

IMPACT OF PEER FEEDBACK PRACTICES DURING PRESENTATIONS ON SELECTED TOPICS OF CLASS XI IN TERMS OF SELF CONCEPT

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Abstract

Feedback is advice or criticism about the quality of products, work, performance or ideas for the purpose of improvements. It provides an opportunity to an individual/person to comprehend own skills and capabilities. Feedback is a remark on the tasks performed by student's which may initiate constructive reflection during the next attempt by the learner. Students are required to identify strategies for improving the way of putting own efforts to achieve success in work. The review indicates that self-concept is about one's own efficiency, beliefs and capabilities and may be related to supervision in simulated circumstances and feedback about the outcomes. By keeping this point in mind, the researcher conducted the present study on peer feedback and its relationship with the self-concept. After seeking permission from Alpine Academy, Indore (M.P.) twenty-one class IX students were selected as sample. They were allowed for peer feedback practices for presentations. The Children's self-concept scale developed by Dr. S. P. Ahluwalia and Dr. H. S. Singh (2012) was administered for studying the self-concept of the respondents. It employed a pretest-posttest single group design. The collected data were treated through the Wilcoxon Signed Rank test. The findings indicate that the mean pre and post-self-concept scores at pre and posttest stage of peer feedback practices differ significantly. Peer-feedback practices were found to be effective in terms of self-concept. The review also indicates significant improvement in the scholastic and non-scholastic performance of students after practicing peer-feedback. The present paper is an attempt for seeking the improved level of self-concept of the learners which can be transferred into routine life activities.

Keywords: *Peer-feedback, Self-concept, Self-awareness, Presentation.*

INTRODUCTION

Feedback is an important part of any teaching-learning system. It is a from of views about a new product, work or performance for getting perfection and success. Feedback is advice or criticism about the quality of products, work, performance or ideas for the purpose of improvements. It provides students an opportunity to comprehend own skills and capabilities. Feedback is a remark on the tasks performed by student's which may initiate constructive reflection during her/his next attempt. It is useful for modified actions during the next attempt by clarifying areas where improvement is required. It is an essential *element* of the learning process and training programs because it has the power of indicating positive and negatives both. Feedback may be visualized in the day-to- day interactions as an informal act between teachers- student(s) or between peers or trainer- trainees. Peer- feedback refers to a communication process through which students/participants indulge in dialogues related to standards of performance. It may be formal as a part of written or oral assessment methods. It may be **evaluative or descriptive, formal or non-formal and formative or summative feedback provided by a teacher, self or peers**. The present education system students have to study different subjects, appear in examinations and at times provided feedback on the assigned tasks. In school education Science subject has found a place as a core subject in the school curriculum at the primary/ elementary to secondary level. Active participation of students in well-designed tasks along with suitable strategies could be a favorable strategy for maintaining their interest in learning better. One can judge other's performance, assess and interpret the classroom events in more meaningful ways if a student/ learner gets an opportunity to observe other's performance in the peer group. If these situations are planned well in advance in classroom situations, both teacher feedback and peer feedback could have the potential to enhance the quality of learning. This may provide an opportunity to integrate theoretical knowledge with practical/ hands-on experiences. In addition to the benefits of receiving adequate feedback, students/ learners may be benefitted by the feedback they get through their peers.

RATIONALE

Education is a process of developing individuals in the group settings for the cohesiveness and progress of society as well as the nation. Conventional examination formats are highly rigid, controlled and at times not suitable for all-round development of students/learners. The active involvement of students has been emphasized in the

