Effect of Students’ Feedback and Teaching Experience on Teacher Effectiveness of Secondary School Teachers

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Abstract

The present study was aimed at finding the Effect of Students’ Feedback and Teaching Experience on Teacher Effectiveness of Secondary School Teachers. This study was experimental in nature. Sample was comprised of 102 Secondary School Teachers teaching in different five schools of Gurgaon city and students taught by them. In the Experimental group after taking students appraisal data of teacher effectiveness feedback was given to the teachers by the researcher. This Students’ feedback was comparative and non comparative, overall and dimension wise. It also included suggestions elicited from the students on important aspects of their teaching. The present study revealed that Feedback information provided to teachers was found to be effective in terms of Teacher Effectiveness of the teachers, But Teacher Effectiveness was independent of Teaching Experience of Teachers and the interactional effect of Teaching Experience of Teachers with Students’ Feedback, when Pre-Teacher Effectiveness was taken as co-variate.

Keywords: Experience, Secondary School, dimension.

The present study entitled “Effect of Students’ Feedback and Teaching Experience of Teachers on Teacher Effectiveness of Secondary School Teachers” is an attempt to improve teachers’ behavior in classroom through giving them feedback from the students taught by them.

Teachers are the key factors in education system. It is a well-known fact that; their subject knowledge has an influence on students’ learning in the classroom settings. In addition to the subject knowledge of the teachers, the issues belonging to the teachers’ personality and behavior are significant contributors to the teaching and learning process for any discipline. The strength of an educational system largely depends upon the quality of its teachers. When one considers the large community of students to whom
teachers impart knowledge and make skilled individuals to become good professionals and citizens of the nation, one would find that teaching emerges as the most important function of an institution. So, the process of any progressive reform in education should begin from the qualitative improvement of teachers and their professional development. There are many approaches to improve teaching quality used by educational institutes such as expert evaluation, Colleague’s observation, Principal’s Evaluation, Self report of practice, providing Students’ Feedback and providing the facility of courses and workshops. Among all these approaches Students’ Feedback is the most visible and prevailing component of any educational system. Information through student Evaluations can help instructors as well as educational researchers to describe and define the learning environment more concretely and objectively than they could through other types of measurement, since students are only ones who are directly and extensively exposed to them. Such evaluations, unlike visits from outside evaluators do not intrude into the class and are made by those with a genuine interest in the instructor’s success.

Rationale of the Study

The success of any progressive reforms in education depends on the qualitative improvement of the teacher and his/her professional competence. The development of professional competence primarily rests upon a proper assessment of teacher’s competence. For a teacher to be able to assess his competence, to monitor the teaching learning process and to make adjustments wherever and whenever necessary, there must be a feedback mechanism which could provide the teacher with information on how the learners are receiving his or her teaching and determine whether or not the environment is conducive for teaching and learning to take place. Furthermore, as rightly pointed out by Dillan and Peterson(1986), “although administrators have considerable responsibility for assessment of teacher’s competence, yet effective behavior could be made only through students’ feedback on their teaching.” With the acceptance of democratic principles, the idea that the teachers and learners have shared responsibilities in the process of teaching and learning has come to be accepted especially at the secondary level. It is not only the academic excellence and aptitude but the entire personality of a person that makes him an effective teacher. It has been observed and perhaps rightly so, that a teacher behavior occurs in relation to pupil behavior, hence is expected to vary to some extent from, one group of pupils to another. By the use of students’ ratings of the teacher actual classroom teaching can be investigated. As the students are actually the only direct observers and could reasonably evaluate classroom interaction. Students are no longer considered as passive recipients of what is being fed to them. They are considered active entities, alive to the whole situation, with the ability to take the initiative and think independently. Students are good sources of information about their instructor, because they know their own situation well, degree of communication and existence of problems between instructor and students. Such information also help the teacher to shape his classroom practices to ensure that the activities are in consonance with the teaching learning objectives. Yet probably the most important benefit of students’ feedback is, they provide directly to instructors, so that they can refine their courses and teaching practices to provide students with better learning experiences. By calling attention to teaching methods and outcomes, student evaluations and feedback play a positive role in improving the climate of teaching
and teacher effectiveness. Finally students’ reports can be justified in terms of students as consumers and beneficiaries of good teaching.

