts and competencies of things that will be instrumental in achieving a

positive change in society. Henceforth, the Department of Education issues the enclosed policy on the Learning Action Cell (LAC) which primarily functions as professional learning communities for teachers that will help them improve practice and learner achievement (DepEd, 2016).

Conversely, the concept development from the learning standards in the curriculum reflects progressions by operationalizing the cognitive processes from basic to complex as follows: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating (Anderson & Krathwohl as cited in DepEd, 2015). This is underscored by Perin (2011) wherein the promising direction as a way to improve outcomes for academically unprepared college students was exploring the nature and effectiveness of contextualization. In the same vein, the report of Mediha & Enisa (2014) revealed positive effect when literature was integrated on comparing the traditional and contextualized methods of teaching vocabulary.

The researcher as an academician pictures the progress of learning that over the years our time has been described as a period of fabulous accomplishment. It is a situation that prompted the researcher to find means on how to improve the students' performance especially on the development of 21st century skills which is a central figure of the curriculum.

The Problem

This study aimed to determine the effectiveness of Unified Approach in Practical Research through contextualization. Specifically, it attempted to answer the following research objectives:

1. To determine if there if there is a significant difference between the achievement scores of the experimental group and control group after their exposures to the methods of teaching;
2. To determine if there is a significant difference between context-related problems by research-oriented and regular students; and
3. To identify which of Anderson and Krathwohl's thinking skills do students perform better in their pretest and posttest.

Statement of Hypotheses:

Ho1: There if there is no significant difference between the achievement scores of the experimental group and control group after their exposures to the methods of teaching.

Ho2: There is no significant difference between context-related problems by research-oriented and regular students.

Methodology

The researcher employed the quasi-experimental matching –only design by answering the 50 item performance test in Practical Research 1. The experimental group were exposed the Unified Approach comprising 20 students from GAS- B and GAS-D sections while the control group of 20 students were from STEM- A and STEM- B had experienced the Conventional Lecture Method. Both homogenous groups were purposively sampled and subjected to pretest and posttest through contextualization. This was administered starting February 2018 right after the third grading. The laborious participants were the classroom achievers due to good evidence that they are representatives of the total population of 40.

A table of specification was utilized that covers the concepts of different subject areas with the adapted cognitive process dimensions with the use of descriptive statistics including mean, frequency, percentage, and ranking.

The researcher a validation of the pretest to other classes those were not included in the study. This process determined if the pre-test was administered to the participants were acceptable in content validation and its format. This was also examined by the master teachers and school head in case they would suggest some revisions that would improve the validity of the assessment tool.

Results and Discussion

It can be reflected in Table 1 that there is no significant difference between the achievement scores of students exposed to the Conventional and Unified Approach. Based on the computed t= 1.46 which is lower than the critical value of 2.021 at .05 level of significance.

Table 1: Significant Difference between the Control Group and Experimental Group in Practical Research 1

Groups	Mean	Standard Deviation (SD)	Computed t	Critical value at α=0.05	Decision
Control	34.2	11.64	1.46	2.021	Accept Ho1
Experimental	25.4	24.46			

It appears that the SD of 11.64 of the control group is a heterogeneous score compared to the homogeneity SD of the experimental group. Since the computed t-value is lower than the critical value, the hypothesis of no significant difference is accepted. The data suggest that the groups are half way far from each other's inclination on intellectual abilities when Unified Approach is applied.

Based on Table 2, there is no significant difference between the context- related problems met by research-oriented and non-research oriented in relation to instructional materials.

Table 2: Significant Difference between the Context-Related Problems of the Participants in Relation to Instructional Materials

Research Oriented Students		Regular Students		Pooled Percentage	z-value	Tabular Value @ 5%	Decision
N_1	14	N_2	26	44.999%	-2.20	1.96	Accept HO2
P_1	21.43%	P_2	57.69%				

The computed z value of -2.20 is lower than the critical value tabled 1.96 at 5% level of significance. Among the participants, majority are non-research oriented who are coming from regular class in their junior high with 21.43%. The data suggest that in the absence of audio-visual materials do not hamper the instructional program and other related subjects whether core, applied, and specialized. Since the z-value is lower than the critical value, Ho2 is accepted.

Table 3 shows that among the Cognitive Process Dimensions. It can be noted that the level of remembering ranks first both in pre-test and posttest having 36.49% and 33.19% respectively. Likewise the level of understanding ranks second in both tests since they probably comprehended certain vocabularies along analogies, definitions, synonyms, antonyms, and examples. There is a tie for the level of analyzing. However, it revealed ranked 6 in the pre-test (7.99%) under the category of applying and the dimension of creating for the post-test (7.82%). The data suggest that the cognitive processes are challenging items that need to be mastered by the students.

Table 3: Cognitive Skills using Cognitive Process in their Pre-test and Post-test Performance

Cognitive Process Dimensions	Pre-test				Post-test			
	Correct Responses	Mean	Percent	Rank	Correct Responses	Mean	Percent	Rank
Remembering	343	8.58	36.49	1	386	9.65	33.19	1
Understanding	245	6.13	26.06	2	301	7.53	25.88	2
Applying	75	1.88	7.99	6	123	3.08	10.58	4
Analyzing	116	2.9	12.34	3	160	4	13.76	3
Evaluating	79	1.98	8.40	5	102	2.55	8.77	5
Creating	82	2.05	8.72	4	91	2.28	7.82	6
Overall Rating	**940**	**23.52**	**100**		**1,163**	**29.09**	**100**	

Conclusion and Recommendation

Unified approach through contextualization does not affect intensely the performance of the respondents. A wide range of pedagogical ability can be recompensed by utilizing varied strategies and instructional materials in order to convey and converge on teaching techniques which include careful organization and considering students' readiness towards differentiated instruction. Likewise, relevant activities should be supplemented to enrich the performance standards on concepts of other research related subjects in the senior high school level.

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