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RESEARCH PAPER

The Role of Critical Reflection in Online Teaching

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ABSTRACT

The study aimed to explore the role of critical reflection in on-line teaching process, providing perceptions of how critical reflection is beneficial and can be improved. The nature of this research was qualitative and a hermeneutic research design was used. A purposive sampling technique was used and 15 teachers were selected who were teaching online in the private universities of Lahore. The study used semi-structured interviews for the data collection. The instrument was developed after literature review and was validated by three experts and modified according to their guidance and guidelines. The interviews were recorded with the respondent's permission. Moreover, the researcher collected and interpreted the participant's lived experiences, revealing a gap between the theoretical understanding and practical implementation of critical reflection among teachers. Themes were emerged. The study concluded that teachers need to be more aware of critical reflection and processes, which are crucial to online teaching and learning. The research suggested that critical reflection must be included into teacher training and professional development programs, making them mandatory or compulsory for all teachers, educators, and prospective teachers.

KEYWORDS

Critical Reflection Practice, Hermeneutic, Online Teachers' Insights, Phenomenology

Introduction

In the 20th century, the teaching and learning process was significantly enhanced by the use of technology and AI (Shafqat & Amjad, 2024). The impact of technology on education has been substantial. Numerous studies indicate that many authors believe the Covid-19 pandemic has brought about major changes in teaching methodologies. During this period, there has been a shift towards new standards and a greater reliance on technology and advanced techniques. These innovations have assisted teachers in their instruction, assessment, and curriculum development (Zafar et al., 2022).

As a result of these significant changes in the education system, numerous benefits have emerged. These include easier global connectivity in Pakistan and an expansion of educational opportunities. The concept of digital education has been adopted in developing countries, similar to its use in developed nations such as those in Europe, the United States, and Australia. Additionally, teachers have agreed on the use of online modes of education during these crises (Sharjeel et al., 2022). Pakistan is a developing country facing numerous challenges and hurdles due to the unavailability of resources and a lack of awareness among educators regarding online education and virtual classrooms. Additionally, the nation's rigid nature contributes to these difficulties. Consequently, the importance of online classes is not as highly regarded as

face-to-face education, and students tend to prefer on-site learning over online modes (Abid et al., 2021).

Distance education is already being practically implemented. The Higher Education Commission (HEC) has provided guidance and instructed several prominent universities in Pakistan to enhance their online teaching methodologies and learning processes. However, this requires resources, infrastructure, software installation, teaching audiovisual aids, and other teaching materials, all of which are challenging to obtain in a developing country (Amjad et al., 2024, a, b, c; Tariq et al., 2019). Therefore, faculty members face significant challenges. Without complete resources, awareness of IT (Information Technology), and electronic devices, the teaching and learning process cannot be effectively accomplished (Hani et al., 2021; Naz et al., 2020).

These challenges can be addressed through the availability of necessary resources and a strategic reflection process. Reflection is crucial in the education system as it offers novel directions, new paths, and solutions. Theories of reflection and critical reflection are interconnected, with some authors using terms like introspection, critical reflection, reflectiveness, and critical self-reflection interchangeably (Van-Woerkom, 2010). Reflection is grounded in experiences and the practical application of concepts, which help develop behaviors, actions, and cognition. According to Brookfield (1995), critical reflection enhances self-awareness and provides teachers with valuable insights into their teaching methodologies, curriculum policies, and content. Teachers should be prepared to change, update, and modify their skills rather than remain passive (Amjad et al., 2022, a, b, 2023, a, b, c). By adopting constructive behaviors and actions in their teaching, teachers can improve through the reflection process. This process guides them in replacing outdated methods with modern ones and in enhancing their skills to align with current trends. This study aims to explore how teachers can improve their online teaching using Google Meet recordings and videos. It looks at whether teachers are using these recordings and their experiences in doing so. The study also examines teachers' views on the importance of recordings for their professional growth and teaching practices.

Literature Review

Globally, each day brings advancements, with technology and AI (Artificial Intelligence) being significant drivers of this progress (Ong et al., 2024). Numerous studies highlight the need for teachers to be more skillful of updating and advancing concepts, knowledge, information, and education to align with current trends and policies. Change can only be achieved through the reflection process, and both reflection-in-action and reflection-on-action are crucial for reviewing, revising, and modifying human behaviors and actions.

Reflection and Critical Reflection

There are various definitions of reflection, with each author outlining different dimensions and characteristics. Dewey described the reflection process as akin to critical thinking. Schon (1983) expanded on Dewey's concept, dividing it into two types: reflection-in-action and reflection-on-action. These terms are self-explanatory; reflection-in-action occurs during the action, while reflection-on-action happens after the action. Both types are instrumental in interpreting, analyzing, and reviewing our actions. Killion and Todnem (1991) introduced another term, reflection-for-action, which focuses on anticipating and improving future actions. Boud et al. (1985) emphasized the importance of reflective activity for individuals, allowing them to review and evaluate their

experiences to identify areas for improvement and recognize past mistakes. A research by Naseem et al. (2023), showed a connection between classroom dynamics and the involvement of teachers in reflective practices. Additionally, the study indicated that most teacher educators and future educators actively participated in reflection in action, reflection on action, and reflection through student feedback. However, due to certain constraints, they were not able to fully implement these practices

Critical reflection offers insights into the accuracy and validity of our instructions, highlighting novel paths and directions in educational procedures and relationships (Tabassum et al., 2023, 2024). Additionally, technology significantly enhances the reflection process, making it more effective through the use of various technological tools and resources (Brookfield, 2017). From students point of view reflective learning is supportive for promoting academic performance (Iman et al., 2024).