Students’ evaluation of teachers and feedback to teachers through these evaluations are being used by an increasing number of universities and colleges and schools. Researches showing impact of Students’ Feedback have been conducted by Balu and Chandran (1979), Tuckman and Yates (1980), Balachandran (1981), Savage and McCord (1986), Tagomori (1993), Renoud and Murray (1996), Phipps and Claxton (1997), Mertler (1999) and Nitza and Dan (2006). Balu and Chandran (1979) concluded that evaluation by students of their teachers is not unjustified and will definitely help the teacher to know where he stands, the way he is seen by them, leading to the improvement of his teaching, by eliminating his drawbacks. The evaluative feedback based on students’ Ratings help teachers significantly to improve teacher effectiveness irrespective of sex or subject of teachers (Balachandran, 1981). Findings of the studies conducted by Tuckman and Yates (1980), Renaud and Murray (1996) and Nitza and Dan (2006) confirm an improvement in all faculty members who receive feedback from their students. These students’ feedback were found as useful, feasible and appropriate by Mertler(1999) but in a study done by Tagomori (1993) evaluation instruments used by students to assess teachers’ behavior were declared as unreliable in their existeng form, also Savage and McCord(1986) revealed in their study that students’ evaluation data do not significantly alter the assessment of teaching competency while in the study conducted by Phipps and Claxton (1997) IEQ (Instructor Evaluation Questionnaire) was found as able to discriminate between more and less effective teachers. Thus from the above review it is clear that there are some researches in which an improvement in teachers through feedback from evaluation done by students and tools using for such kind of evaluation by students have discriminating power to separate more effective teachers to less effective teachers, on the other hand there are also some researches showing these evaluation tools as unreliable and students’ feedback as incapable to evaluate a teacher’s performance properly. Hence, there are mixed results in these studies resulting confusion leads to a need to do further research in this direction.

During last four decades number of studies have been conducted with teacher effectiveness as a criterion variable (Deo, 1980; Subharayan, 1985; Ummekusum and Khajapeer, 1985; Wingington, Tollefson and Rodriguez, 1989; Badri et al., 2006; Sawhney and Kour, 2011). These studies have reported the effect of major variables namely gender, socio economic status, age, teaching experience, home, health, intelligence, residential area, self concept, school background, academic grades and job satisfaction on teacher effectiveness. Gender, experience and designation of teachers were found to have no significant effect on teacher effectiveness (Subharayan,1985). Further the results of the studies conducted by Ummekusum and Khajapeer (1985), Wingington, Tollefson and Rodriguez (1989) and Padmanabhaiah (1986) showed the significant effect of gender, qualification and experience on teacher effectiveness. Thus studies reviewed here indicate mixed results as regards to the influence of Teaching experience on teacher effectiveness, which leads to do further research in this direction.

When a teacher get Students’ Feedback, its effect on his/ her teaching behavior depends on how the teacher look this feedback. Also with the passage of time, it is possible that effectiveness of teachers change with experience. So depending upon experiences, teachers may have different levels
of effectiveness. Do the Experience of Teachers affect their Effectiveness? Also, Do Feedback from students affect effectiveness of teachers in relation to their experience? These questions were focus of the present study.

**Keywords used in the study**

Operational definitions of keywords used in the title are given below:

**Teacher Effectiveness**: It refers to teacher skills with key functions of teaching viz teaching-learning, communication, evaluation, relationship with students etc.

**Students’ Feedback**: In the Experimental group after taking students appraisal data of teacher effectiveness feedback was given to the teachers by the researcher. This feedback was comparative and non-comparative, overall and dimension wise. It also included suggestions elicited from the students on important aspects of their teaching.

