

Research Article

Enhancing Teaching and Learning through Peer Observation: An Indian Case Study

Avita Katal ¹, Vijay K. Singh ², Tanupriya Choudhury ¹ and Faisal Imran ³

¹School of Computer Science, University of Petroleum and Energy Studies, Dehradun 248007, India

²School of Law, University of Petroleum and Energy Studies, Dehradun 248007, India

³Department of Computer Science and Engineering, Daffodil International University, Dhaka, Bangladesh

Correspondence should be addressed to Faisal Imran; faisalruetcse09@gmail.com

Received 14 September 2021; Revised 12 January 2022; Accepted 19 January 2022; Published 22 February 2022

Academic Editor: Xiao-Guang Yue

Copyright © 2022 Avita Katal et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer observation demands the teaching community to observe each other's teaching practice followed in classrooms and to learn from it. It focuses on individual requirements and learning by receiving and providing constructive feedback. This study gives detailed information about the purpose and principle of peer observation along with the steps followed in the peer observation cycle. The data gathered are from postobservation forms and meetings. Feedback from peers is used to demonstrate the importance of peer observation in improving the overall teaching experience. The results indicated that there is a significant improvement in the teaching style of the instructors. The category of attaining student attention and engagement grew by 28.8 percent, while the category of students demonstrating passion and motivation climbed by 15.27 percent. Peer observation is seen as a beneficial tool for teachers' professional development. Teachers stated that peer observation reduced their worry, hesitancy, and pressure throughout the teaching process, making it more dependable and real. However, participants identified time constraints and teachers' lack of observation expertise as barriers to peer observation.

1. Introduction

Teaching being one of the main components of educational planning plays a crucial role in educating children. Despite the importance of effective teaching, the results are far from ideal. Researchers have started a movement toward instruction attentive to students' variance, focusing on students' readiness, learning profile, and interest. Bell proposed the concept of peer observation in 2005 [1]. It is defined as the collaborative developmental activity in which the faculties or the professionals provide support to each other by examining each other's teaching and discussing and explaining the observations that they made. They exchange different ideas about teaching, collect feedback from the students/peers, and check out the new ideas that could possibly improve the way of teaching [2]. Peer can be a colleague from the same or different school/department. He can also be a skilled teacher having years of experience in teaching. However, peers should be willing to support other

peers throughout the entire duration of the observation activity. The value of the one-to-one relationship, which is usually between two faculties and intends to promote continued professional development, is a distinguishing feature of this model [3].

Peer observation is an important element of social cognitive theory where observational learning occurs. This asserts that people witness and experience another person's behaviour and then replicate it. Participating in social experiences teaches people a lot. Observing other peers not only helps in increasing current knowledge but also helps in building confidence and thus enhancing the self-efficacy for teaching. Observation is not merely about copying others' styles. It inspires the peers to try new pedagogies in classrooms and helps them to figure out what they have been trying in classrooms is in line with the good teaching quality practices. Faculty tries to adapt and modify techniques in classrooms to see what works best for them. Peel [4] presented the idea that peer teaching has two main purposes:

management of performance and overall development. The developmental peer observation in teaching is an integral part of the academic development program and can be formal. It offers a platform to discuss the practices related to teaching openly. Hence, it leads to reflections on teaching and fosters debate on the best practices of teaching [5].

Peer review of teaching (e.g., observation) is a professional responsibility that is critical to teaching quality. Huston and Weaver [6] asserted “the value of peer coaching as a form of continuing professional development for experienced faculty is largely unrecognised.” According to Chism [7], “good systems can be introduced and can flourish with focused attention.” In the long term, the investment can yield significant benefits for the health of academic units.

In education, peer observation of teaching can take various forms. There are three types of observation models that are widely accepted: evaluation, developmental, and collaborative [8]. These models differ depending on who conducts the teaching observation and the purpose of the observation. The evaluation model is primarily for managerial purposes, is generally judgmental, and involves managerial or academic staff monitoring teaching quality to ensure compliance with standards and the promotion of best practices [8]. Two other models are less judgmental and more formative in nature. The developmental model employs an educational expert as an observer, while the collaborative model employs an academic colleague who observes each other in a reciprocal arrangement [8]. “The forms of peer review used in higher education can be distinguished by contrasting assumptions about the purpose or function of peer review and the implications of that function for academic authority and power relationships” [9]. Nonetheless, the objectives of any peer observation of a teaching model or experience are multifaceted. According to Martin and Double [10], the goals of peer observation of teaching models are to (1) extend and improve an understanding of personal approaches to curriculum delivery; (2) develop and refine curriculum-planning skills in collaboration with a colleague; (3) improve teaching technique/styles of presentation through collaborative practice; and (4) engage and refine interpersonal skills through the exchange of insights relating to the review of specific curricular materials.

Online learning and teaching are becoming a more essential component of the institutional offer. It is critical that standards are upheld throughout all modes of practice. Faculties are asked to accept new ways of teaching and pedagogical techniques fit for the environment as online teaching via virtual classrooms grows in popularity. One method is to do peer observation online. Staffing arrangements are evolving in tandem with increasingly flexible learning and teaching styles. Part-time, on-demand, and remote teaching staff can build and experience a stronger sense of institutional connection through online peer observation. Online peer observation allows for the exchange of best practices in the online world. This guarantees that online innovation spreads in the same manner that classroom invention does. The majority of faculty new to online teaching lack that foundation of online learning experience,

whereas trainee instructors beginning out in classroom teaching may depend on personal classroom learning experiences dating back to their early years at educational institutions. Face-to-Face or classroom-based peer observation involves peers/observers attending a distinct lecture, whereas online learning environment classes’ observation is not straightforward as suggested by authors [11]. The observation in online mode is without the usual natural time boundaries where the peers can observe recorded sessions multiple times. It leads to better observations and feedback.

This paper reports the evidence from a study of faculties pursuing the Post-Graduate Certificate in Academic Practice (PGCAP) program. The study involves observing a colleague’s teaching online, which helps the observer and the observee to enhance their confidence and apply the newly learned strategies in their own teaching. Observing a colleague’s teaching might help validate elements of the observer’s approach that are working well. Being observed, on the other hand, has been proven to cause temporary emotions of vulnerability in certain employees, while feedback from the observer has typically been considered to be beneficial. We address the implications of our methodology for institutions and/or organizational units contemplating using peer assessment as part of a comprehensive methodology for effective teachings and learning.

This paper presents the different stages of peer observation and describes the mechanism for effective peer observation in the university. In the subsequent sections, the paper also shows that peer observation is very effective in enhancing the teaching of the instructor and proves to be efficient in the overall development of the educator.

In this study, the following four research queries were addressed:

RQ1: what mechanism is followed to collect and analyze the data?

RQ2: how observing the peer’s session helps in improving the teaching practice?

RQ3: does self-teaching enhance by observing the session of the skilled teacher?

RQ4: do instructors see peer observation as a useful tool for continuing their professional development?

