

Relation between Teaching Methods Versus Academic Achievement of Students

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ABSTRACT— The objective of the investigation was to examine the relation between teaching methods/approaches and the academic achievements taken by the students. The goals of the study were to clarify the relation between Single-Subject and multi-subjects teaching methods and students' academic success. The respondents of the study were fifty students of 5th class and 20 teachers of Primary Schools. While the effects of these teaching approaches on students were assessed by carrying out pre- and post-tests. The answers of teachers were assessed through Mean and standard deviation while students' performances were appraised using Wilcoxon signed-rank test. The findings of the study depicted that single-subjects-teaching have positive but not meaningful relationship to the academic success of students while multi-subject-teaching approach had significant and positive relationship to the academic success of students. It was suggested that the present approach of multi-subject-teaching should be continued with some adaptations and more trainings should be organized to provide teachers with increased teaching knowledge.

KEYWORDS: Single-subject, Multi-subject, students' academic achievement, effectiveness

Introduction

According to Akinbute (2007), primary school years are the most significant years for all students. Student are impart with basic knowledge at this level. The education and wisdom of primary education provide base for future education. The education quality can be weighed through the quality of elementary education. The productivity and inefficiency of education depends on the fundamental education, if at primary level productive knowledge and training are supplied to the students they can easily finish their secondary and higher education. Hence, the standard of elementary or primary education is very important which can be improved through the quality of teachers and their educating way. It is therefore essential to enhance all directions of primary education that is teachers' qualification, pedagogical knowledge through coherent trainings and refreshing courses, school equipment's and all others that facilitate primary education. The major objective of primary education is to recognize the interest, ability and capabilities of the students for further planning and also to inspire them for school life. This level of education imparts fundamental life skills; communication, reading, writing, and basic mathematics (Phelps & Ball, Thames., 2008-2009). Traditional system of learning and education in Pakistan is divided into three main stages that is elementary, secondary and higher education. Every stage of education is significant and requires specific strategy and mechanism to be adopted to provide the requirements of the related stage. The mechanism of teaching at all levels is distinctive because of the need and intellectual stage and level of the students. Teacher is considered as all-rounder generalist at primary level in elementary or primary stage of education. They educate all subjects that include mathematics, languages, science, theology and all other related subjects which are educated at primary level. Teaching all subjects is somewhat difficult if not impossible. In addition to that the teaching of a subject requires expertise, as an expert teacher teaching will be completely different from that of an inexperienced teacher, while the skills or expertise teacher in all concerned subjects are too difficult. It deflects teacher's focus. This influences his/her Efficiency and performance. Research surveys indicate that it is difficult to teach multi subjects. Fennel and Rays (2003) recommend that it is unworkable to have expertise of a teacher in all related subjects. There are two main approaches which are applied at primary level. Those two approaches are single-subject and multi-subject approach. In single subject teaching approach one teacher teaches only one subject while in multi-subject teaching one teacher teaches all the subjects of one class. Both these approaches have their own merits and demerits. Shulman (1987) reasons on teacher knowledge; content knowledge, general pedagogical knowledge, curriculum knowledge and pedagogical content knowledge are the most important areas for teaching purposes. It is the use of teaching knowledge which increased the productivity of teaching learning process. Situation. Single-subject teaching imparts purified and valid knowledge to students. This approach enhance students' capacity of adjustment to different teachers' methodology, attitude and learn more than multi subject teaching. There are certain needs of single subject-teaching for example the selection of subject specialists, arrange of separate subject trainings and Division of time in school. Single-subject teaching has numerous problems at primary level. First of all because of financial load it is difficult for a developing country to appoint separate teachers for separate divide the teachers in two ways; first the teacher will separate from other teachers, teaching

separate subjects, they will stick to a specific subject which will keep them away of others subjects which may a bad effect on their professional knowledge. Multi-subject teaching is currently prevailed. According to government officials it is the most effective approach at primary level as there is no need of expert knowledge at primary level a PST is able to impart the basic knowledge to children. Their training and academic education is enough for them to teach effectively. But there is need of research studies to assess the value and worth of both approaches. The possibilities of single subject teaching at primary level and its complications will be studies in detail and it will be co-relate to the academic achievements of the students.

1.1. Statement of The Problem Keeping in view the above discussion the purpose of the study was to investigate the relationship between teaching approaches and students' academic achievement.

1.2. Objectives of the study Objectives of the study were to;

1. Investigate the relationship between teaching approaches and students' academic achievement
2. Probe the relationship between single subject teaching approach and students' academic achievement.
3. Explore the relationship between multi subject teaching approach and students' academic achievement.
4. Compare the effectiveness of single-subject and multi-subject teaching approaches for students' academic achievement.

1.3. Significance of the study

The study was significant in clearing the ambiguity related the effectiveness of these two teaching approaches. It may also be significant to Directorate of primary education for making decision about these approaches. The study may further be significant for unite writers and future researchers. The study is further fruitful to planning commission, administrators, and teachers, unite writers and future researchers.

1.4. Hypotheses

1. There is no significant relationship between teaching approaches and students' academic achievement.
2. There is no significant relationship between single-subject teaching approach and students' academic achievement.
3. There is no significant relationship between multi-subject teaching approach and students' academic achievement.
4. There is no significant difference between in the effects of single-subject and multi-subject teaching on students' academic achievements.