**Objectives of the Study**

1. To study the effect of Students’ Feedback on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.
2. To study the effect of Teaching Experience on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.
3. To study the interactional effect of Students’ Feedback and Teaching Experience on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.

**Hypothesis of the Study**

1. There is no significant effect of Students’ Feedback on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.
2. There is no significant effect of Teaching Experience on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.
3. There is no significant interactional effect of Students’ Feedback and Teaching Experience on Teacher Effectiveness by taking Pre-Teacher Effectiveness as covariate.

**Sample**

The study was experimental in nature. The sample comprised of 102 higher secondary school teachers belonging to five different schools of Gurgaon city and also the students being taught by these teachers were taken as sample in the present study. These schools were selected by purposive sampling technique. All schools were situated in Gurgaon city and were following CBSE syllabus and co-educational system. Out of these five schools treatment was assigned randomly to the three schools. These three
schools fell under Experimental Group and other two schools were taken as Control Group. On the basis of Teaching Experience, the subjects were divided into two levels namely, Less Experienced and Experienced. Teachers who had five or below five years teaching experience were labeled as Less Experienced and teachers with more than five years teaching experience were considered Experienced. Out of 102 teachers, 46 comes under Less Experienced level category and 56 teachers were there in Experienced level category as per defined criterion. Among these 46 Less Experienced teachers 26 were in experimental group whereas 20 teachers belonged to the control group. On the other hand, among 56 Experienced teachers, 29 teachers fell under experimental group category and 27 teachers fell in the control group.

### Table 1: Group wise and Teaching Experience wise distribution of sample

<table>
<thead>
<tr>
<th>Group</th>
<th>Teaching Experience</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Experienced</td>
<td>Experienced</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>102</td>
</tr>
</tbody>
</table>

### Tools Used

To assess the Teacher effectiveness, Teacher Effectiveness Scale was developed by the investigator herself. Through experts’ opinion and initial try out content validity of the tool was established. The reliability of the tool was examined through test-retest method and reliability coefficient was calculated to be 0.84.

### Procedure of Giving Feedback to the Teachers

First of all the tool namely “Teacher Effectiveness Scale” was developed by the investigator. On the basis of this tool, teacher effectiveness scores were collected by the students for the concerned teachers. These scores were summed up, scrutinized dimension wise and analyzed in percentage form. These scores were analyzed in two forms-

(i) Overall

(ii) Dimension wise

Now these analyzed scores were represented in the form of graphical report so that they could be easily understood by the teachers. Graphical report was used to provide feedback to the teachers and it was given to the teachers in two forms-

(i) Comparative

(ii) Non-comparative
In comparative form, effectiveness scores of all teachers of a school were shown simultaneously. Overall performance and Dimension wise performance of all teachers respectively were shown in the form of bar diagrams. So that the performance of a teacher could be easily compared with the performance of other teachers. One example of Overall graph is given below:-

Graph 1: Overall Effectiveness Scores of all teachers (comparative)

Here in this graph names of all teachers are given in abbreviated form. It is very clear from the above graph that in the school among all the teachers SDH is the most effective teacher as he got the highest bar with 86.92% effectiveness score. Also the teacher SUR is least effective teacher with the lowest score of 58.80%. Thus from this graph, a comparative picture of all teachers can be viewed at a glance for their effectiveness. This provides a group feedback to all the teachers from their students.

This kind of comparative feedback provides an indicator to a teacher for his/her effectiveness. The overall performance was also analyzed dimension wise. As already stated, the total effectiveness of the teacher comprised of twenty five dimensions, so the performance of all teachers could also be compared on all these twenty five dimensions. These twenty five dimensions were:- Classroom Behavior, Subject Command, Black board Writing, Unbiased Evaluation, Concept Clarification, Systematic Teaching, Dictation Avoidance, Timely Assessment, Assessment Feedback, Freedom to ask questions, Creative Teaching, Unambiguous Language, Interest in teaching, Help in Co-curricular activities, Interaction with students, Equal Treatment, Tolerating Mistakes, Grade Justification, Audibility in the class, Notebook Correction, Regularity, Patience with students, Rapport Building, Mistakes Acceptance. Comparative
feedback to the teachers on all these dimensions was given through bar diagram form. One example is given below:-

