



## REFLECTIVE TEACHING REVISITED: UNCOVERING INSIGHTS FROM A QUALITATIVE STUDY

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### ABSTRACT:

Reflective teaching is a vital component of effective pedagogy, influencing educators' professional development and enhancing learning outcomes. The qualitative research design using a multiple case study approach was adopted. The data were collected through documents, classroom observations and semi-structured interviews with five purposively selected college teachers in West -Bengal. A computer-aided qualitative data analysis software, Atlas ti, was used to organize and manage the analysis process. Through the multiple case studies, thematic analysis was used to explore the research questions. Pedagogical practices, Creative practices and Application of Constructive approaches were the main three themes created. Each of them had a few sub-themes. Findings indicate that teachers creatively use reflective practice in several ways to enhance their teaching. They integrate a multidisciplinary approach, allowing students to see connections between various subjects, which fosters critical thinking and makes learning more relevant. Continuous professional development plays a crucial role as teachers engage in ongoing training and workshops, cultivating their skills and inspiring them to implement innovative strategies in the classroom. Furthermore, experimentation and risk-taking are evident, as teachers actively try new instructional methods, creating a culture of innovation that invites students to think creatively. A supportive environment is also vital; teachers establish a classroom atmosphere that promotes safety, openness, and collaboration, enabling students to express their ideas without fear of judgment. Additionally, teachers reflect on and analyze student feedback, using it to inform their practices, thereby refining their methods and enhancing the overall learning experience. In conclusion, this research paper offers a multifaceted exploration of reflective teaching and its implications for educators. It contributes to the ongoing discourse on pedagogy and professional development, emphasizing the importance of self-reflection in improving teaching practices and, ultimately, enhancing the quality of education. This study invites educators, researchers, and policymakers to engage in a broader conversation about the role of reflective teaching in shaping the future of education.

### KEYWORDS:

**REFLECTIVE TEACHING, PROFESSIONAL DEVELOPMENT, THEMATIC ANALYSIS, SELF-REFLECTION, PEDAGOGY, EDUCATIONAL PRACTICE.**

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### INTRODUCTION:

Reflective teaching, reflective practices, reflective feedback, reflective questions, and other settings are merely some of the illustrations of how the concept of "reflection" is used in modern educational thinking. The ideas expressed by Dewey, which frames reflective practice as "assessing the grounds (justification) of one's beliefs, the process of rationally examining the assumptions by which we have been justifying our convictions," has references to this idea. Over time, phrases like "higher-level thinking," "problem-solving," and "critical thinking" have arisen to convey related ideas. ("Making a Difference Through Reflective Practices: Values and Actions," 2000). Teachers who

engage in reflective practice carefully gather data about their instruction in order to analyse, interpret, and evaluate their experiences in order to improve their teaching in the future (Farrell, 2016; Mathew et.al 2017). Teaching techniques, strategies, and methods have currently encountered immense transformation, along with the education system as a whole. In order to attain the greatest level of teaching, which is the reflective level, teachers must constantly observe, reflect, appraise, and modify their teaching-learning processes in light of new trends and technology innovations. The most effective degree of teaching is reflective, when instructors use careful and thoughtful methods. It strives to give students

engaging educational opportunities that encourage the complete development and enhancement of their cognitive capacities. Reflective teaching is a process of 'looking at what you do in the classroom, thinking about why you do it, and thinking about if it works. It is a process of self-observation and self-evaluation. It is where teachers continuously introspect and critically analyse their own teaching strategies, beliefs, and assumptions to improve their instructional methods and student learning outcomes. This might result in the long-term improvement of students' learning outcomes through the sustained establishment of efficient instructional procedures. Teachers can develop via this method of meaning-making as well (Clouder, 2002). Reflective teachers strive to better understand themselves and how the answers they have found relate to other experiences and ideas, in along with finding better solutions. Reflective practice's benefits have been amply attested to (Loughran, 2002; Yalcin Arslan, 2019), in fact. The teacher now has even more challenging responsibilities to carry out due to the complexity of the 21st-century student and other obstacles the educational institution and its students undergo (Gore, 2001). According to Sidorenko & Yampolsky, (2015) highlights reflective practise in education as one of the most important pathways for both professional and personal growth. No matter how well-designed the lesson is or how competent a teacher is, reflective practises may always be used to further their reflective practices. Understanding and learning may be created via critical interpretation and reflective practise. In addition, Cirocco, (2007) views reflective thinking as an important component of interactive instructional practises that let students engage in communication while receiving teaching. In a nutshell, Chin Wei et al., 2012 lists the following as qualities of reflective practise: retrospective analysis, problem-solving, self-critical reflection, self-belief, and self-efficacy. There are many and various justifications for teachers to use reflective practise when delivering teaching. Reflective practise is considered to be one of the best methods for improving teaching standards. As it encourages the development of abilities like decision-making, metacognition, and logical thinking in both instructors and students, reflective practise is essential for the teaching and learning process (Goodley, 2018 as referenced by Oduro et al., 2022). According to Gutierrez (2020), reflective practise gives teachers a way to cultivate a culture of self-reflection on their lesson plans.