teaching-learning process repeatedly by various learning theories and assessment of students' performance is an integral component of it. Assessment ought to exhibit different aspects therefore learning and teaching is required to be a multi-dimensional activity. The review of related literature showed that peer- assessment has been related to other kinds of assessment methods used in schools. **Mrudula Patri (2002)** indicated that peer- feedback found to be favorable for students to judge peer's performance. **Juwah (2003)** reported peer- assessment ensures to develop desired knowledge and skills. **Reese (2003)** found that peer evaluation is an active learning technique for learners. According to **Langan, et al. (2008)** significant differences were found between assessments done by peers, tutors and student's own. **Chao- hsiu Chen, (2010)** observed that there are significant differences between student- grading and teacher- grading. **Semiral and Erhan (2011)** reported peer evaluation effectively contributes to improved performances during the next attempts. **Yurdabakan (2012)** found that the peer- assessment is a good predictor for the self- assessment process. **Adediwura (2015)** concluded that peer- feedback practice affects retention ability. According to **Alshammari (2015)** peer- assessment contributes positively to the student's performance. Different researchers attempted to study the relationship between peer- feedback and other variables. Most of the previous researches on peer- assessment had been conducted on the effectiveness of active learning technique, student's satisfaction, retention ability, academic performance, and achievement. The review indicates that there is lack of researches on peer- feedback by students in the country. There seems to be a gap in the trend of researches on peer- feedback and this has led the investigator to undertake the present study.

Pridemore and Klein (1995), Butler and Hodge (2001), Race et al. (2005), Papinczak et al. (2007), Tseng and Tsai (2008) conducted studies related to the effect of peer assessment in feedback, comparison of teacher assessment. Results showed a significant effect of different type of feedback on learning in some researches, while not in others. The researches indicated that students of different achievement level benefited with different forms of feedback.

STATEMENT OF THE PROBLEM

The study has been entitled as:

Impact of Peer Feedback Practices during Presentations on Selected topics of Class XI students in terms of self-concept

OBJECTIVE AND HYPOTHESIS

Objective of the study was as follows:

To compare mean ranks of positive and negative differences of pre and post-self-concept scores on selected topics of class XI students

The hypothesis of the study was:

There will be no significant difference between mean ranks of positive and negative differences of pre and post-self-concept scores on selected topics of class XI students

METHODOLOGY

The methodology of the present study was as follows:

- **Sample:** The sample comprised of twenty- one (21) class XI students studying at unaided, self- finance, coeducation and English medium higher secondary school situated in the Indore city.
- **Children's self-concept scale:** Children's self-concept scale developed by Dr. S. P. Ahluwalia and Dr. H. S. Singh (2012) for students belonging to 13 to 18 years of age, based on six dimensions of self-concept; physical appearance, behavior, intellectual status, satisfaction, popularity, and anxiety. The maximum scores of the scale were 80; each item carries one mark. Self-concept scale had been standardized by establishing concurrent validity. Reliability for a female is 0.79 and for male 0.74 by the split-half method.
- **Experimental design:** The present experiment was conducted by following the pretest-posttest single group design.

The procedure of data collection: The treatment for peer feedback was scheduled as follows;

Table 1.1: Day wise schedule for treatment

| S. No. | Day | Schedule of activities |
|--------|-----------|--|
| 1 | 1 (first) | The orientation of students about the peer- feedback activities |
| 2 | 2 (Two) | Administered a Pre-test for the self- concept |
| 3 | 3 to 16 | Peer- feedback practices are undertaken in the class and followed by a discussion on the process (on alternate days) |
| 4 | 17 | Post-test |

The intact group was provided orientation and an opportunity for peer feedback practices during the presentation session. Mnemonics based study material on the topics Krebs's cycle and the Calvin cycle was provided to the class. The self-concept scale, as a pre-test, was administered after giving them all necessary instructions required. The peer- feedback practice sessions were scheduled as in one presentation session a group comprising of three students as a team gave a presentation for a period/ duration of 50 minutes in one day. All the twenty-one students gave their presentations in a group of three students during fourteen days duration (ref: Table I). Each and every student had to present the content for which they were exposed to provide peer-feedback to other randomly allotted five students of the class. Each student had the freedom to get the teacher's guidance and also they could discuss with peers and concerned teachers for resolving their doubt. The self- concept tool was administered on the students after the feedback duration of fourteen days as post-test.

STATISTICAL ANALYSIS

Wilcoxon Signed Rank test was found to be suitable for the statistical analysis of collected data because the sample size was less than 30 students.