**Graph 2: Dimension wise Effectiveness Scores on the dimension ‘Classroom Behavior’ (comparative)**

From the above graph, it is clear that this is a comparative feedback to all the teachers for their classroom behavior. According to students, behavior of their teachers in the classroom varied from 52% to 86%. Students liked the behavior of teacher PUS the most (score was 86%) and behavior of teacher SBH the least (score was 52%). Although many teachers got similar scores (BSY-77%, SDV-80%, MDV-76%, SDH-79%, RG-83%, KAM-83%, PUS-86%, PG-76%, AS-83%, MG-73%, RB-78%, IJT-73%, YPV-76%, RAM-76%, RAJ-82% and VK-76%), yet there are some teachers namely SBH, PTI, USH and SUR whose behavior were not liked by the. Thus through these comparatively formed bar graphs teacher could get feedback overall and also could check where they stand among all teachers on different dimensions. Thus teachers could know the opinion of their students about them and about all other teachers. By getting comparative performance report, a teacher could on the one hand find their own position in the group as well as could learn good performance skills form his/her colleagues if they wanted to improve their own teaching.

Secondly, non-comparative form of feedback was also provided to teacher. In this form performance of a teacher on all the dimensions was shown collectively on a graph. In this type of graph different dimensions of teachers’ performance were shown in the form of bars. Through this form, a complete picture of a teacher’s effectiveness could be obtained. By analyzing his/her performance on every
dimension teacher could get appropriate feedback to improve his/her effectiveness. For example, the performance of one teacher SBH is given here below:

**Graph 3: Non-comparative teacher effectiveness on all dimensions**

From the above graph we can perform keen observation of the effectiveness of the teacher SBH i.e. we can see the performance of this teacher on all different dimensions. As we see that the performance of this teacher varied from 60% to 80% on all dimensions. This shows that the effectiveness of this teacher is good (greater than average performance). Further by observing the performance of SBH on different dimensions, it can be said that this teacher is good in interaction with students. He gives freedom to students to ask questions and has a good voice. Teacher is rather weak on some dimensions which the teacher should concentrate upon and try to improve his performance. Like, he should try to bring more creativity in teaching, control his behavior in the classroom and plan his lessons more systematically. Also students believed that this teacher uses dictation in the classroom (66%), so SBH should avoid dictation as much as possible in the classroom.
Thus it can be concluded from above that a graph like this provides a detailed feedback to a teacher about self-effectiveness on different dimensions. Thus in this experimental process feedback was provided to teachers on the basis of teacher effectiveness scores provided by their students. This feedback process was repeated five times after a fixed interval of time during entire one academic session. Feedback in both comparative and non-comparative form was given to the teachers within one month of receiving their effectiveness scores by the investigator.

In control group no feedback was given to the teachers. At the end of the experiment, both the experimental and the control group were post-tested by administering teacher effectiveness scale to the students and Attitude towards Teaching Profession to the teachers respectively.

**Analysis and Interpretation of Data**

The data were analyzed with the help of $2 \times 2$ Factorial Design ANCOVA. There were two levels of Students’ Feedback namely Students’ Feedback and No Students’ Feedback. First level Students’ Feedback was taken as Experimental Group and second level No Students’ Feedback was taken as Control Group in the study. There were 55 teachers in Experimental Group and 47 teachers were taken under Control Group.

The results are given in following Table 2:

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Df</th>
<th>SS y.x</th>
<th>MSS y.x</th>
<th>F y.x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Feedback</td>
<td>1</td>
<td>153.573</td>
<td>153.573</td>
<td>7.176*</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>1</td>
<td>26.606</td>
<td>26.606</td>
<td>1.243</td>
</tr>
<tr>
<td>Students’ Feedback × Teaching</td>
<td>1</td>
<td>36.282</td>
<td>36.282</td>
<td>1.695</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>97</td>
<td>2075.934</td>
<td>21.401</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.01 level of significance.

