PROJECT BASED LEARNING VERSUS CONVENTIONAL LEARNING THROUGH ITS EFFECT ON STUDENTS ACADEMIC ACHIEVEMENT

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Abstract

The purpose of this study was to explore knowledge and skills of diverse and underserved population. In this study two different ways and methods of teaching and learning have been discussed to identify the best one regarding improvement of teaching and learning culture. This study was aimed upon exploration of the gap between teaching, content and technology. Moreover, the study was intended to determine the effective learning technique that is supportive to computational thinking, collaboration among the student. Effectiveness of project based learning in comparison of the conventional learning has been explored through student academic achievement. Therefore, nature of the study was experimental and pre-test or post-test was used. Data was collected from students of public school. Findings revealed that the student need advances learning, and the change of teaching technique as compared to the conventional one yields good results towards students learning.

Keywords. Project based , Conventional , Learning , Students 'Academic Achievement

Introduction

Project-based learning is student-central. Project-based learning does not finish in a predetermined conclusion or take predetermined routes. Project-based learning projects include respectable deal with peers and student independence, unsubstantiated time and accountability for jobs as opposed to conventional preparation and traditional projects. Projects individuality is embodied, which offers students legitimacy. These features may include the subject, it includes that students perform; the situation within the project's work involves partners who work on the project with students. Project-based learning (PBL) encompasses real-life challenges where genuine problems or questions are the focus of attention and where solutions can be applied.

In project-based learning, tasks that allow students to incorporate the expertise and skills they acquire are the core of the program, rather than being introduced towards the conclusion of conventional teaching as a complement. The whole project-based learning process is sorted around an open-ended driving inquiry used by instructors to interface the substance with existing and appropriate concerns or problems. Via this process, understudies create their own investigations to motivate learning, research thoughts and facts that lead to those investigations, and apply that fact to things they create Thomas(2000).

PBL energizes increasingly thorough learning since it expects Understudies play a working role in gathering ideas and content, and it empowers them to learn skills of the 21st century that foster a painful curiosity and strive for knowledge. Since understudies can extend homeroom substance to real wonders, PBL also promotes professional research, use of creativity, dedication to understudies, network partnerships, and importance of substance (Blumenfeld, Soloway, Marx, Krajcik, Guzdial, & Palincsar, 1991; The Buck Institute for Education, 2012).

Conventional learning a means of sustaining the learning experience. Other ways of learning consider this to be a lesser amount of efficiency. Universities merge study, science, teaching and advanced learning with a proud heritage (Petrosino, 1998). Conventional learning has a more probability students to assemble their topics and discuss issues with them. This theoretical paradigm addresses this question by comparing the features of conventional learning with project-based learning (PBL) system in glow of their capacity to create best possible student learning. Much of these experiments are focused on theoretical foundations such as constructivism, social interdependence, cooperative learning and situated learning (ChanLin, 2008). Recent literature has paying attention on through empirical observation representing that student learning results from project-based learning is not superior to student learning results from a conventional learning system.

Conventional learning is the most popular teaching activity seen in schools worldwide is traditional, teacher-centered teaching and lecturing. Teacher-centric teaching can be very successful, especially for sharing knowledge that is not easily found elsewhere, informing quickly, informing interest and teaching learners who learn best by listening. The main stream of education is still HE traditional teaching style of a teacher with chalk in front of a classroom. During recent years, however, different modes of distance education have drawn attention from educators.

In conventional learning an instructor is interested in traditional schooling, a brick-and-mortar building (Commonly a school) and a number of students gathered at this. A place to learn from the teacher during different times of the day. It also includes paper-based assignments and examinations. Teachers and students are generally in the same room and in general learning. The planned time for the school / college of education. The instructor is thoroughly overseeing the learning cycle, the class tasks (Sholeh, 2019).

Research Design and Methodology:

This study was drawn through Quasi-experimental to analyze the effective learning techniques through student academic achievement. In a pretest-posttest method, the dependent variable was calculated both before and after the procedure is applied.

The researcher used multi-stage sampling as the researcher randomly picked the school and determined the population. For the sample size, the investigator used convenience sampling and selected one Public School and afterwards it grade six only. The researcher developed the pre-test and post-test for the student to check the effectiveness of the project-based learning. To fulfill this assumption researcher validated the instrument by three experts. Data was obtained from the students of selected schools by performing the pre-test and post-test. The informed consent of the participants was received.

Table 1: Percentage of Pre-Test Examination results of Grade Six

Grade Six	Percentage % of Pre-Test of Grade six
91-100%	0
81-90%	0
71-80%	1
61-70%	2
51-60%	7
41-50%	15
Below 40 %	33

As per table the conventional method of teaching results shows that no one student lies in 81 to 100 % of the marks results. at 71-80 %, one student, 61-70 %, 2 students, 51-60 %, 7 students, 41-50 % 15 students and below 40% 33 students lies respectively out of 58 students.

