

IMPROVING TRENDS OF TEACHING METHODS USED IN THE CONCEPT SCHOOLS OF KARACHI: AN EVALUATIVE STUDY

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ABSTRACT

The present paper attempted to evaluate the improving trends of teaching methods by examining their impact on the learning concepts and perception of students of the Concept Schools located in the Baldia Town, Karachi Pakistan. For this purpose, three research questions were formulated; 1) what sorts of teaching methods have been used for the students during the period of 2008 to 2012?; 2) What was the impact of these teaching methods on the learning concepts of the students?; 3) How do students perceive these teaching methods used in their classroom? To answer these questions, a checklist was used to examine the improvement made in teaching methods during 2008 to 2012. In order to examine the impact of teaching methods on students' learning concepts, students of grade 8 were equally divided into two groups. Innovative teaching methods were used for group one and traditional teaching methods were used for second group to teach English subject. Their ability to learn concepts of English subject was evaluated by taking into account their performance in test conducted after one month. Their perception regarding teaching methods was checked through a question given to each student of both groups. Statistical analysis of the data reveals that students who were taught through innovative teaching methodologies performed good on conceptual paper than those who attended by traditional teaching methods. Most of the students perceived innovative teaching methods as good, whereas most of the students from control group perceived traditional teaching methods as un-satisfactory. This research has several implications for school administration and teaching staff.

Keywords: Improvements, teaching methods, students, innovative, concepts, perception, school

INTRODUCTION

It is said that lesson itself is not interesting; in fact, it is teacher who makes the lesson enjoyable using various teaching methods that fascinate the students. Teaching methods used in the class have imperative role in learning and producing skilled and knowledgeable students. In Pakistani schools, two types of teaching methods are being used; innovative and traditional. In most of the schools, especially located in low-privileged areas, students are still attended by traditional teaching methods which are impeding their intellectual growth. On the other hand, innovative teaching methods facilitate the intellectual growth by developing critical thinking and creativity.

Previous researches have proved the significant impact of teaching methods on academic performance of the students. Students who were given instructions in modern teaching methods significantly secured higher mark in their subject tests as compare to those who were taught their lesson in conventional way (Khurshid & Ansari, 2012). Students not only learn the lesson effectively but activity based knowledge further enhance their ability to solve real life problems, and enrich their understanding at highest level (Boud & Feletti, 1997). In

another study, Doyle (1993) found that variety of ways used for information processing influence the learning than using direct way of studying curriculum.

Students' achievement in academics largely depends on how teachers behave in their class. Structured and planned activities proved to be more effective than routine and conventional methods. Students' perception of teaching methodologies being used with them also counts a lot. Satisfaction the students gain from their teachers during class enhances their interest in academic activities. Students are deemed as best judge of evaluating teaching methods. A research has been done by Sajjad (n.d) on teaching methods used with students at graduate level. It was suggested that teaching methods need to be improved by considering the students' perception regarding that. Students can rate the different methods of teaching effectively.

Considering this, the present study has been designed to evaluate the improving trends of teaching methods used in the Concept Schools by finding answers of the following research questions;

1. What sorts of teaching methods have been used for the students during the period of 2008 to 2012?
2. What was the impact of these teaching methods on the learning concepts of the students?
3. How do students perceive these teaching methods used in their classroom?

LITERATURE REVIEW

Teaching Methods and Learning Concepts

Mirza (2003) suggested input as the means and resources used to enhance the education system. Inputs include method of teaching and learning. Without effective input, it is not possible to have more output in form of competent and skilled students. According to Nayak and Singh (1997), best scheme of education is converted into bad scheme if teachers handle it badly. Similarly, good teachers and methods can convert bad scheme into good one. Teachers' behaviors are exhibited in terms of teaching methods they use in the class (as cited in Rahman et al, 2011).

Conventional teaching methods are evident to be ineffective for the growth of students (McGee & Howard, 1998). Single teaching method hardly meets the needs of students coming from different background and having different learning questions in their mind. The level of learning cannot be determined until the concepts get cleared to students (Croker & Algina, 1986).