1.5. Delimitation of the study the study was delimited to;

- i. Primary school level.
- ii. 5th class students of primary schools.
- iii. Subject of English

Methodology

The study was carried through mixed method research. An experiment was lunched; a pretest was prepared for the students being taught in both approaches. The researcher applied pre-test, post-test comparison group design. A survey was also carried out to investigate teacher's point of view

Regarding these teaching approaches. A self-developed questionnaire was applied for the purpose.

1. Population

5th class students and Primary School Teachers constituted population of the study.

2. Sample of the Study Nonrandom purposive sampling techniques were applied for selection of schools. Two primary schools were selected for the study. One school adopted single-subjects teaching approaches while the other had multi-subject approach. Twenty five students each of 5th class constituted the sample of the study.

3. Data Collection Tool For collection of data about the research problem, researcher administered pretest to students before the treatment and at the end of the treatment posttest was applied. The researcher also administered a self-developed questionnaire to twenty Primary School Teachers for the purpose to know their view regarding these two approaches.

4. Scoring the Teacher's Instrument

The Mean Score= 1.00 --- 1.50 = Strongly Disagree

The Mean Score=1.51---2.50 = Disagree

The Mean Score= 2.51--- 3.50= Undecided

The Mean Score= 3.51--- 4.50= Agree

The Mean Score= 4.51--- 5.00= Strongly Agree

Results and interpretations

This approach was found to be more beneficial for teacher's development. The respondents were not clear in the area of students' adjustment that whether students are more adjusted in this approach or not. Multi-subject teaching approach was not an effective approach for teaching at primary. While the mean score for the learning of students, teachers' professional development and student's adjustment showed that majority of the respondents were agreed to the statements of the questionnaire. The mean score of students under Single-Subject teaching approach in pre-test was 27.60 while after post-test the mean score was 33.68 which showed a slight increase of 6.08 in students score. On the other hand the mean score of students under Multi-Subject teaching approach in pre-test was 12.68 and after the post-test this score was 26.67 which demonstrated an increase of 13.99 mean which

is very high and shot the effectiveness of the Multi-Subject teaching approach for primary school students. A Wilcoxon signed-rank test showed that one month teaching on two different teaching approaches to students did not elicit a statistically significant change on the academic achievements of students ($Z = -3.792, p = 0.05$)

Findings

Findings of the study were as follow:

1. Single subject teaching approach is more effective for primary school students. This approach provides more knowledge to students.
2. Single subject teaching approach increase students' adjustment capabilities and are also beneficial for teacher's professional development.
3. Single subject teaching approach is comfortable in comparison to multi subject teaching approach as there is free time for teacher not only to repair himself for next class but also for refreshment.
4. Multi-subject teaching approach is not an effective approach for primary school students. It Burdens the teacher and not provides time for preparation and refreshment.
5. Multi-subject teaching approach provides improved knowledge to students and is highly appreciable for teacher's professional development.
6. Students are more adjective in single-subject teaching approach than the multi-subject teaching approach.
7. The performances of students were better in multi-subject teaching approach than the single subject teaching approach.

Discussions

Single-subject teaching approach is a new approach at primary level. In this approach one teacher teaches only one subject and he/she is expert in that subject. This approach is already applied at secondary and high secondary level. At present multi-subject teaching approach is there at primary level. One teacher teaches all the subjects. This approach is the most popular at primary level and nearly in all the countries of the world it has been followed. It is because of the integrated curriculum at primary level. Findings according to the questionnaire of the study teacher's liked the single-subject teaching approach as it reduce their work and increase time for preparation and refreshment. This approach is also beneficial for students as it increase their adjective capabilities but due to financial constraints, shortage of trained teachers, low level of teachers trainings and other local problems the implementation of single-subject teaching in its true sense is difficult. On the other hand the results of the of students on pre and post-test administered were different which favored multi-subject teaching approach as the students of that approach performed well than the single subject teaching approach.

Recommendations

The above findings and discussions illustrate the gaps in single-subject and multi-subject approaches for which the researcher suggested following recommendations.

1. Present Multi-Subject teaching approach overloaded the teachers and they are in favor of single-subject teaching approach which will help them in their teaching, yet this is a difficult task and need a great number of teachers' appointments which is difficult for the government to finance. So it is recommended that the present staff of primary schools should be scrutinized and categorized to allot subjects according to their specialties with refresh training in the summer vocations.
2. Students learn more in an integrated way with multi-subject teaching approach where teachers have more background knowledge of students which helps the teacher to teach accordingly. So it is strongly recommended that in single-subject teaching approach an induction program at the start of the session should be lunched through most experience teacher to obtain students background knowledge.
3. Teacher's in-service trainings are the secrets of teacher's professional development. It provides an opportunity for teachers to refresh their knowledge according to new research findings and new trends of the society. So it is strongly recommended that the in-service trainings for teachers should be arranged at least within two years duration in two main areas of teaching that are teaching methodologies and subject matter.
4. Adjustment and other qualities of the students are developed by their teachers. The changing nature of human needs and new trends indulge teachers as well as students in new complexities which needs research mindedness. So the researcher recommends that teachers should be motivate for conducting research studies in their respective fields which will not only help them in solving their own and students problems but will also develop them professionally.

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