2. Background of Peer Observation

Great teachers are not born but made by constant efforts of nurturing by persistent and concerted efforts to improve their knowledge and skills. An important quality of a great teacher is that he understands the teaching-learning process in depth, which helps him in appreciating the profession he is in and as well the process of imparting education. Learning is a transformation that occurs because of acquiring new knowledge, comprehending empirical law, or altering one’s mindset, among other things. Training brings a transition that is not just coincidental or inevitable with the passage of time, and it is a long-term transition that has been brought in consciously. Different learning models proposed by various

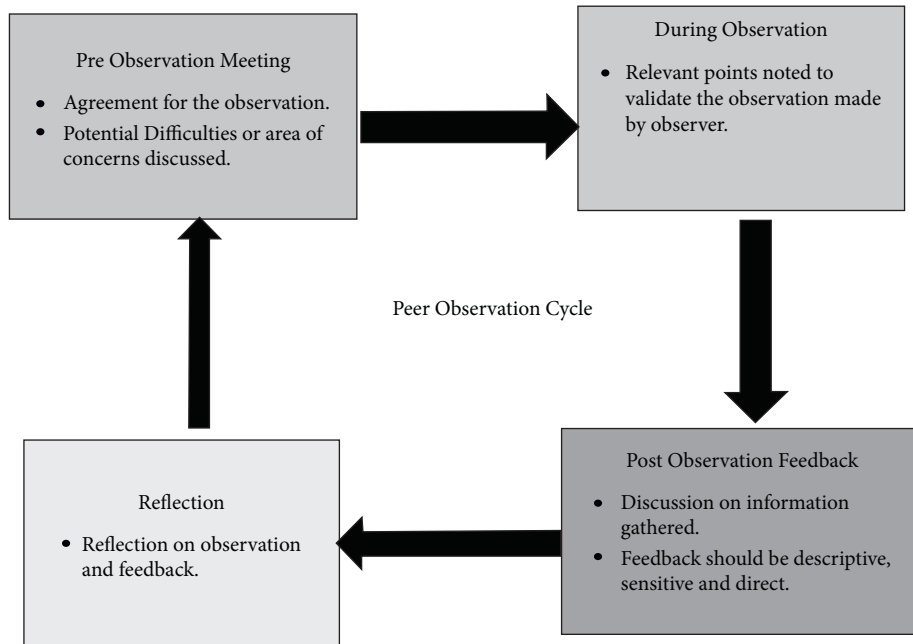


FIGURE 1: Peer observation cycle. Peer observation cycle occurs in multiple steps that mainly include preobservation meeting, observation, postobservation feedback, and reflection.

researchers can make this process more effective. The learning model defines a specific way of absorption of information. Faculty applies the learning model, which suits them and makes the process more efficient and easier. One such model is the reflective model that has been described in detail by Kolb [12], Gibbs [13], and Brookfield [13]. Reflection is the basic part of the teaching and learning process. It is a systematic way of reviewing practices followed in teaching, which helps to learn from one's experience to the next, making sure that the learners make maximum progress. More appropriately, reflective practice is described as learning through and from experience that aids in the development of fresh insights about oneself and one's practice [14]. It makes the practitioners aware of their own professional knowledge and action by questioning the already established ways/practices and evaluating them critically to practice situations.

The reflection process needs to be repeated. It inspires individuals to work collaboratively with others, to share best practices and draw support from them. Figure 1 shows the stages in the peer observation cycle, which are described in detail in sections.

2.1. Identifying Peers. Identifying peers [15] that will be involved in the observation process is of utmost importance. The relationship between the observer and the observee is critical to a successful observation of teaching. Chism [16] suggests that effective peer observation programmes ensure that the "observed teacher and the observer be trusted and respected by each other," emphasising that feedback should be candid, yet tactful, and clear communication between the observer and observee should be fostered. Both parties

should be supportive of receiving the feedback and acting on it to improve their teaching quality that in turn helps the learners. On the contrary, according to Keig [17], peer observation of teaching studies indicates that "colleagues who respect and trust each other can be invaluable in helping improve each other's teaching." One way of getting formative and supportive emphasis on feedback is to let the observee decide who would observe them and what aspects of their teaching their peers should observe, receive feedback, and take follow up on. However, changing the peer pairings can prove to be fruitful in providing critical and constructive teaching findings in due course of time. According to Hammersley-Fletcher and Orsmond [18], the observer should provide "as objective a view of the teaching session as possible, and review and reflect on that experience with the observee in a way that informs future thinking and practise."

A peer chosen can be from the same school or a different school or can be a skilled faculty too. It is better to have a peer who understands the subjects and can comment on the teaching of certain subjects knowing the criticalities of teaching it but at the same time having peers from other schools helps in observing the teaching process rather than the content of the lecture. Peers can also be at different levels of experience, so it becomes important that power does not get in the way of providing mutual support and genuine feedback to each other during the process of improving teaching pedagogies. Some other ways of choosing peers include the administration team deciding the learning sets randomly or alphabetically. Whatever system or process may be to choose the peers, the borderline remains the same that the opportunities must be created for broader discussion and outcomes.

2.2. Preobservation. The first stage of the peer observation cycle is a preobservation meeting where the observer and the observee get an opportunity to discuss how the observation will be organized, where the faculty is supposed to be assessed and what kind of feedback is sought. The observer gets to know where the lecture will be conducted, what is the level of the target audience, how well the faculty knows the learner set, what kind of interaction is expected from learners, what would be the learning outcomes for the session, how the observer will be introduced to the learners, and so on. All the points discussed are recorded in a pre-observation form and are discussed in a preobservation meeting. The main points covered in the form are as follows:

- (1) Aim/objective/outcomes to be achieved during this session
- (2) Description of the learner's profile and their understanding level
- (3) Teaching pedagogy to be adopted with appropriate reasons for learner needs and equal opportunities
- (4) Resources/tools to be used
- (5) Scope for participation and interaction
- (6) Techniques to be applied to measure the extent of the student's learning during this session

2.3. Observation. The observation phase not only adds value to the teaching skills of the observee but also helps gain insights into the teaching skills of the observer. The observer should arrive in the class early without causing any hindrance or suspicions in the mind of the learners. He is not supposed to take part in class activities, but the presence of the observer should be explained to the learners [19]. They should be made well aware of the fact that the observer is not there to judge their efficacy or performance. The faculty should deliver the lecture in the same way as they do on a regular basis without being affected by the presence of the observer. This helps to get better and actual feedback for the session. The students are given a choice to decline the observation-taking place in their class. It is also important to note that, for better results, the faculty should try to focus on the facilitation of the lecture (teaching process) rather than on the content of the lecture until and unless he has not asked for comments and discussion in those areas in pre-observation meetings. Making notes of the points during the session helps the observer to give detailed feedback to the observee/faculty without missing anything.

2.4. Postobservation. A meeting is arranged between the observers and observee right after the session to have a discussion on the feedback. Some observers note down important points during the session. Nevertheless, it is still important to have a postobservation meeting as quickly as possible as it helps to easily recall the details of the session and thus facilitating reflection by the observer and observee. If it is not possible to have a meeting as soon as possible after the session, it becomes very important that the observer has noted down the points to make sure what worked well in the

session, what went wrong, and what are the areas of improvement and concern. In addition, the observer is supposed to submit a postobservation form, particularly in the areas where the observee has sought feedback. Some of the key points that are to be observed and are a part of the postobservation form are as follows.