From the Table 2, it can be seen that the adjusted F-value for Students’ Feedback is 7.176 which is significant at 0.01 level of significance with df = 1/97.

This shows that the adjusted mean score of Teacher Effectiveness of Experimental Group differ significantly from Control Group when Pre-Teacher Effectiveness was taken as co-variate. Thus, the null hypothesis that there will be no significant effect of Students’ Feedback on Teacher Effectiveness
when Pre-Teacher Effectiveness was taken as co-variate is rejected. Further the adjusted mean score of Teacher Effectiveness of Experimental Group was found to be significantly higher than those of Control Group. Hence, it can be concluded that Feedback information provided to teachers was found to be effective in terms of Teacher Effectiveness Score of the teachers, when Pre-Teacher Effectiveness was taken as co-variate.

Again from Table 2, it can be seen that the adjusted F-value for Teaching Experience is 1.243, which is not significant. Therefore, the null hypothesis that there is no significant effect of Teaching Experience on Teacher Effectiveness when Pre-Teacher Effectiveness was taken as co-variate is not rejected. It can thus be concluded that the Teacher Effectiveness is independent of Teaching Experience when Pre-Teacher Effectiveness was taken as co-variate.

Once again from Table 2, it can be seen that the F-value for the interaction between the Students’ Feedback and Teaching Experience is 1.695, which is not significant. Therefore, the null hypothesis that there is no significant effect of interaction between Students’ Feedback and Teaching Experience on Teacher Effectiveness when Pre-Teacher Effectiveness was taken as co-variate is not rejected. It can thus be concluded that the Teacher Effectiveness is independent of interaction between Students’ Feedback and Teaching Experience when Pre-Teacher Effectiveness was taken as co-variate.

### Results and Discussion

The findings of the study were as follows:

- Feedback information provided to teachers was found to be effective in terms of Teacher Effectiveness of the teachers, when Pre-Teacher Effectiveness was taken as co-variate.
- Teacher Effectiveness was independent of Teaching Experience when Pre-Teacher Effectiveness was taken as co-variate.
- Teacher Effectiveness was independent of interaction between Students’ Feedback and Teaching Experience when Pre-Teacher Effectiveness was taken as co-variate.

The study revealed Feedback information provided to teachers was found to be effective in terms of Teacher Effectiveness of the teachers, when Pre-Teacher Effectiveness was taken as co-variate. This result of this study is supported by Murray, H. G.; Jelley, R. B.; Renaud, R. D. (1996), Mertler, C.A.(1999), Nitza, D. and Dan, S.(2006) and, also by Aleamoni, L. M. and Hexner, P. Z. (1980), Cohen (1980), Follman (1992), Huemer, Michael (1994), Marsh, H. W. (1983) in their meta analysis and review based literature.

Murray, Jelley, Renaud, (1996) found from longitudinal trends in faculty opinion surveys and field experiments on student feedback, that student evaluation of teaching contributes significantly to improvement of teaching quality. Mertler, C.A. (1999) found students’ feedback useful, feasible, and appropriate and felt they should occur twice yearly as many instructors modified their behavior as a result. Nitza and Dan (2006) confirmed in their study an improvement in all faculty members’
ratings on assessment items as measured in instruction assessment surveys conducted at four points of time. Yet, the findings also indicated that improvements in teaching were not related to instructors’ participation in teaching workshops or to any other steps taken by the college to improve quality of teaching. Aleamoni and Hexner (1980) Recommended in their report that Student ratings feedbacks are valuable indicators of teaching effectiveness. They provide constructive information to help and guide the improvement efforts of instructors, departments, and institutions. Meta-analysis (Cohen, 1980) shows that ratings feedback is related to improved teaching. However, the greatest increases in teaching effectiveness were found when instructors received not only feedback on student ratings, but a combination of ratings feedback and consultation (type of consultation varied across the studies in the meta-analysis). Thus student ratings provide the most help when combined in a comprehensive program including a variety of evaluation tools and systematic faculty development. Follman (1992) also noted that students are the most direct client of teachers and thus have a broader and deeper experience with teachers than other potential evaluators, including principals, administrators, peers or parents. A teacher’s first responsibility is to his or her students and students are in turn the most frequent source of feedback on a teacher’s performance. Huemer, Michael (1994) stated in his critical review about student evaluations that Instructors who received results of a midsemester evaluation tended to have higher ratings on end-of-semester evaluations than those who did not, suggesting that SEF cause changes in teaching behaviors which result in higher ratings. Marsh (1983) also agreed that Feedback from students help instructors to improve their teaching performance.