Critical Reflection and Online Teaching

Many researchers support critical reflection, and authors and philosophers believe it greatly aids in developing educational programs, culture, and teachers' professional growth. However, according to Ahmed et al. (2020), and Saif et al. (2021), teachers often do not practice this. They rarely review their recorded lectures or listen to their voices to identify and fix their teaching mistakes and problems. Dharma et al. (2017) highlighted in their study that Zoom and Skype are two technological tools frequently used in the online education system. These resources offer numerous benefits, such as user-friendliness, easy screen sharing during webinars or other online sessions, and minimal internet usage. Additionally, these apps prove to be highly beneficial in situations with staff and faculty shortages. Consequently, Zoom is regarded as the optimal and most intelligent e-learning solution for educators, students, and professionals alike.

As Pakistan is a developing country, the lack of resources and equipment prevents teachers from thinking critically and updating their lessons accordingly. Zoom is one of the best apps for delivering lectures, and teachers often use it to record sessions for later review. However, many teachers do not listen to these recordings or use them for future improvement, leaving the recordings unused and missing opportunities for critical reflection and teaching enhancement (Jamil et al., 2022).

According to Parsazadeh et al. (2013), Asiry (2017), and Zulfikar et al. (2019), online resources, including Google Meet, significantly enhance learning for both students and teachers. Google Meet stands out as one of the top apps in this regard. Online learning positively influences the teaching and learning processes. Borges and Mello-Carpes (2015) note that Google Meet facilitates interactive and critical reflective approaches, providing educators with novel experiences, knowledge, and information. Students support the increased use of technology in the classroom and find face-to face interaction with faculty valuable (Hamilton, et al., 2020).

This research focuses on how Google Meet can be beneficial for teachers in their online teaching domain and aims to raise awareness among educators about the importance of utilizing recorded lectures for self-improvement. The goal is to understand this phenomenon better and address the gap in the literature.

Material and Methods

This research used a qualitative approach with a hermeneutic design. Sample were selected through purposive sampling technique. Fifteen female teachers from private sector universities from Lahore was selected. Their ages ranges 30 years to 45 years and having teaching experience in online mode. Semi-structured interview guide was used as an instrument. The researcher developed questions after reviewing literature review. The questions were based on: what is the importance of critical reflection, what is the role of critical reflection in teaching, identify the practical implementation of critical reflection, and what types of challenges teachers face during critical reflection as well as online teaching. The instrument was validated by the experts of education who had experienced in research field.

The data were collected through fifteen private university teachers, who practically implemented online resources in their teaching or their mode of teaching online. The faculty of the department of education was selected from the four universities. The Interviews were conducted online via Google Meet, recorded, and guided by an interview script for smooth data collection. The data was collected within ten days. The researcher considered all ethical and trustworthy elements during the data collection and analysis procedure. Thematic analysis was then used to identify and analyze themes from the interviews. There are several methods for conducting thematic analysis, including steps such as familiarization with the data, creating codes from the chunks of data, sub codes to make sense of data through categorizations, sometimes thematic analysis leads to theory building (Frankle at al., 2012).

Results and Discussion

The findings of the research are detailed below, with an explanation of the themes and relevant descriptions based on participants' comments in response to specific questions. Themes one and two are aligned with research question one, Theme two is aligned with research question two and themes three and four are aligned with research question three.

Theme 1: Importance of Critical Reflection

The researcher asked questions about the importance of critical reflection, focusing on various aspects such as its understanding in the Pakistani context and its primary role in the teaching and learning process. Additionally, the researcher explored teachers' thoughts and perceptions regarding critical reflection, along with its advantages and benefits. Based on the findings and collected data, most participants were familiar with the term "critical reflection" and understood its significance in the teaching domain. Participants believed that reflection allows them to review past experiences and improve their actions, behaviors, and address errors encountered in the classroom.

One participant indicated, "Critical reflection stands out as the most effective process for evaluating past experiences and identifying errors. It serves as a cornerstone for teachers seeking to enhance their teaching methodology and style". Another participant stated, "Critical reflection is instrumental in fostering teachers' professional development by providing guidance on best practices, professional conduct, and instructional prowess".