2.4.1. Aims/Objectives/Outcome of the Session. Setting objectives and aims for the lecture is very important as it helps in setting direction for the learning process (the contents, session aims, and learning outcomes). Hence, it is one of the main factors to be observed in the activity. When the objectives are communicated to the learners at the beginning of the session, learners get the connection of what they are learning and why they are learning. They know where they have to pay attention and where they may need support from their instructor. This in turn helps the students to set personal learning objectives, which keeps them motivated.

2.4.2. Content Clarity, Research, and Update. The content used by instructors should be clear and up to the mark. They learn more from examples and case studies rather than starting from basic principles and building the knowledge further.

2.4.3. Clarity of Content Delivered. Simple and logical presentation of course material aids students in comprehending the point of each lesson and making the subject easy to follow and remember. It is important to connect students with the course in both face-to-face and online settings. Being concise and avoiding spending too much time on minor details help students to learn what the faculty wants them to learn. The less the content dumped on students at a given time is, the better it is.

2.4.4. Display of Enthusiasm and Motivation for Students. Teacher enthusiasm is widely regarded as one of the most important and admirable traits and attributes of good educators and hence regarded as one of the important observation points. An enthused instructor instills enthusiasm, fun, and suspense in the classroom, encourages students to participate, and encourages them to explore. As a result, teacher passion piques students' interest and motivates them to read. Teacher excitement results in higher teaching evaluations, favourable attitudes toward faculties, increased student achievement, and a stronger learning environment [20].

2.4.5. Choice of Tools for Delivery. Faculties use teaching resources to assist students in being self-directed and strategic learners. Faculty adopts new and innovative methods rather than using traditional teaching techniques that make students sleepy in the classrooms [21]. Techniques like polling used between the lectures help students listen to the lecture carefully and answer. Visual media surround today's learners. They are accustomed to accessing

information in both textual and visual forms. Using images in lectures is a pedagogical strategy that helps in gaining the attention of students. Many of the learners are more inductive than deductive in nature. Making a course engaging by the use of interesting anecdotes, animations, or illustrations in the lectures not only motivates students to study hard but also helps them to succeed.

2.4.6. Student Attention and Involvement. One of the major challenges is to gain students' attention, especially in online lectures; hence, it is one of the key factors to be observed and evaluated during a peer observation activity. There are different ways to gain student attention. Some of the ways include changing the level and tone of voice that signals the students to pay attention, using a visual related to the instruction and not commenting on it immediately, and focuses students' attention on the course content, which afterward leads to a productive session [22].

2.4.7. Classroom Management. Classroom management refers to "the process through which faculties and educational institutes develop and maintain appropriate student conduct in classroom situations" [23]. The goal of implementing classroom management strategies is to increase students' prosocial conduct and academic involvement. Evertson and Weinstein [24] defined classroom management as the behaviour teachers receive to build a strong foundation for participants' education and socialisation. According to Brophy [25], "classroom management refers to actions taken to create and maintain a learning environment conducive to successful instruction (arranging the physical environment, establishing rules and procedures, maintaining students' attention to lessons, and engagement in activities)." Both definitions emphasise the importance of the teacher's actions to facilitate student learning. Effective classroom management not only creates and maintains an organized atmosphere in the classroom but also improves student learning, promotes psychological and emotional development, and reduces misconduct.

2.4.8. Treated Students with Respect and Gave Equal Opportunity. The notion of equality and tolerance, often known as multiculturalism, is the encouragement and acceptance of individual diversity. Individuals must be treated consistently and fairly regardless of their race, gender, age, handicap, sexuality, or gender identity [26]. Equality affirms that each and every trainee, irrespective of race, should get the same access to the top education. It also necessitates that all pupils be held to the same benchmarks and goals, irrespective of their situations, skills, or perceptions [27]. Equality in education has traditionally been viewed as a matter of more evenly or fairly dividing educational and education-related resources [28]. Essentially, no matter where they come from or what needs they may have, everyone gets the same thing. Diversity is about recognizing and accepting individuals. Promoting equity and diversity in the classroom benefits both faculty and learners and hence

becomes a key observant point. The aim of the faculty is to create a classroom environment in which all students can excel together and recognize that human characteristics make them unique.

2.4.9. Confidence and Professionalism. The teacher should be prepared to anticipate the challenges of specific classes and should be confident when he meets new challenges or the education landscape changes or he has to modify their teaching pedagogy.

2.4.10. Effective Use of Questioning. Although it seems to be a straightforward job, posing questions is perhaps the most important weapon for educators. Educators inspire a student to new heights of vision and understanding if the right questions are asked to the right student at the right time. A good question can excite, annoy, or comfort the student, and it can lead to a surprising amount of insight and vital awareness. The levels of questions require students to answer three kinds of questions about a text: factual, inferential, and universal (levels of questions). Factual questions (level one) may be clearly addressed by facts in the paper, inferential questions (level two) can be answered by evaluating and interpreting specific portions of the text, and general questions (level three) are open-ended inquiries presented by concepts in the text. They are intended to spark a discussion on a broad subject or issue.

2.4.11. Teaching Strategies and Resources. Lecture remains an important means of conveying knowledge. Case methods where students are allowed to adapt what they learn in the classroom to real-life situations are also an important means of disseminating and applying information. Discussions are used to better focus on huge groups of people. Problem-solving sessions, collaborative small groups, games, case studies, role-playing, and other practices that require students to put what they have learned into practice are examples of active learning [29], which is one of the most acceptable and effective teaching strategies. Along with the mentioned strategies, cooperative learning and distance learning are also very popular.

2.4.12. Providing Clear Feedback (If Any). Important insights or suggestions which observers feel are important to be shared with the observee go under the category of providing clear feedback (if any).

