

# Reinforcing Reflective Writing Skills of Phase II MBBS Students

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## Introduction

Reflective capacity is a vital attribute for professional competence in clinical practice and is embedded within the competencies set by The Accreditation Council for Graduate Medical Education (ACGME). Recent studies emphasize the significance of reflection in medical education, highlighting its role in developing critical insights and adaptive thinking in future practitioners<sup>1</sup>. Reflection is defined as “a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation”<sup>2</sup>. Writing reflections is a skill that should be practiced throughout the MBBS curriculum, with instructors assessing students' reflections to guide them on whether they are engaging superficially or exploring their thoughts and emotions from various perspectives. This approach enables students to make informed decisions and take appropriate action. Reflective practices empower medical practitioners to learn continually from their experiences, enhancing their ability to deliver patient-centered care<sup>3</sup>.

**AIM:** To evaluate benefits of session to reinforce reflective writing skills of Phase II MBBS students

### OBJECTIVES:

1. To assess the reflective writing ability of Phase II MBBS students after one year training in CBME
2. To analyse the change in reflective writing after undergoing an educational reinforcing session

## Methodology

**Study Type:** An interventional study

**Place of Study:** Department of Pharmacology, ELMC&H, Lucknow

**Participants:** Phase II MBBS - 150 students

### Work Plan:

We evaluated reflective writing abilities of 150 Phase II MBBS students after getting Institutional Ethics committee approval. Students were asked to submit reflections on an Attitude, ethics, and Communication module they attended. These reflections served as baseline data. A follow-up session aimed to reinforce their CBME (Competency-Based Medical Education) learning by discussing their submitted reflections, revisiting the purpose and value of reflective writing, reviewing reflective writing models from their manuals, clarifying expectations, and encouraging students to share personal insights. After this interactive session, students wrote a new reflection on a previously attended AETCOM module, applying the techniques learned in the reinforcement session.

### Data:

The baseline and post-interventional reflective write-ups obtained from the students were considered as data for the study and were further assessed using rubric method.

The reflective write-ups were analyzed using the grading system by Mandal *et al.* (2022)<sup>2</sup>, originally based on O'Sullivan *et al.* (2010)<sup>4</sup>, with evaluation criteria as follows:

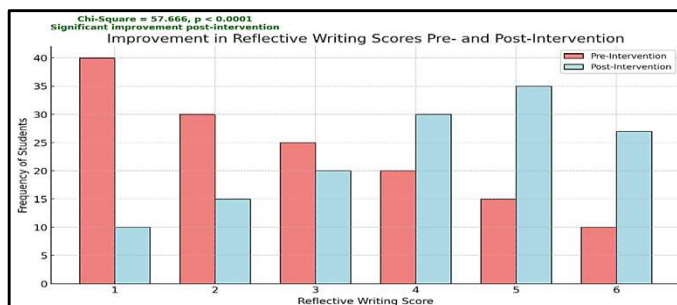
### Evaluation Criteria:

The system ranged from 1 to 6, with the following criteria:

- Score 1:** No reflection was evident, with a poor description of the event.
- Score 2:** Repetition of event details without any interpretation.
- Score 3:** Description of the event and recognition of its importance, but without explaining why it was important.
- Score 4:** Description of the event, recognition of its impact on feelings, beliefs, and attitudes, and comparison with previous experiences, including learning from it.
- Score 5:** Judgment on what went well and what did not, with reasons for both.
- Score 6:** Detailed description of the event, including how it had changed the individual and how they would respond to a similar event in the future, with references to literature, articles, books, and anecdotes.

## Results

Figure 1- Improvement in Reflective Writing Scores Pre- and Post-Intervention



The Result showed that:-

Out of 150 participants, 137 submitted their reflections, which were then analyzed for reflective depth. The reflective writing scores of Phase II MBBS students were evaluated using a rubric-based grading system as outlined by Mandal *et al.* Each student's reflection was assessed, and scores were compiled for both pre- and post-intervention stages. Statistical analysis was performed using Stata software, and a chi-square test was conducted to determine the significance of score changes across the intervention.

### Statistical Findings:

•**Chi-Square Value:** 57.666

•**Degrees of Freedom:** 5

•**Significance Level:**  $p < 0.0001$

This result indicates a statistically significant improvement in reflective writing scores post-intervention, demonstrating the effectiveness of the reinforcement session.

## Conclusion

The p-value ( $< 0.0001$ ) indicates that the observed improvement in scores is not random, confirming a significant difference between the pre- and post-test results. The significant chi-square outcome suggests that the reinforcement session influenced students' performance across different reflective writing grades. Thus the study concludes that such sessions could have a positive impact on reflective writing, aiding in the development of critical thinking, promoting self-awareness, and facilitating professional growth.

At the end, one of the student's reflection states: “*In the future, I would like to seek advice from my mentors when dealing with difficult communication scenarios. I will also work on delivering sensitive information with empathy to handle better any such similar situations*”.

This demonstrates the student's commitment to applying empathetic communication skills, highlighting the practical impact of the reinforcement session on personal and professional growth.

## References

1. Wald HS, Reis SP. Beyond the margins: reflective writing and development of reflective capacity in medical education. *J Gen Intern Med.* 2010;25(7):746-9.
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3. Kadam SS, Kolhe SK, Kulkarni VV, *et al.* Impact of reflective writing skill on emotional quotient. *Med J Armed Forces India.* 2024;80(2):205-9.
4. O'Sullivan P, Aronson L, Chittenden E, *et al.* Reflective ability rubric and user guide [Internet]. MedEdPORTAL. Published 2010 Aug 26. Available from: <http://services.aamc.org/30/mededportal/servlet/segment/mededportal/?subid=8133>