EFFECTIVENESS OF INTERACTIVE TEACHING METHODS FOR FOSTERING STUDENTS MOTIVATION TO LEARN IN IMPLEMENTING "STANDARD-BASED-EDUCATION" IN SINDH

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ABSTRACT
This paper reports a quantitative research, to study Effects of Interactive Teaching Methods in fostering Students Motivation to learn at secondary school level. The research was framed in accordance the behavioral perspective. Direct or formal observation by using motivational inventory was used as main method for data collection. Only X graders students were taken as population. Two groups of Classroom size were selected randomly from the population as sample then randomized in the two groups. Obtained data was analyzed quantitatively by employing SPSS. ANOVA was the selected statistic for making inferences. It was found that interactive teaching methods played a vital role in fostering students' motivation for learning in and outside the class as they stimulated students' curiosity and used their interest. On the other hand, traditional teaching methods did not have any opportunity or potential inspiration that might foster students' motivation as the methods did not let them work independently and interact with other students. The data suggests that interactive methods have more opportunities of using motivational strategies for fostering students' motivation for learning that teacher can use in the classroom than the traditional one.

KEYWORDS
Standard-Based-Education, Interactive teaching methods, Traditional teaching methods, Motivation for learning, Motivation Fostering and ANOVA

INTRODUCTION

Teaching-learning in school system is the core process. Whole progress of the education system depends on its effectiveness. The process progresses in the class through curriculum and teaching methods. Traditionally teaching methods were not considered so crucial for imparting education and learner was not placed at the center of education system. Modern education placed the learner at center position for developing any education system. In result, the nature of education system and its components; curriculum, teaching methods, content, assessment etc. has got changed and are set around learner.

Traditional Teaching Methods or Practicing Ones

Traditional teaching methods make the classroom teaching uninteresting, teacher-cantered and content based. Abrahamson (1992) said, even the most lucid and brilliant lecture lack the interest, motivation, or desire to expend the mental effort to follow the presentation, understand the arguments, make sense of the positions, and validate the inferences.

Interactive Teaching Methods

Interactive teaching methods make the classroom teaching interesting, student centered and activity based. Students learn by; doing, making, writing, designing, creating, and solving. Pose questions, encourage students to suggest approaches to solve a problem or to guess the results of an experiment. Passivity dampens students' motivation and curiosity (Abrahamson, 1992). To Work in group, to meet with friends, to plan with friends, to share with friends are the things those are inherited in every individual. He or she enjoys these phenomena in interactive teaching methods. In this approach learners satisfy their intellectual, social, emotional needs.

Motivation

Motivation is considered the most important factor that educators target in order to improve learning. Gredler, Broussard &Garrison (2004) broadly define motivation as "the attribute that moves us to do or not to do something". Intrinsic motivation is combination of personal enjoyment, interest, or pleasure. Some theories claim that people are motivated by extrinsic motives like material rewards, desire to increase their power and prestige in the world, interesting work, enriched environments, recognition, or being respected as an individual (Williams and Williams, 2011). In school all students are different in knowledge, skill and attitude, they like things differently; some of them prefers monetary benefits while other one wants appreciation and honor. When an educator relies on any one of the motivation type to accomplish his or her teachings in result he or she will not find appropriate outcomes. Extrinsic and intrinsic motivation is interdependent as well therefore it is equally desirable to address both in order to attract and retain student towards learning.

The study was conducted in classroom setting to collect facts inductively from the class. Researcher hopes that the findings are helpful in presenting empirical implications to improve program for teachers' professional development at the time of planning. Use of methods to foster students motivation in classroom teaching contributes greatly. It saves teachers time and facilitates learners in learning new concepts as well as makes classroom congenial place where learner enjoys instead of being boredom. The study will contribute to the local as well as international empirical literature. The findings are significantly useful for the given stake holders in order to bring educational reforms at all levels of education system in Pakistan:

- Instructors / Teachers,
- Organizations
- Administration
- Curriculum developers and
- Researchers

LITERATURE REVIEW

Interactive teaching is not something new or mysterious. Basically interactive teaching is just giving students something to do, getting back what they have done, and then assimilating it him or herself, so that he /she can decide what would be best to do next (Abrahamson, 1992).

Interactive Teaching Methods as a Strategy for Fostering Motivation

Interactive teaching methods play vital role in increasing and maintaining students' motivation. Student motivation is increased when they are taught through interactive teaching methods (Bonwell, 1991). The methods were students-centered and activity based so there were many reasons for students' motivation. The anticipation of immediate feedback in the form of reaction from their peers, or from the teacher is a very strong motivator (Abrahamson, 1992).