It is difficult to provide critical feedback, but it is also important to note that the observee and observer should benefit from this experience. Some of the key points that should be kept in mind while providing feedback are as follows [30]:

Positive articulation: the feedback though critical should also praise/affirm and acknowledge the achievements and efforts put in by the observee

Realism: the comments made in the feedback should be concrete and grounded and should focus on observable behaviour

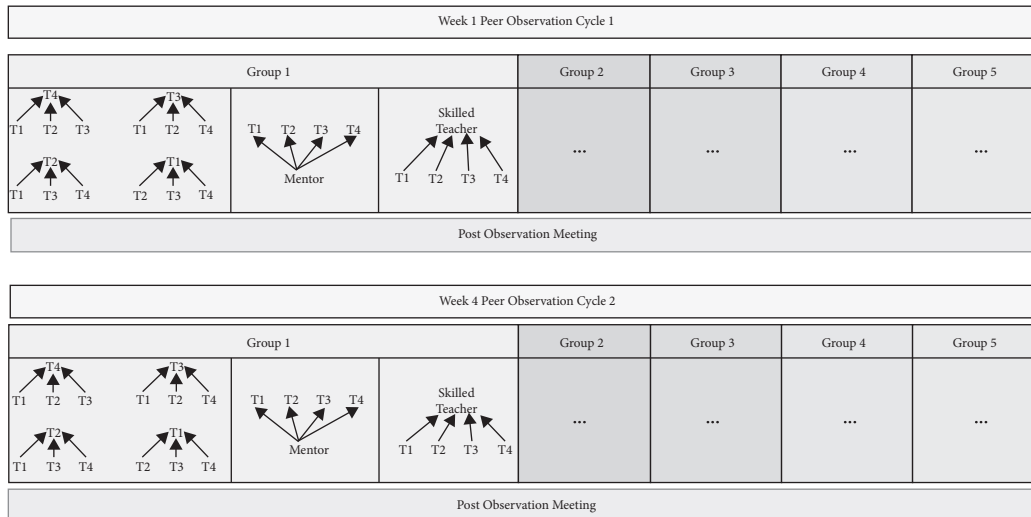


FIGURE 2: Sources of data collection. Peers observed each other's sessions and provided feedback. Mentor and skilled teachers who also observed the peers' sessions provided feedback that was also added to the data being analyzed.

Result-oriented: the feedback must focus on suggesting a course of action to achieve the teaching pedagogy where the observee was lacking

2.5. Reflection. The postobservation comments and discussion lead to reflection where the observee chalks out a plan or a course of action to improve the concerned areas. The observer reflects on the process of observation and what he has learned from that experience. It is useful to do the peer observation activity in a cycle to develop a critical reflection on teaching sessions and outcomes. Reflective education is a strategy in which teachers assess the relative effectiveness of their educational approaches by reflecting on their own teaching activities. Changes in teaching methods might be predicted based on the outcomes of this methodical approach that focuses on reflection. Reflection is one of the most effective activities of professional educators (whatever the subject matter).

3. Participants and Site

During the lockdown period of the novel coronavirus disease 2019 (COVID-19), the higher learning subnetwork, from primary to tertiary level, has crumbled not only in India but also globally. The peer observation done in this study was for synchronous online education followed in the University of Petroleum and Energy Studies, Dehradun, India. It looked forward to an intellectually enriched opportunity for future academic teaching-learning process improvement during any adversity. Twenty-one faculty members were selected for their level of experience to participate in the study under Post-Graduate Diploma in Academic Practice after discussions with the heads of different schools and the interview process. These participants were divided into 5 groups. Each group was assigned a mentor (a faculty with 15+ years of experience). The justification for purposefully selecting the aforementioned

mode and participants was that it was far easier for us to conduct this activity in synchronous mode on blackboard online platform used during pandemic times when social distancing was being followed, and all educational institutions were running online.

4. Data Collection

RQ1: what mechanism is followed in order to collect and analyze the data?

The data collected in peer observation were mainly from four major sources. The process of data collection is as shown in Figure 2:

- (1) Feedback from the preparatory session that was held as a part of the boot camp. It demonstrated how peer observation should be performed, followed by feedback and reflection.
- (2) Feedback from peer observation that was collected for two subsequent cycles in order to determine how effective it was in improving the teaching and learning process.
- (3) Utilization of skilled teacher's lecture observation and feedback for each peer observation cycle.
- (4) To aid the process, feedback from an assigned mentor with more than 15 years of teaching experience that was also collected for each peer observation cycle.

Since this was a qualitative as well as quantitative study, the data collecting tools comprised observations, focus group interviews, and forms. During the focus groups, like preobservation and postobservation meetings, the peers (observer and observee) addressed questions designed to elicit the participants' perspectives on peer observation, including their ideas on the merits and limits of peer observation for both the observer and observee. In this regard, the group conversations were

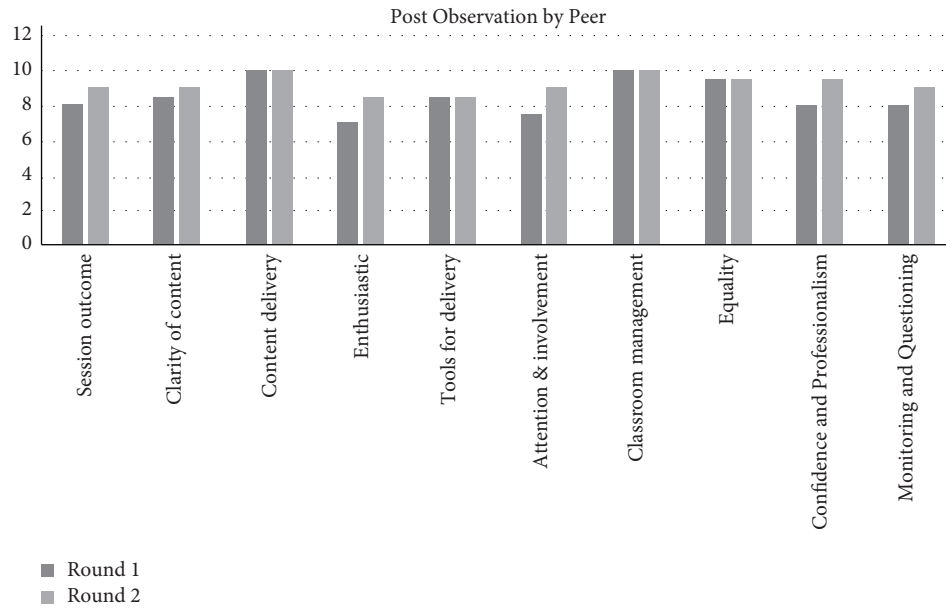


FIGURE 3: Postobservation by peers in round 1 (dark grey bars) and round 2 (light grey bars).

closely watched, and every effort was made to create clear and open-ended questions, changing them as needed to elicit explanations, descriptions, or examples. Furthermore, the peers were coworkers and therefore had a preexisting connection. They discussed opinions, shared ideas, and offered support for one another throughout the process [31]. As a result, of the mutual trust created by shared experiences among the study's stakeholders, the participants offered their perspectives honestly and freely. A systematic procedure was followed in order to collect the data. The preobservation form after having the preobservation meeting was sent to the peers that informed them about the aim and objectives of the session, strategy for teaching, and so on. After the session, in the postobservation meeting, a postobservation form was given by the observee. The postobservation form provided feedback about the session, like what was going right, what needs to be improved, and so on. For quantitative analysis, the peers submitted the forms, which had comments and grades assigned to the peers whom they observed. These grades were compared with the grades obtained in the subsequent cycles.

5. Ethical Considerations

Before beginning the data collecting procedure, the peers contacted the school heads to arrange an introductory meeting and to request that their peers are allowed to participate in the study. When this was completed, the heads were given an informed consent letter informing them of the study's goal and method. The heads were also assured that the study's findings would not be utilized for nonacademic purposes. The students of the classes where the peer observation was going to be conducted were also informed of the activity and its goal.

6. Data Analysis and Findings

RQ2: how observing the peer's session helps in improving the teaching practice?