In order to enhance conceptual learning, teachers may use innovative teaching methods with the students of secondary level. For instance; lectures, demonstration, group discussions, creative writing tasks and so on. Lectures are used to impart information on various topics which needs students as active listener (McKeachie & Svinicki, 2006). Problem based learning is another teaching method that can develop concepts of various topics instead of memorizing the learning material (Kumar, 2003). Through discussion in the class, student can identify the learning issues which are essential to have understanding of lesson. Through discussion methods, knowledge is shared, imparted and compared with each other. Students can express their views, opinion and feelings and as well as clarify and pool their knowledge. Teaching aids (audio/video lectures, documentaries, pictures and images, art and craft material) are used as innovative teaching style. Researchers have demonstrated that video based demonstration proved to be effective learning tool for students (Shefton, 2001).

A comparative study was done by Yasmin (1984) to see the impact of inquiry and traditional teaching method for the subject of biological science at high school level in Pakistan. Results showed the effectiveness of inquiry teaching methods over traditional teaching methods in the context of learning the concepts of biological science for the students of high school. Mehmood and Rehman (2011) examined the effectiveness of teaching methodologies used for students of secondary level in Pakistan. Findings of their study reveal that teachers using the methods of query, inquiry, discussion, lectures, giving homework assignments, maintain vigilant contact with students and using audio/visual material to facilitate the comprehension of concepts among students proved them effective teachers at secondary level.

Students' Perception about Teaching Methodologies

Students are the best judge of evaluating the teaching methodologies used in the class. They are directly influenced by variety of techniques used to make the learning easy. According to Murray (1994), evaluation of teaching methods based on students' rating seems to be more reliable, unbiased and useful. Students may show their satisfaction or dissatisfaction with regards to teaching methods because of their learning experiences.

Researches also have been done to evaluate the teaching methods from the perspective of students. In a study, perception and preference of medical and non-medical students regarding the use of different teaching methods (lectures, role playing, videotapes, problem based learning, case study) were examined. Results have shown that mostly students preferred case study method and perceived it as the most easy, interesting and interactive method of learning the topic. About 30.2% students preferred Problem Based Learning (PBL) and perceived it as a reliable and effecting teaching method and 32.4% perceived it as better learning experience. Medical students preferred Problem Based Learning (PBL) and non-medical students preferred case study methods to have better understanding of the lesson (Mahmoodi, Khatoon, Ali, Ejaz & Qureshi, 2013).

METHODOLOGY

In the present study, improving trends of the teaching methods were examined using a checklist. Teaching methods included group discussion, individual presentation, query (critical questioning), inquiry (searching information from library and internet) and creative writing task. The checklist was filled with the help of deputy head of the senior section. Reported information was confirmed from administrator of the school and class observation for 1 week. In order to evaluate the effectiveness of these teachings methods, about 40 students were randomly selected from both sections of grade 8 of the Concept Schools. They were equally divided into two groups; one was experimental group and second was control group. Subject teacher was debriefed about the purpose of study and instructed to attend the students of both groups for one month as required. The experimental group, comprised of 20 students, was exposed to innovative teaching methods in the classroom such as; group discussion, individual presentations, query (critical questioning), giving creative writing tasks, inquiry (searching information from library or internet to make assignments of English subject).

Whereas, control group, comprised of 20 students, was taught the subject of English using traditional teaching methods in the class such as; reading (reading out the lesson, copying answer (asking student to copy the answer of the formal questions given in the end of each chapter), copying material written on board, giving traditional homework. After one month, students of both groups were asked to respond to a question given in written form, "How did you feel about teaching methods used in your class during past one month to teach English subject?" They were asked to answer on 3 point rating scale; Good, Satisfactory,

Unsatisfactory. Then, students of both groups appeared in English test held to examine their learning concepts of the lessons taught to them during past one month. Test comprised of two sections; one was conceptual paper (related to critical thinking and learning concepts) and second was traditional one (related to formal and traditional questions as given in the end of chapter). There were 50 marks for each section. Their performance was evaluated on the basis of marks they secured in both sections of the test respectively. Data was analyzed by calculating independent t- test in order to examine the difference in the tests scores of the students. Frequencies and percentages were calculated to examine the perception of students of both groups regarding teaching methods.

RESULTS, ANALYSIS AND DISCUSSION (553 words)

Improving Trends of Teaching Methods in School

Following improvements have made in teaching methods for senior classes during the period of 2008 to 2012 in the Concept Schools.