Several strategies are recommended for educators interested in supporting students' motivation, including the limited use of rewards, using rewards to provide information about competence and using collaborative or cooperative learning methods (Deci et al., 1999; Guthrie, 2000; Hidi and Harackiewicz, 2000; Pintrich, 2003; Stipek, 1996; Turner, 1995).

The classroom environment is another method for improving-students' motivation, which includes goal orientations and attributions. Stipek (1996) observes that classroom environments stimulate students to hold mastery of the skill or to achieve learning goals. Student engagement is associated with students' motivation to learn (Aelterman et al. 2012). Motivation contributes significantly in the interest and enjoyment of study (Martin, 2003).

RESEARCH OBJECTIVE

1. To compare effectiveness of two different teaching methods for fostering students' motivation for learning

RESEARCH QUESTION

1. Do interactive teaching methods foster students' motivation for learning more effectively than traditional teaching methods in Implementation of "Standard-Based-Education?

RESEARCH HYPOTHESES

Use of interactive teaching methods is an effective approach for fostering students' motivation than use of traditional teaching methods in Implementation of "Standard-Based-Education.

RESEARCH METHODOLOGY

All Government secondary school students in Hyderabad district who were enrolled in Board of Intermediate and Secondary Education Hyderabad and had passed their Ninth grade examination were the population for the study. Researcher selected the sample from the boys only for conducting the study to obtain the empirical data. Researcher used chance procedure in selecting the sample and assigning the groups. Multiple Probability Techniques are the adopted sampling technique (Teddlie, 2007). Randomization attained the possible inclusion of each population element using chance only. He selected 80 students randomly from the determined population then randomized them into two groups; experimental and control from the 26689 population of students. The population was large in size and known. As research instrument, Researcher developed Observation inventory of students' Motivation for learning to measure their attitude in the class. It was based on the factors influence motivation; good teacher-learner relationships, good learner-learner relationships, self-confidence, experience of success and feeling of satisfaction identified by D'Cruz, et al (2001). In an experimental study, Researcher administered the inventory to both groups to collect the evidences of their motivation for learning for forty-five minutes daily throughout the experiment. Control group was taught through traditional teaching methods and experimental with interactive teaching methods.

Two observers observed the classroom teachings of each group simultaneously for 78 days and collected empirical evidence of their motivation for learning by marking the tallies on the inventory. Mean of these two observers' scores were used for analyzing the data of their motivation for learning. Data was obtained through the motivation inventory for classroom observation with help of tallies**.** Credibility of the instrument was maintained by obtaining coefficient of reliability .977and coefficient of validity.963.Descriptive statistics was used to convert the wordy data into numerical

in order to make it measurable statistically then analyzed by employing ANOVA to make credible inferences and presented to explore the underlying facts and making useful prediction about the population.

RESEARCH FINDINGS & DISCUSSION

Table 1

Difference of Effectiveness of Teaching Methods Used for Fostering Students Motivation for Learning

ANOVA

Sources of variance	Sum of Squares	df	Mean Square	F	Sig.
(01)	(02)	(03)	(04)	(05)	(06)
Between Groups	419485.612	1	419485.612	2341.269	.000
Within Groups	13975.275	78	179.170		
Total	433460.887	79			

The table represents results of Analysis of Variance (ANOVA) for testing Hypothesis. Use of interactive teaching methods is an effective approach for fostering students' motivation than use of traditional teaching methods in Implementation of "Standard-Based-Education.

In this regard, Column 01 of the table shows groups of the study as the three sources of variance; between groups' variance, within group's variance and sum of the both variances. In the first row of the column 01, Between Groups is shown and Within Groups in its second row, then their total in the last row of the column to understand the statistics of the test easily. Column 02 contains sum of squares for each row of the column. The "Sum of squares" is total variance of the groups' data. In the column 02, the value 419485.612 shows between groups' variance, the value 13975.275 shows within groups' variance and the value 433460.887 is presented in the last row of the column as sum of these two variances. Column 03 represents degrees of freedom, in first row, for between groups analysis, the degree of freedom is 1 as there are only two groups so the degrees of freedom for between groups variance is (g-1) = (2-1) =1. In second row for within groups variance, there are two groups and each group has forty participants so the calculations of degrees of freedom are (n-1) + (n-1) = (40-1) + (40-1) = 78 and total of both rows is 79shown in the last of the column. Column 04 shows mean square that is obtained by dividing between groups and within groups' sum of squares by their respective degrees of freedom. In row first, the value of mean square i.e. 419485.612 is obtained by dividing the between groups sum of squares by its degree freedom i.e. 419485.612 /1, and in second row the value of mean square i.e. 179.170 is obtained by dividing within group sum of squares by its degree of freedom

i.e. 13975.275 /78. The value of "mean square" within group is error term for the F-ratio. Column 05 contains F-ratio obtained by dividing "mean square" between groups by "mean square" within group i.e. 419485.612/179.170. Obtained F ratio is 2341.269. The obtained F-ratio (highlighted value in column 5) is significant enough that suggests, the obtained findings are significantly valid. Column 06 determines the level of significance of the obtained results statistically.