The study revealed no significant effect of Teaching Experience of teachers on Teacher Effectiveness when Pre-Teacher Effectiveness was taken as co-variate. Both Experienced and Less experienced teachers were found to have similar teacher effectiveness scores when groups were matched with respect to Pre-Teacher effectiveness scores. It indicates that irrespective of teaching experience of teachers, teacher effectiveness did not differ significantly. There are not enough researches relating teacher effectiveness with teaching experience of teachers in support or against their findings of the present study. In analytical study of previous researches, it was found that most of the researchers studied the effect of some psychological variables (like mental health, job satisfaction, creativity, intelligence and self concept) on teacher effectiveness. Some researchers also studied the effect of gender, residential area on teacher effectiveness but how the teaching experience of teachers can affect teacher effectiveness of teachers, has not been studied by the previous researchers. However, generally it is presumed that more experienced teachers teach more effectively as experience gives them confidence, content mastery and deep understanding of students’ need but in present study teacher effectiveness was found to be independent of teaching experience of teachers. There might be some reasons behind this finding, which can be as follows:

- Less experienced teachers have the feeling of insecurity for their job, so they do hard work and try to give their best in front of their students resulting in their effective teaching.
- Experienced teachers have other administrative responsibilities in the school along with their teaching. So they become too busy and can’t devote themselves wholeheartedly in teaching.
Generally in schools well qualified and trained teachers are recruited, thus their qualification and pre service training help them in content mastery and effective presentation skills rather than experience.

Apart from above mentioned reasons, practically it has been seen that in schools, students like to study with those teachers who have more friendly and helping nature with pleasant personality and these qualities of teacher are not correlated with their experience count in the schools. Thus independence of teacher effectiveness from teaching experience seems to be logical and appropriate.

The study also revealed Teacher Effectiveness is independent of interaction between Students’ Feedback and Teaching Experience of teachers when Pre-Teacher Effectiveness was taken as co-variate. This shows that among feedback group, teacher effectiveness scores of experienced teachers was not significantly different from less experienced teachers. The same could be said about the no feedback group meaning thereby that levels of students’ feedback and levels of teaching experience of teachers are independent of each other in respect of teacher effectiveness when groups were matched with respect to Pre-Teacher effectiveness.

Conclusion

The study revealed Feedback information provided to teachers was found to be effective in terms of Teacher Effectiveness of the teachers, when Pre-Teacher Effectiveness was taken as co-variate. Literature suggests that Students’ Feedback can be a valuable component of a teacher evaluation system. Several studies conducted on student evaluations and its effect on instructor’s behavior concluded that students can respond reliably and validly when rating their classroom teachers and their feedback are proved to track changes overtime for the improvement of Teacher’s Effectiveness. Same finding was reached in the present study wherein teachers have improved their effectiveness through continuous feedback from students. In our Indian schools, there is necessity to encourage such kind of feedback mechanism. Efforts should be made to develop the abilities of students to give free and honest appraisal to their teachers. Educational institutes should provide more scope and proper system to their students so that they will be able to enhance the quality of their teachers’ competence as well as the whole teaching learning process.

References


Effect of Students’ Feedback and Teaching