Table 1. Status of improvements in teaching methods for senior classes

<i>Improvement in Teaching Methods</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Reading	yes	yes	yes	no	no
Query	no	no	yes	yes	yes
Inquiry	no	no	no	yes	yes
Creative writing task	no	no	yes	yes	yes
Individual presentation	no	no	no	no	yes
Group discussion	no	yes	yes	yes	yes

Results (Table: 1) show that reading method was being used for senior classes till 2010. After 2009, innovative teaching methods were introduced to teachers and students. Query method (critical questioning regarding lesson taught in the class) was used for the first time in 2010, whereas inquiry method (searching information from library or internet) was introduced for students of senior classes in the year of 2011. Creative writing task is another innovative teaching method that is being used since 2010 in the class. Students were encouraged to give presentation on different topics related to subjects in the year of 2012. It is also depicted by the results that method of group discussion is being used since 2009 to enhance the learning abilities of students.

Performance of the Students in Subject Test

Performance of the students was evaluated in two ways. The marks students secured responding on conceptual and traditional questions given in English test were taken into account so that effectiveness of improving trends could be evaluated.

Table 2. Independent t-test shows the significant difference between performance of experimental and control group on conceptual paper

<i>Performance on Conceptual Paper</i>						
<i>Groups</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Df</i>	<i>T</i>	<i>Sig</i>
Experimental Group	20	37.30	6.98193	38	5.526	0.000
Control Group	20	24.40	7.76226			

Results (Table: 2) show that experimental group, attended by innovative teaching methods in the class for English subject, significantly performed better in their conceptual paper as compare to control group (attended by traditional teaching methods) ($t(38) = 5.526, p < .000$). Mean scores of students of experimental group is greater ($M = 37.30, SD = 6.98193, N = 20$) than means scores of students of control group ($M = 24.40, SD = 7.76226, N = 20$).

Innovative teaching methods clarified the concepts of lesson taught to them than traditional teaching methods. Group discussion methods removed the confusion of mind concerning lesson. It also facilitates the sharing of knowledge among students, expression of ideas etc. Inquiry and query methods compel the students to use their thinking abilities and build the habit of brain storming. That was the reason of performing well on conceptual questions by students being taught with innovative teaching methods. On the other hand, traditional teaching methods such as; reading, copying answers of questions impeded the growth of critical thinking that became the cause of performing poor on the conceptual test. The results of present study are also consistent with previous researches. Haas (2002) investigated the impact of teaching methods on academic achievement of the students. He found that teachers of Allgibra I need to use the teaching methods of direct instruction, technology aided instruction, and problem-based learning for the sake of students.

Some researchers consider teaching as the art of assisting students in learning. Rahman and associates (2011) studied the effectiveness of teaching methods (discussion and lecture) for students of social studies. His study indicated the positive impact of discussion and lecture method on the test scores of students. Encouraging students to give presentation in the class make them more confident and skilled. They learn to present themselves in front of group of people. Their communicative skills are also polished through this activity. Just reading the lesson in the class may enhance their reading skill but cannot enhance their ability to speak in front of crowd.

In the present study, students of experimental group were also encouraged to search information from library and internet to make their assignment. This task enhanced their ability of exploring environment and as well as enhanced linguistic and cognitive abilities. Previous researches also show that computer and internet use for studies improve the cognitive skills of students (Fiorini, 2010). Similarly, libraries facilitate the students in achieving their academic excellence. Encouraging students to explore the material from books available in the library work out in developing learning habit. They learn to utilize their intellectual resources in constructive way.

Table 3. Independent t-test shows a non-significant difference between performance of experimental and control group on traditional paper

<i>Performance on Conceptual Paper</i>						
<i>Groups</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Df</i>	<i>T</i>	<i>Sig</i>
Experimental Group	20	38.30	8.19563	38	.698	.490
Control Group	20	36.75	5.61834			

Results (Table: 3) show that there is a non-significant different in the performance of experimental group and control group on traditional paper ($t(38) = .698, p < .490$). Whereas, mean scores of students of experimental group is greater ($M = 38.30, SD = 8.19563, N = 20$) than means scores of students of control group ($M = 36.75, SD = 5.61834, N = 20$).