RESULTS AND INTERPRETATION

The objective of the present study was “to compare mean ranks of positive and negative differences of pre and post-self-concept scores in the group allowed for peer- feedback practices in class XI”. The values as per the Wilcoxon Signed Rank test are given in the following table;

Table 1.2: Mean ranks of positive and negative differences between pre and post-self-concept scores, Z value, and significance level

| Self-concept | Ranks | N | Sum of Ranks | Mean Rank | Z | Sig. level |
|-----------------------|----------------|----|--------------|-----------|------|------------|
| Post Score– Pre Score | Negative Ranks | 2 | 16.50 | 8.25 | 2.89 | 0.004 |
| | Positive Ranks | 15 | 136.50 | 9.10 | | |
| | Ties | 4 | | | | |
| | Total | 21 | | | | |

From the table 1.2, it is evident that the calculated z value is - 2.89 (why negative sign before the Z value is not mentioned in the table) which is approximately normally distributed for the sample. The t value is 0.004 which is less than the critical value 0.01 level, therefore it is significant at 0.01 level of significance with N= 21. It means pre and post scores on the self -concept variable differ significantly. Hence, the null hypothesis “there will be no significant difference between mean ranks of positive and negative differences of pre and post self -concept scores in the group allowed for peer- feedback

practices in class XI” is not accepted. Further, it is clear from the calculations that the sum of positive rank is 136.50 which is greater than the sum of negative ranks 16.50. It **can** (How can you generalize with such a small sample these findings) be concluded that post-self-concept scores are significantly higher than pre-self-concept scores in the group. Finally, peer feedback practices may found to be effective in enhancing the self-concept levels among students.

DISCUSSION ON FINDINGS

The findings indicate that the exposure of students for peer- feedback practices for the presentations could be favorable for enhancing their self-concept. Mrudula Patri (2002), Juwah (2003), Reese (2003), Langan, et al. (2008), Chao- hsiu Chen, (2010), Semiral and Erhan (2011), Yurdabakan (2012), Adediwura (2015) and Alshammari (2015) reported that peer- feedback practices exerted a positive effect on student's knowledge, comprehension, communication skills development, performance, active learning, retention ability, and comparative scoring.

During peer- feedback sessions the students involved in observing the ways of presentation responses along with improving their capability to identify suitable strategies. This might be supportive of the possibilities for improving their understanding and self-concept. Similar conclusions were reported in the previous researches on peer- feedback practices. Enhanced level of self-concept might be the outcome of special opportunity to gain new experiences and proper attention of students as well as the opportunity for their doubt clearance. Suitable learning climate is to be required in which the giving and receiving of peer feedback is a normal part of teaching and learning processes. The more involvement of students/learners in peer feedback processes, the more likely they are to develop qualities for effective decision making. The results of the present study like other researchers reported the positive influence of feedback practices. This could be used as an innovative assessment method in our schools.

CONCLUSION

Commonly teachers never consider peer feedback as an integral and important part of the assessment. In fact, it is an essential competence for self- regulation in order to lead a well-integrated/balanced life. Peer- feedback technique is required to be considered as a need of the hour for improvement without any comparison among the learners. It requires proper guidance with exposure to interesting experimentation. Peer- feedback method is a stepping stone to achieve success in different spheres of life. It depends upon

observation strategies which help students to evaluate other's way of presentation and understanding about interactions in a specific peer group. Awareness about performance criteria enables individuals to raise the processes of thinking and products of learning. Therefore students ought to be guided for using scoring rubrics and also to be involved in developing scoring criteria. Students gradually assume responsibility for assessing outcomes, framing learning objectives, identifying weak points, pointing out strengths, ways of improvement and developing student autonomy. It can be said that peer-assessment is a way of feedback to an individual about specified qualities of performance on the assigned task. Feedback provided to an individual is a suggestion for improved performance but no place should be occupied by any comparisons with other learners. It can be concluded that teachers needed to make attempts for designing the activities on the peer-feedback process. These may enhance their interest as well as self-concept levels which may lead to enhanced learning, interactions, better academic performance and overall achievements in future life events.

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