P-Value is 0.00 (highlighted value) in Column 06 which expresses the obtained findings are significant enough to accept the alternative hypothesis so null hypothesis is rejected.

The table explains between groups variance is higher than the within group variance that reveals that minimum sampling error exists in the groups and the groups are statistically equal. The effects of treatment are significant to predict the behavior of population and impact of interactive teaching methods for fostering students' motivation for learning in implementing Standard-Based-Education. Thus the alternative hypothesis has been accepted that Use of interactive teaching methods is an effective approach for fostering students' motivation than use of traditional teaching methods in Implementation of "Standard-Based-Education.

By adopting appropriate teaching behavior while teaching students through interactive teaching methods, teacher was able to foster motivation by developing; good Teacher-Students-Relationships, and Student-Student- Relationships. His motivation strategies helped him in developing students' Self-confidence. By recognizing their efforts and appreciation he provided them many opportunities of experiencing their Success. The experience-of-success was proved very strong stimulus for getting them motivated for learning inside or outside the classroom. Verbal rewards (such as praise or performance feedback) enhance the intrinsic motivation of students. However, negative performance feedback significantly reduces intrinsic motivation for both groups of students. Moreover, even positive feedback, if administered in a harsh tone, can diminish intrinsic motivation (Deci et al, 1999).

Researcher conducted direct observation as an assessment tool for motivation throughout the experiment. He assigned two observers to observe students constantly when they worked. They used an observation inventory to collect Subjects' Nonverbal communication; such as inattention, looks of frustration, interest, motivation, and other cues gave researcher/observers greater insight than their verbal feedback. The observation inventory contained several items for the construct of motivation for learning. Inter-Item homogeneity of the inventory were estimated .963 through Cronbach's Alpha coefficient so the items of the test were more than 96% homogeneous. He analyzed the hypothesis by employing One-Way ANOVA. The

control group obtained smaller means i.e.114.8 was taught through traditional teaching methods and the experimental group higher means i.e.259.6 was taught through interactive teaching methods. The difference of the mean scores 114.8 deduced the significant effects of treatment on sample and predict the behavior of population about impact of interactive teaching methods on students' motivation for learning in implementing Standard-Based-Education.

The obtained inferential statistics the effects of treatment are significant to predict the behavior of population and impact of interactive teaching methods in fostering the motivation by accepting the alternative hypothesis that is Use of interactive teaching methods is an effective approach for fostering students' motivation than use of traditional teaching methods in Implementation of "Standard-Based-Education.

RECOMMENDATIONS

It is concluded that the traditional methods are quite unable to foster students' motivation on the other hand interactive teaching methods significantly effective in fostering, maintaining and increasing students' motivation. Students-centered and activity-based methods provide students many opportunities of interaction with students, environment and content that stimulates students' interest, curiosity and enthusiast so there were many reasons of their motivation. Student motivation is increased when they are taught through interactive teaching methods (Bonwell, 1991).

1. Teacher should adopt Proper teaching behavior by showing students that he/she cares about them; by establishing good rapport with students; by showing his / her enthusiasm for teaching.
2. Teacher should recognize students' effort by recognizing their work and achievement; by Monitoring their' progress and celebrating their success; by making sure fair assessment and grade reflect students' effort and hard work
3. Teacher should promote learners' self-confidence by providing students with positive feedback; by teaching them learning techniques; by encouraging students to try harder; by designing tasks that are within the students' ability.
4. Teacher should make classroom environment pleasant, supportive that may break their hesitation; by bringing and encouraging humor in the class; by avoiding social and ethnic comparison; by using a short and interesting opening activity to start each class that stimulated their curiosity also
5. Teacher should present students tasks properly by giving clear instructions, and by modeling; by giving them good reasons regarding the importance of the particular task.
6. Teacher should promote group cohesiveness and group norms by explaining the importance of the class rules; by allowing them to suggest class rules; by encouraging them to share personal experiences, opinions and thoughts.

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