Figure 3 depicts the marking by peer observers in cycles 1 (dark grey bars) and 2 (light grey bars). Peers graded and commented on all of the criteria listed on the post-observation form. Each criterion was graded out of ten.

RQ3: does self-teaching enhance by observing the session of the skilled teacher?

Figure 4 depicts the marking by a skilled teacher for rounds 1 (dark grey bars) and 2 (light grey bars). Skilled teachers graded and commented on all of the criteria listed on the postobservation form. Each criterion was graded out of ten.

Figure 5 depicts the marking by a mentor for round 1 (dark grey bars) and round 2 (light grey bars). Mentor graded and commented on all of the criteria listed on the postobservation form. Each criterion was graded out of ten.

Figure 6 depicts the overall feedback received in round 1 and the improvement after the incorporation of feedback in the second round. The overall feedback is calculated by taking the average from the peer observation grades, skilled teacher grades, and mentor grades.

Peer monitoring of teaching at universities is viewed as a positive and progressive technique for improving teaching quality. There is a significant improvement in round 2 for the areas where the faculty falls short. The faculty considered feedback from peers, skilled teachers, and mentors and incorporated it into his instruction. The incorporation of feedback has resulted in a significant improvement in teaching. The criteria for achieving students' attention and engagement have increased significantly by 28.8 percent, while the criteria for demonstrating enthusiasm and motivating students have increased by 15.27 percent. As a result,

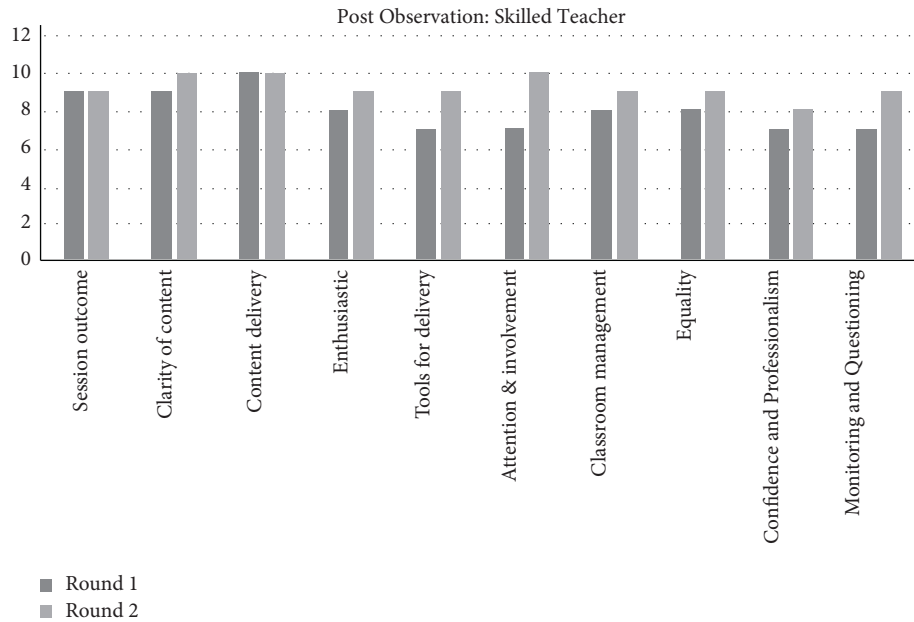


FIGURE 4: Peer observation by skilled teachers in round 1 (dark grey bars) and round 2 (light grey bars).

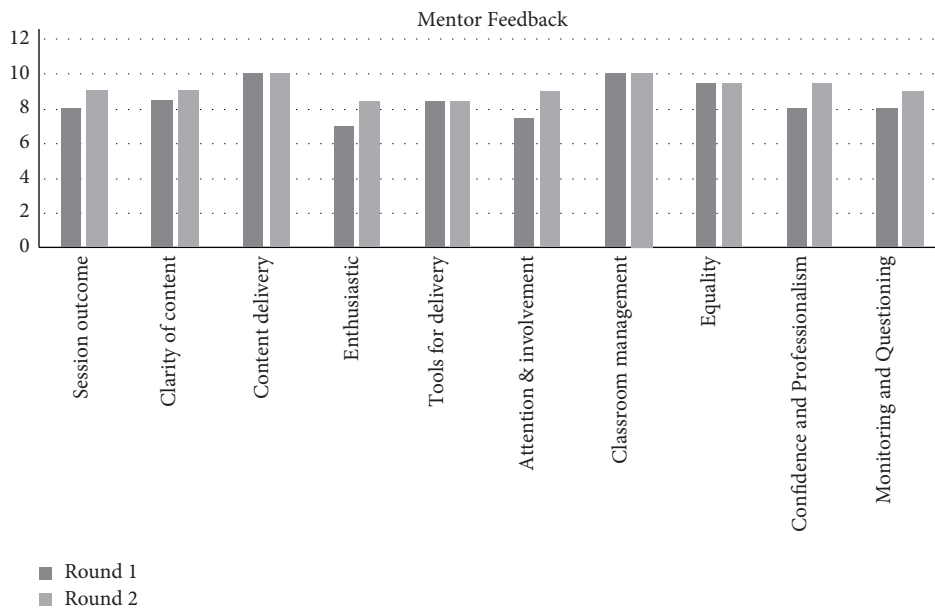


FIGURE 5: Peer observation by mentor in cycle 1 (dark grey bars) and cycle 2 (light grey bars).

it is possible to conclude that peer observation improves the overall teaching experience.

7. Discussion and Highlights

RQ4: do instructors see peer observation as a useful tool for continuing their professional development?

Peer observation becomes especially valuable when new techniques are introduced into the educational process. Adoption of new technology takes time, and many of the difficulties that teachers face can be overcome with peer support. In the context of the continuous development scheme, peer observation of teaching is described as the

formal process of identifying, disseminating, and developing good practice among professionals involved in learning and teaching activities. Peer observation can also be used to help teachers reflect. Some of the highlights of this study are discussed in the following sections.