Non-significant in the performance on traditional paper also depicts that students recruited in both groups were talented and motivated to learn. Students who were taught with traditional teaching methods also performed better when tested by asking traditional questions like students who were taught with innovative teaching methods for one month. It also confirms that traditional teaching methods significantly affected the learning process of students. If they were taught with innovative teaching methods, they also had performed better on conceptual questions like experimental group.

Conventional or traditional teaching methods virtually facilitate the memorizing skills of the students rather than strengthening the learning concepts. As a result, students fail to think critically towards the solution of a particular problem. Researchers also suggested that by merely focusing on standardize curricula and test scores limit the instructor/teacher's ability to create the effective learning environment that enhance critical thinking of students (Wong, 2007). Students must be encouraged to explore the learning material to analyze and as well as apply the information they get their own.

Students' Perception about Teaching Methods

All students included in the present study were asked to answer the following questions on 3 points rating scale;

How did you feel about teaching methods used in your class during past one month to teach English subject?

Table 4. Teaching methods used in class

<i>Response of Students of Experimental group (n =20)</i>			
<i>Teaching Methods</i>	<i>Good</i>	<i>Satisfactory</i>	<i>Un-satisfactory</i>
Innovative Teaching Methods	16 (80%)	02 (10%)	02(10%)
Group discussion	17 (85%)	03 (15%)	0 (0%)
Query	3 (65%)	05 (25%)	02(10%)
Presentation	11(55%)	05 (25%)	04(20%)
Inquiry	19(95%)	01(5%)	0(0%)
Creative writing tasks	13 (65%)	04(20%)	03 (15%)

Results show (Table: 4) that majority of the students (80%) perceived over all innovative teaching methods as good. Mostly (95%) rated the inquiry method as good than other types of teaching methods. About 85% students also perceived group discussion method as good for their learning.

Creative writing task and query method were rated a good by 65% students, whereas individual presentation was perceived good by 55% students. Not a single student rated group discussion and inquiry methods as unsatisfactory. Surprisingly, there were 10% students who perceived innovative teaching methods as unsatisfactory.

Table 5. Satisfaction of students

Response of Students of Experimental group (n =20)

<i>Teaching Methods</i>	<i>Good</i>	<i>Satisfactory</i>	<i>Un-satisfactory</i>
Innovative Teaching Methods	02(10%)	03(15%)	15(75%)
Reading	05(25%)	03 (15%)	12 (60%)
Copying answer/material	02(10%)	02(10%)	16(80%)
Traditional homework	03(15%)	07(35%)	10(50%)

Results (Table: 5) reveal that most of the students (75%) were unsatisfied with the overall traditional teaching methods used in the class for one month. The method of copying answer/material was most unsatisfactory teaching method for students (80%). Reading method did not satisfy 60 % students at all, whereas 50% students rated giving traditional homework as unsatisfactory. There were 35% students who were satisfied with assigning traditional homework and 15% rated homework as good. About 25% students rated reading method as good. Moreover, 10% students rated copying answer/material as good and satisfactory respectively.

Students' satisfaction depends on variety of factors such as; they need, their learning preference or style and so forth. Their level of satisfaction also influences their academic achievement. Students performed better in their academics when their teaching style was according to the learning style preference of students (Zeeb, 2004). In the present study, though learning style preference of students was not investigated, but results reveal that most of the students wanted to study in innovative way. They felt good when subject teacher encouraged them to express their opinion by exposing the teaching methods of group discussion, presentation and assignment of creative writing tasks. A study has been carried out in a Pakistani school to examine the effectiveness of variety of teaching methods on students and teachers of social studies. It has been found that cooperative learning, Socratic method, storytelling method, recitation and discussion methods were more effective and perceived by students as good to teach the subject of social studies (Baig, 2011).

CONCLUSION

Based on present findings, it is concluded that improvement made in teaching methods during the period of 2008 to 2012 in the Concept Schools is praiseworthy. Such improvements have positive impact on students as evident by the present findings. Students of this era are impossible to be satisfied with the old teaching style. These students are the children of computer age and they have numerous questions in their mind when teacher teach the lesson. In order to produce competent and skilled students, teaching method must be reformed. Traditional teaching methods only produce literate people who can read and write but are unable to think critically. Innovative teaching methods not only can enhance the knowledge of students but also enable them to solve real life problems. In fact, effective teaching methods give boundless results.

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