Figure; shows that the performance level of students on pre-test examination of grade six in Govt. Comprehensive Model High School Samnabad Faisalabad who were examined. The majority of the students 57 % had achieved below 40 % marks, 26 % students had achieved 41-50 % marks, 12 % students had achieved 51-60 % of the marks, 3 % students had achieved 61-70 % marks, 2 % students had achieved 71-80 % marks, and there are no students achieved 81 to 100 % marks respectively. These results show deprived performance of the students in a conventional method of teaching. Advance learning and teaching are need for these students.
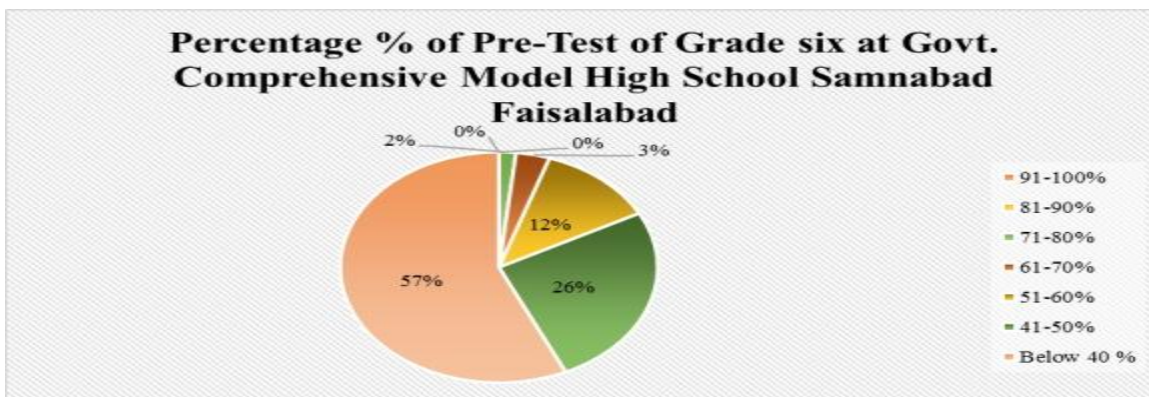

Table 2: Percentage of Post-Test Examination results of Grade Six

Grade Six	Percentage % of Post-Test of Grade Six
91-100%	3
81-90%	11
71-80%	18
61-70%	20

51-60%	5
41-50%	1
Below 40 %	0

As per table by the Project based learning method of teaching results shows that no one student lies in below 40% of the marks results at 41 to 50 %, one student ,51-60 %,5 students, 61-70 %,20 students, 71-80 %,18 students, 81-90 %,11 students and 91-100% 3 students lies respectively out of 58 students.

Figure; shows that the performance level of students on post-test examination of Garde six in Govt. Comprehensive Model High School Samnabad Faisalabad who were examined. The majority of the students 34 % had achieved 61-70 % marks, 31 % students had achieved 71-80 % marks, 19 % students had achieved 81-90 % of the marks, 9 % students had achieved 51-60% marks, 5 % students had achieved 91-100 % marks, 2% students had achieved 41-50% marks and there are no students lies below 40% marks respectively. The students improved their performances after implementation of project-based learning method of teaching. Advance learning helped them to improved academic results.
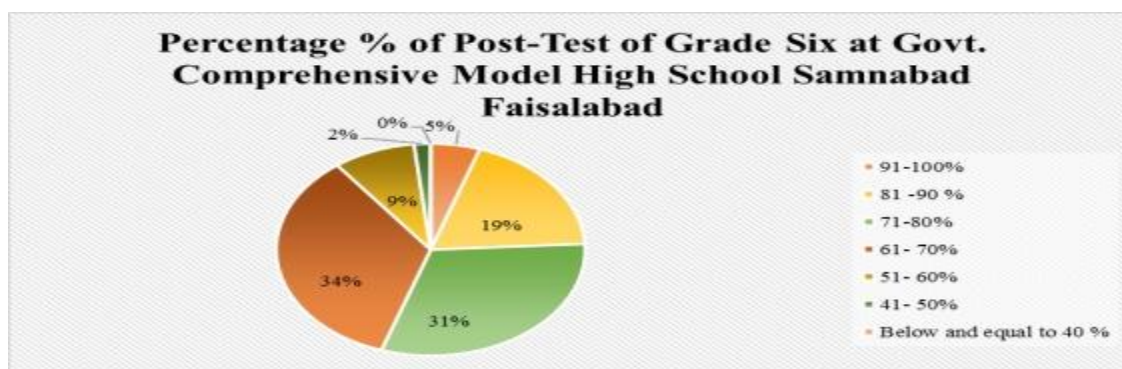
Conclusions:

This research was based on selecting students from grade 6and Pretest and protest were conducted with them. Result compression shows that students need some class activities, motivation and collaboration among students as well as with teacher. After conduct some activities with the help of technology the academic record gives effective results.

The result shows the Conventional method of teaching   focus on rote learning that teachers just deliver the lecture rather than to explain the topics in detail. Project-based learning method of teaching supports them to recognize the complex problems and to generate a new concept. It also increases critical thinking, computational skills and aware how to manage time.

Recommendations:

The following guidelines for future studies are in line with the results and discussion: a meeting must be conduct for principal of different sector in which there will be training of advances learning method of teaching and technology which used in classroom. Teacher should arrange

group activities in classroom for collaboration among the students to make the record effective. A teacher should plan topics of the subject in such a way that it removes gaps between content and technology. Similar research should conduct in primary or secondary schools with the government and private schools' comparison so that we will able to compare the effectiveness of project-based learning in two dimensions context. This study is not only sufficient for interpreting data processing, data obtained from the pre-test or post-test often amplifies the various methods to figure out the research, such as pre-survey or post-survey. The Future researchers will also wonder that there a large difference between content and technology training.

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