Theme 2: Role of Critical Reflection in Teaching

Participants were questioned about the role of critical reflection in the teaching process. They endorsed its efficacy for educators and professors in enhancing teaching, learning, leadership, and administrative skills. Moreover, critical reflection serves as a guiding force for teachers, offering new paths, and direction, and fostering personal and intellectual growth. One participant stated, "Critical reflection significantly influences the teaching process, particularly in the context of 21st-century skills where educators must continually enhance their abilities and adopt innovative teaching strategies. This process involves revisiting past practices to cultivate advanced skills and insights, making it invaluable for educators' professional growth". Few participants also claimed, "Critical reflection fosters teachers in comprehending students' interests, cognitive capacities, and personalities. This insight enables teachers to adapt their teaching approaches to align with students' characteristics, thereby minimizing potential challenges in the teaching-learning process".

Theme 3: Practical Implementation of Critical Reflection in Teaching

Teachers were examined regarding how they practically apply critical reflection in their teaching, including their use of Google Meet recordings for improvement and problem-solving. Most respondents acknowledged the effectiveness of critical reflection in enhancing understanding and knowledge. They indicated that while many engage in this process informally, a few adhere to formal protocols and complete structured reflection activities as part of their professional practice.

In this regard, one participant mentioned, "I engage in the reflection process both in my teaching and personal life because it's essential for our profession and personal growth. In today's skill-based era, self-awareness and continuous improvement are crucial. Reflection allows us to identify our strengths and weaknesses independently, fostering professional development by addressing and learning from our mistakes". While some participants stated, "Critical reflection is not practically implemented because of the tough routine tasks, heavy workload, and are not habitual about the reflection process". Moreover, teachers recorded their online lectures using Google Meet, saving the recordings for personal reference and sharing them with their students as well.

Theme 4: Challenges of Online Teaching

Participants were queried about the problems encountered in online teaching, particularly the challenges they faced during Google Meet sessions. The most common issue reported was unstable internet connectivity, which disrupts the teaching process for both teachers and students. This instability often leads to interruptions in getting concepts, causing confusion among students trying to grasp concepts. Mostly participants also stated, "Another barrier to online education is the non-serious behavior of students and parents, which can disrupt teaching. Teachers also face the challenge of not being able to physically guide students; instead, they must provide virtual guidance and motivation. This virtual interaction presents difficulties as teachers cannot ensure whether students are attentively listening or engaged, given that they are behind screens and not physically present in front of the teacher". Additionally, insufficient resources, infrastructure limitations, and outdated curricula are significant barriers to online education.

Theme 5: Challenges for Critical Reflection

Participants investigated the challenges for critical reflection. They have mentioned some such as; the not awareness of the reflection process, not being habitual in the practical implementation of the reflection process, and the shortage of time, heavy workload in the organizations, not emphasis on the professional development training programs. Some participants mentioned that they find it hard to do critical reflection because they are impatient and have busy schedules. They feel it takes too much time and they often don't finish it properly. Another reason is that they are used to doing tasks that give them rewards or incentives, which affects how they approach their daily activities.

This qualitative study identified five main themes from data collection: the significance of critical reflection, practical implementation of critical reflection in teaching and learning, barriers to critical reflection, and challenges in online teaching. The study discovered various insights into online learning and critical reflection. While many teachers are familiar with the concept of critical reflection, they have not integrated it into their daily practice. Some teachers express enthusiasm for promoting online learning, but others feel it is delayed by students' and parents' lack of seriousness.

An important finding suggests that critical reflection should be integrated into teachers' professional development and included in their performance appraisals or annual reports. This formal integration could encourage more consistent adoption in practical teaching. The study's findings align closely with those of Jamil (2022), who similarly explored teachers' perceptions of online teaching and highlighted the role of critical reflection in the teaching process. Saif et al. (2021) is also mentioned in his research that teachers are habitual for the practical implementation of the reflective practice, because there are lots of reasons behind this such as their heavy workload tasks, administrative activities, and personal interest as well. Therefore, it seems that the results and findings of this study are also related with this research.

Conclusion

Effective teaching relies heavily on critical reflection, particularly in the everchanging realm of 21st-century education. Embracing online teaching strategies enables educators to foster new viewpoints and creative methods. In the current technologyfocused society, online education plays a crucial role in the educational process. To effectively navigate this digital environment, teachers need to utilize cutting-edge tools and software to establish interactive virtual classrooms, particularly in times of emergency. In order to improve their teaching techniques through critical reflections, educators need continuous access to essential resources, continuous training, and chances to implement online teaching. The study concludes that educators should enhance their understanding of critical reflection, as they play a vital role in online education.

Recommendations

The following recommendations are mentioned below:

- This study focuses solely on teachers from private organizations. Future research
 could expand this investigation to include both public and private sectors for a
 broader perspective.
- The university administration, and the educational policies needed to address the importance of critical reflection for the professional development of the teachers who

- are teaching online. They can design training courses, seminars and other sessions for its awareness.
- As per the findings of the study, there is also a recommendation that an organization needs to arrange and provide authentic, required online resources to the faculty. So, that instructional process would be accomplished according to the desired goals as well as the learning objectives.

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