7.1. Constructive Feedback. While it is critical that the rationale address all aspects of the rubric, positive and constructive feedback should be prioritized [32]. Significant feedback across all or many components is overwhelming to a teacher and does not indicate what is important or where they should begin. Prioritized feedback focuses on the most important ideas and

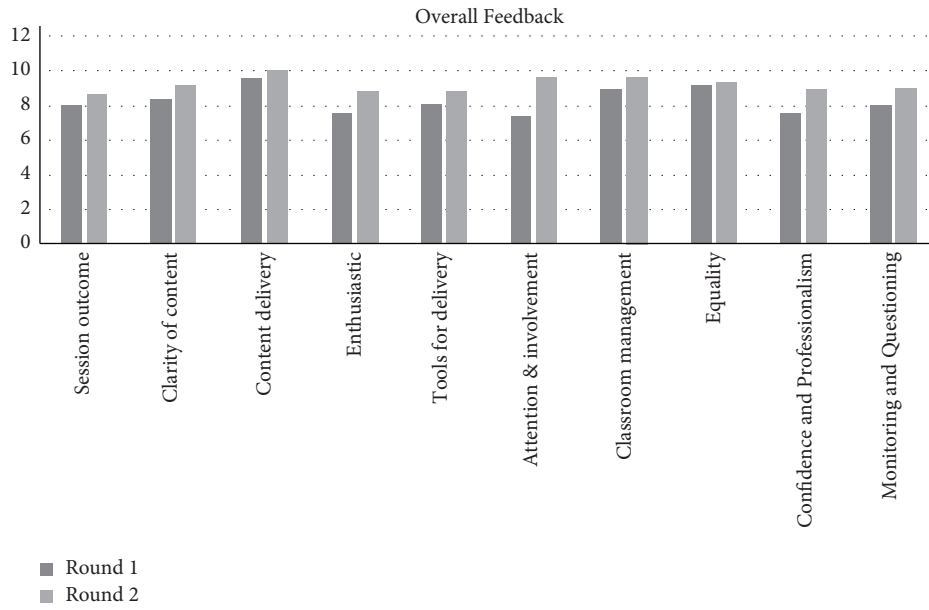


FIGURE 6: Overall feedback in round 1 (dark grey bars) and round 2 (light grey bars).

strategies for the educator to continue or adjust in order to progress in their practice. Some examples of this type of feedback include the following. To engage students, teachers used a variety of techniques (movement, story, eye contact, tone of voice, group work, discussion, etc.). To meet changing learners' needs, the professor merged instructional methods (visual, auditory, etc.) when suitable. The teacher was observant to student thoughts and feedback, providing detailed explanations and instances and/or assisting trainees in replying to one another's remarks. The professor was well-informed and up-to-date on the subject matter, demonstrating mastery of the material.

According to Whitlock and Rumpus [33], "the observation feedback that is given should be both positive and supportive to help the observed teacher reflect on their teaching. Instructors should begin and end with positive points, interspersing the positive with the critical throughout." In peer observation, one of the observers commented, "Your presentation skills are excellent and you give ample time to the students for thinking about the question that you asked in the class. Students actively participated throughout the session." He also added, "The content used is well researched and updated with the current scenario." One of the observees had quoted, "In fact, I was a little nervous before the experience. And after... well, not after, but during the first observation, I felt relaxed. At first, I assumed it would be a criticism of your profession, your job as a teacher. Then I realised that it is dealing with problems together in order to assist one another. Now I am completely confident in it."

Constructive feedback should be nonjudgmental and detailed, with plenty of evidence and concrete examples [4]. As a result, participants must be self-reflective, self-aware, and self-critical. The observation of a peer helped the observer to reflect on his own teaching style. He quoted, "I had grown accustomed to teacher-centered instruction, with

more lecturing and less integration of students, so observing these other teachers made me realise that I needed to shake things up a bit... because I'm unintentionally focusing on this style and not changing it... That was extremely beneficial to me." Observer at the same time quoted after the second cycle, "You have enhanced your teaching skills after the first cycle, and there are significant improvements in your teaching methodology. You have changed the way how questions were asked in the class."

From the above conversation among observers and observees, it can be concluded that peer observation, which includes analysis and comments, is critical for constructing a research society and rising group performance. Peer observation helps teachers by offering structured feedback against a set of established requirements, with the goal of progressing learning outcomes. Peers were grateful for the feedback received from observers. The majority of them felt benefited. Some of the peer's experiences revealed that being an observer for the sessions of their colleague proved more beneficial to them. The suggestions and the informed comments from the observers helped the peers to improve their teaching pedagogy and instructional practices and made them feel confident.

7.2. Instructional Strategies Enhancement. Peer observation enabled peers to promote the sharing of excellent practices while also raising understanding of the effect of their own teaching. Observations made were utilized by the peers in online synchronous mode teaching: innovative tools were used to make online learning as good and effective as face-to-face mode. Random cold calling and question answering on a voluntary basis were used as strategies. However, some of the peers observed that these methods could not be effective in case the strength of the class is huge. Some of the students may not participate. Getting immediate feedback on the

content delivered provided a discerning window through which faculty assessed their teaching methodologies and changed them accordingly to involve and engage students at a deeper level of understanding. It also empowered students by making them feel that their opinion matters and is valued. Polls and surveys were used effectively to actively engage all the students. Questioning was also found to be a very useful tool in order to check whether students were able to understand the subject. Continuous feedback given to the students encouraged the students to learn more and feel motivated. Teaching is tough, and that is true even if the faculty has a classroom full of 40 intelligent and bright students who listen to every word. Getting the student's attention was found to be one of the most difficult tasks for an instructor, especially in online classes. By setting a polite, professional tone, promoting online conversations, asking questions and clarifying answers, and honouring contributions, peers learned to help students overcome uncertainty while fostering positive student experiences with course material. Relations that are upbeat and enthusiastic tend to set the mood [34] as faculties face situations where students are distracted. Many strategies like cooperative learning, project-based learning, and active learning were used to grab their attention.

Content preparation equally plays an important role in delivering the lecture. It is the responsibility of the teacher to make the content arrangement in a systematic way so that learners do not find difficulty in understanding the subject. It has been discovered that high-quality teaching necessitates faculties' continual learning. They should have up-to-date skills, be able to use available tools, and be prepared to use a range of teaching methods to attract a diverse group of students. They should be outstanding communicators, eager to put students first, conscious of creating an atmosphere that encourages constructive learning and experimentation, and able to engage with all students both within and outside of the classroom [35]. An instructor should ask questions that help students develop thinking skills. The methodology of active learning was chosen by many peers to change the traditional teacher-centered classrooms into the newer student-centered approach to learning. By instilling a sense of discovery in students without losing the fundamental tenets of educational taxonomy or a rigorous knowledge of the foundation and advancement of the academic disciplines the student might be pursuing and need to master, an active learning approach has become an acceptable teaching strategy in the new learning setting.

A faculty proficient in a language is easily understood by all the students. The strategies like using humor in the class while explaining the concept were used by the instructors. These indirect mechanisms such as comedy will elicit and maintain student interest in learning. Teaching is a serious (i.e., important) profession, but it does not require faculty to be serious (i.e., humorless) [36]. Indeed, one of the characteristics of excellent (i.e., master) faculty, according to Bill Buskist and his posse of productive Auburn University protégés who, over the last 20 years, have discovered and identified the criteria of exceptional (i.e., master) faculty, is having and displaying a strong sense of humor [37].

One of the observees involved in the peer observation activity commented when asked about how his instructional strategies have improved? He answered, "I spend 1–1.30 hours preparing for each class. I collect stories and sayings that express the same idea as the lesson. I teach by using examples from everyday life and well-known incidents from the community. As a result, I introduce each topic by telling a story motivating students, and I prefer to relate the situation from the text to real-life incidents, thereby retaining students' interest out of class time I use the tried-and-true method of repetition to assist slow learners."

The observer of the session commented by adding to the observee experience, "Your teaching style is unique and the way you have used different techniques for engaging children is excellent. By observing your lecture, I clearly conclude that you have good sense of knowledge about the subject and especially the children who are slow learners would find your lecture very helpful."

Many observees when asked about instructional strategies commented, "My teaching style is very much improved by observing my peers. I quality that I have adapted by observing my peers is that while providing questions to the students. . . we should give some time to them for answering the question."

From the above conversations, it can be concluded that examining how the other lecturers involved in peer observation can assist other lecturers in making choices about their own lecture halls and pedagogical techniques. These instructor interactions generated fresh teaching ideas, methodologies, and techniques and created an environment in which teaching changes were possible.

7.3. Cooperation and Collaboration. People coming together to share decision-making power and responsibility has been broadly defined as collaboration [38]. Individuals cannot transform educational institutions into places where all learners learn on a daily basis; groups of teachers bring more skill, knowledge, and experience to schools than any single individual can. Professional collaboration in the institutional setting is defined by Leonard and Leonard [39] as "teachers working together regularly, sharing their knowledge, contributing ideas, and developing plans for achieving educational goals." Collaboration inside a college can occur among educators, inside a grade level and subject area, and across either services and support and can contribute to the formation of trust and collegial connections, both of which are recognized to be important for enhancing school and learner achievement [40]. Collaboration cultures, learner performance, and the content and structure of teacher relationships all have strong links [41].

One of the peer observation group members said "Some of the notable experiences that I faced includes: When I first started the peer observation process, I was a little embarrassed and nervous about having someone else watch and evaluate my teaching methods... but the support and encouragement I received... was better than I expected and was very useful."

Peer observation led to cooperative relationships among colleagues. This was most likely the result of disciplinary differences and personal experiences. Collaboration with coworkers sparked debates about educational planning and designing, encouraging educators to participate in a never-ending cycle of growth and training. When done properly, peer observations allowed teachers to grow in ways that resulted in better academic education and better levels of academics.

One of the observers said “With the help of collaboration with other peers, I have learned many things. . . like I was really impressed by one of my peers’ methods of teaching how he builds a story around the technologies by incorporating real incidents from bug tech giants, which involved using pictures of some really influencing techies and arranging them in order of time, then having the students tell their views about the technologies and their long-time impact. I took note of this technique, went to my room, devised a strategy, and taught the story like him the next day.”

“...Another method that I have learned is that, my presentation of key ideas to my students was sloppy. I lacked the ability to present ideas in a logical order, which frequently caused confusion among my students. I went to my colleague’s class about twice. I was taken aback by how methodically he would present key points and deal with each of them in a logical manner. I made a note of it in my diary and promised myself that I would apply this lesson from the next class.”

Peer Observation provided an opportunity to implement effective professional development, thereby contributing to collaboration that resulted in more effective and improved teacher instruction in classrooms.

8. Limitations

Some of the observations made that influenced the scope of the study are as follows:

- (1) The number of participants is a key drawback of this study. Only 21 people were a part of the study. Their experiences may not be representative of the overall population. The small size of the cohorts, although providing participants with numerous opportunities to express ideas, may have resulted in a smaller pool of ideas, which might be viewed as an additional constraint.
- (2) Since the participants were all faculties from different educational programs, their insights into how peer observation is regarded in the observed specific program may not be applicable (due to the differences in the interest areas). As a result, determining whether the findings are generalizable is challenging.
- (3) The participants have numerous concerns regarding the time component. They thought that, despite its importance, peer observation might sometimes feel like just another duty to perform. Participants stated that, due to everybody’s busy timelines, it may be hard to find time to discuss the lecture they are watching or whenever they watch it.
- (4) Participants were encouraged to contact the instructor ahead of time to organize the observation and to clarify requirements such as whether to identify themselves or interact with the students, etc. Several participants mentioned instances when they were dissatisfied with the behaviour of their coworkers, which ranged from showing up late to courses they had agreed to monitor to not showing up at all. Some participants, on the other hand, noted that the mentors had previously provided them with useful guidance and some etiquette as observation rules but teachers were failing to follow them. In any case, if participants are to engage in and benefit from peer observation, the observing teacher’s top priorities should be civility and care. These were the real-world barriers to learning through peer observation.
- (5) Another drawback noted by participants is that teachers may not perform to their full potential if they are aware that they are being monitored. They may perform better than their actual performance during the observation sessions. It can also be prejudiced.

9. Conclusion

Peer review of teaching allows academic staff to focus on and strengthen their teaching methods, as well as foster positive teaching relationships among colleagues. Peer observation refers to faculties watching and learning about one another’s experiences. Its aim is to encourage the exchange of best practices and raise awareness of your own teaching’s influence. Gaining knowledge about the subject taught is not the only factor that helps to be a successful teacher. It also entails a willingness to develop yourself on a holistic level, as well as upgrading the tools and materials one uses in the classroom. The easiest way to teach is to have students reflect and analyze what they have learned on a regular basis. The several hours spent in the classroom will never be enough to schedule classes, arrange content, and study students’ assignments and tests, as well as all of the institutional standards for whatever organization one works in. In this paper, the purpose and principle of peer observation are discussed, along with the steps that should be followed while participating in the peer observation cycle. The paper concludes with the results that are obtained by following the customized peer observation cycle, which show significant improvement. The criterion for attaining student attention and engagement grew by 28.8 percent, while the criteria for expressing excitement and inspiring students improved by 15.27 percent. Additional investigation on peer observation as a human development tool should involve a larger number of participants and far more focus organizations to acquire a wider diversity of viewpoints, according to the findings. A greater diversity

of professional or cultural backgrounds among the chosen participants may be beneficial and lead to a more in-depth understanding of how the practice is perceived.

Data Availability

Data sharing is not applicable to this paper.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Acknowledgments

The authors would like to express their appreciation to the University of Petroleum and Energy Studies, Dehradun, India, for providing faculty with the opportunity to participate in the Post-Graduate Certificate in Academic Practice program and for providing full support throughout the program.

References

- [1] M. Bell, *Peer Observation Partnerships in Higher Education* Higher Education Research and Development Society of Australasia, Victoria, Queensland, South Australia, 2012.
- [2] H. Kanuka and C. Sadowski, "Reflective peer observations of university teaching: a Canadian case study," *Journal of University Teaching and Learning Practice*, vol. 17, no. 5, 2020.
- [3] A. Kennedy, "Models of continuing professional development: a framework for analysis," *Journal of In-Service Education*, vol. 31, no. 2, pp. 235–250, 2005.
- [4] D. Peel, "Peer observation as a transformatory tool?1," *Teaching in Higher Education*, vol. 10, no. 4, pp. 489–504, 2006.
- [5] M. L. Angelini, *Learning Through Simulations*, Springer, Berlin, Germany, 2021pp. 43–47, Professional Development Through Peer Observation and Feedback.
- [6] T. Huston and C. L. Weaver, "Peer coaching: professional development for experienced faculty," *Innovative Higher Education*, vol. 33, no. 1, pp. 5–20, 2007.
- [7] N. V. N. Chism, "Why introducing or sustaining peer review of teaching is so hard, and what you can do about it," *The Department Chair*, vol. 18, no. 2, pp. 6–8, 2007.
- [8] J. Yiend, S. Weller, and I. Kinchin, "Peer observation of teaching: the interaction between peer review and developmental models of practice," *Journal of Further and Higher Education*, vol. 38, no. 4, pp. 465–484, 2014.
- [9] J. Sachs and M. Parsell, *Peer Review of Learning and Teaching in Higher Education: International Perspectives*, Springer, Berlin, Germany, pp. 1–219, 2014.
- [10] G. A. Martin and J. M. Double, "Developing higher education teaching skills through peer observation and collaborative reflection," *Innovations in Education and Training International*, vol. 35, no. 2, pp. 161–170, 1998.
- [11] S. Tonkin and J. D. Baker, "Peer coaching for online instruction: an emerging model for faculty development," in *Proceedings of the 19th Annual Conference on Distance Teaching and Learning*, pp. 1–4, Madison, Wisconsin, August 2003.
- [12] M. Chen, S. Zhang, M. Tenbomer, and D. Tate, "Evaluation of learning and teaching practice for design-oriented engineering modules," in *Proceedings of the 2018 4th International Conference on Humanities and Social Science Research (ICHSSR 2018)*, pp. 763–768, Wuxi, China, April 2018.
- [13] M. Huda and K. S. M. Teh, *Mentorship Strategies in Teacher Education*, IGI Global, Hershey, PA, USA, 2018pp. 136–152, Empowering Professional and Ethical Competence on Reflective Teaching Practice in Digital Era.
- [14] T. S. C. Farrell, "Professional development through reflective practice for English-medium instruction (EMI) teachers," *International Journal of Bilingual Education and Bilingualism*, vol. 23, no. 3, pp. 277–286, 2020.
- [15] J. Tenenberg, "Learning through observing peers in practice," *Studies in Higher Education*, vol. 41, no. 4, pp. 756–773, 2014.
- [16] N. V. N. Chism and G. W. Chism, *Peer Review of Teaching: A Sourcebook*. 209, Wiley, Hoboken, NY, USA, 2007.
- [17] L. Keig, "Formative peer review of teaching: attitudes of faculty at liberal arts colleges toward colleague assessment," *Journal of Personnel Evaluation in Education*, vol. 14, no. 1, pp. 67–87, 2000.
- [18] L. Hammersley-Fletcher and P. Orsmond, "Reflecting on reflective practices within peer observation," *Studies in Higher Education*, vol. 30, no. 2, pp. 213–224, 2005.
- [19] G. F. Kohut, C. Burnap, and M. G. Yon, "Peer observation of teaching: perceptions of the observer and the observed," *College Teaching*, vol. 55, no. 1, pp. 19–25, 2007.
- [20] H. Serin, "The role of passion in learning and teaching," *International Journal of Social Sciences & Educational Studies*, vol. 4, no. 1, 2017.
- [21] P. Sharma, "Teaching online: tools and techniques, options and opportunities," *ELT Journal*, vol. 65, no. 2, pp. 217–219, 2011.
- [22] J. S. Twyman and W. L. Heward, "How to improve student learning in every classroom now," *International Journal of Educational Research*, vol. 87, pp. 78–90, 2018.
- [23] K. Sieberer-Nagler, "Effective classroom-management & positive teaching," *English Language Teaching*, vol. 9, no. 1, pp. 163–172, 2016.
- [24] C. M. Evertson and C. S. Weinstein, *Handbook of Classroom Management: Research, Practice, and Contemporary Issues*. 253, Lawrence Erlbaum Associates, Mahwah, NJ, USA, 2006.
- [25] J. Brophy, *Handbook of Classroom Management*, History of Research on Classroom Management, Lawrence Erlbaum Associates, Mahwah, NJ, USA, Lawrence Erlbaum Associates, 2006 .
- [26] G. Şahan, "Evaluation of professional ethics principles by candidate teachers," *Journal of Education and Training Studies*, vol. 6, no. 4, p. 161, 2018.
- [27] L. Latta, "Equity in education: defining equity, equality, and standardization-impact tulsa," 2021, <https://www.impacttulsa.org/2019/11/26/impacttulsa-equity-in-education-defining-equity/>.
- [28] K. Lynch, *Handbook of the Sociology of Education*, Springer, Berlin, Germany, 2000pp. 85–105, Research and Theory on Equality and Education.
- [29] J.-S. Horng, J.-C. Hong, L.-J. ChanLin, S.-H. Chang, and H.-C. Chu, "Creative teachers and creative teaching strategies," *International Journal of Consumer Studies*, vol. 29, no. 4, pp. 352–358, 2005.
- [30] S. M. Brookhart, *How to Give Effective Feedback to Your Students*, p. 145, ASCD, Alexandria, Virginia, 2008.
- [31] A. Strauss and J. Corbin, *Basics of Qualitative Research*, Sage, Thousand Oaks, CA, USA, Techniques and Procedures for Developing Grounded Theory, 2008.

- [32] S. Burgess, S. Rawal, and E. S. Taylor, "Teacher peer observation and student test scores: evidence from a field experiment in English secondary schools," *Journal of Labor Economics*, vol. 39, no. 4, pp. 1155–1186, 2021.
- [33] W. Whitlock and A. Rumpus, *Peer Observation: Collaborative Teaching Quality Enhancement* University of Westminster, London, UK, 2004.
- [34] D. L. Baker, "Advancing best practices for asynchronous online discussion," *Business Education Innovation*, vol. 5, no. 1, pp. 11–21, 2013.
- [35] B. Johnson-Farmer and M. Frennand, "Teaching excellence: what great teachers teach us," *Journal of Professional Nursing*, vol. 25, no. 5, pp. 267–272, 2009.
- [36] "Using humor in the college classroom: the pros and the cons," 2021, <https://www.apa.org/ed/precollege/ptn/2018/02/humor-college-classroom>.
- [37] W. Buskist, J. Sikorski, T. Buckley, and B. K. Saville, *The Teaching of Psychology*, Psychology Press, Hove, East Sussex, UK, 2013, pp. 47–60, Elements of Master Teaching.
- [38] L. R. Ketterlin-Geller, P. Baumer, and K. Lichon, "Administrators as advocates for teacher collaboration," *Intervention in School and Clinic*, vol. 51, no. 1, pp. 51–57, 2014.
- [39] L. Leonard and P. Leonard, "The continuing trouble with collaboration: teachers talk," *Current Issues in Education*, vol. 6, 2003.
- [40] E. Daniels, R. Pirayoff, and S. Bessant, "Using peer observation and collaboration to improve teaching practices," *Universal Journal of Educational Research*, vol. 1, no. 3, pp. 268–274, 2013.
- [41] C. E. Barton, C. L. Williams, J. S. Halle, and L. McGrew, "Graduate and undergraduate faculty collaboration utilizing peer observation to enhance educational opportunities for students and faculty: a case example," *The Journal of Scholarship of Teaching and Learning*, vol. 18, no. 3, pp. 189–211, 2018.