An extensive variety of students are capable of being encouraged and inspired by curricula that place a strong emphasis on these pedagogies when they are delivered online. This will help them make sense of their experiences-based learning. The ability to implement instructional approaches that are current, relevant, and effective is made possible by the increased integration of technological tools into educational programming, including synchronous conferencing platforms, asynchronous discussion frameworks, social networking environments, video sharing websites, and others

(Jonassen et al., 1995). The requirement of instructional techniques that mobilise ways to produce collaborative, interactive, and relevant applications, especially within the framework of experiential learning, is expanding as technology are being integrated into curriculum more and more (Howell, Williams, and Lindsay, 2003). With the intention to facilitate the development of civic, social, cultural, and language literacies in experiential learning Boyer et al. (2006) comprehended that the reflection as an essential element. As a systematic means for students to interact with their local communities as well as to take part in collaborative inquiry and discussion with peers who are geographically scattered, web-based courses have emerged that use reflective practise as the foundation for teaching.

### REVIEW OF LITERATURE:

The techniques by which instructors assess their actual classroom practise, reflect on their prior teaching practise, and recommend improved practise for future improvement are uncovered by reflective teaching practise. Every lesson plan that a teacher engages in is expected to be considered. In order to come up with new, thoughtful ideas for enhancing future practises, they should study, describe, analyse, and assess the present situation. Reflecting on teaching is more than just thinking about what is taught and how teach, it's also a fundamental, iterative process for analysing the effectiveness of what we do as teachers and a method of enhancing our professional growth as educators.

Historically, the concept of reflection can be traced back to a century ago at the hands of the pioneering scholar John Dewey in the early twentieth century. However, the term has come into the education spotlight in the late 1970's and the commencement of the 1980's. Then, reflective teaching practice has been gaining momentum since the 1990's amongst researchers and educators. From this time forth, the term has come into common parlance as an efficient approach in schools and colleges in the twenty-first century. Richardson (1990) showed that reflective practice is not a new concept, but its origin goes back to Dewey who explored it in 1909 and appealed individuals to reflect upon their professional actions and ultimate outcomes.

Researchers began comparing and contrasting the effects of employing two distinct approaches on students' performance and accomplishment during the 1980s, a time when there were significant worries about inquiring comparative methodologies. The findings show that no approach is superior than all others on different levels. The goal of theoretical and empirical research has been to find an efficient approach that not only works for learners but also raises their levels. Research of teachers' practises in their line of work started in the 1990s. There was a consequent change from external to internal influences. By adding the element of periods in which reflection occurs, Schon (1983), a renowned social scientist, made a distinction between what he called Reflection-in-Action and Reflection on Action in order to look at how individuals

utilise their experiences to evaluate their practises. He clarified that reflection-on action is the process of thinking logically about the ultimate conclusion of an activity, while reflection-in action is the iterative strategy of contemplating the chain of activities throughout an activity for continual development. According to Richardson (1990), the idea of reflective practise is not new; Dewey first introduced it in 1909 and encouraged people to consider their professional decisions and results. In truth, one cannot avoid John Dewey's major writings for a thorough comprehension of the state of the art of reflective teaching and learning.

According to **Richert (1990)**, reflective practise is the capacity to consider what one does and why, i.e., evaluating previous activities, present circumstances, and desired consequences. According to **Eyler (2002)**, the better the learning, including academic goals like a deeper comprehension and better application of the subject matter, increasing complexity, the more rigorous the reflection in the process of teaching of analytical thinking, willingness to consider new ideas, and problem-solving abilities.

Learning is the process that acquires knowledge, beliefs, and behaviours in order to modify and establish brain patterns (**Hoque2017**). The three domains that make up Bloom's Taxonomy of Learning are cognitive (knowledge), affective (attitudes), and psychomotor (behaviour). The affective domain comprises of learning-related attitudes, whereas the cognitive domain concentrates on knowledge acquisition. In the psychomotor domain, actions like imitation, manipulation, accuracy, articulation, and naturalisation are highlighted as natural and autonomic behaviours. These areas aid in classifying learning into the three behavioural, emotional, and cognitive viewpoints. All things considered, learning is a complex process that affects several facets of our cognitive, emotional, and behavioural development.

By considering all the potential approaches to a problem or issue, reflecting on experience enables varied learning outcomes and improves learning via experience (**Loughran, 2002**). According to **Agouridas and Race (2007)**, reflection may be the crucial phase where new knowledge is processed, personalised, and added to one's frames of reference. **Brooke, M(2012)** claims that most instructors struggle with critical reflection. Teachers should consciously try to reflect on their practises. In an analogous way, reflective teaching, according to **Rayford (2010)**, is a process that enables the teacher to look in the mirror and make the necessary adjustments to their teaching. In order to bridge the gap between theory and practise, **Pacheco (2011)** emphasises the necessity of instructors reflecting on their classroom-based behaviour. He suggests a framework for enhancing instruction through action research and reflective practise. A reflective teacher education course was designed and tested by **Tajik et al. (2019)**

Teachers in the twenty-first century must be familiar with modern technologies and use it in the classroom (**Alt,**

**2018**). With the use of technology, students may interact both individually and in groups with the course materials, the computer-generated interface, the teacher, and other students. The usage of technology in the classroom necessitates that potential instructors have utilised the equipment and are accustomed to using ICT in their lessons. The usage of common sets of software tools including word processors, spreadsheets, browsers, and e-mails as well as understanding of operating systems and computer hardware are all abilities that instructors must possess in order to operate specific technologies.

To bridge the gap between theory and practice, this study conducts a deep investigation of college teachers' reflective teaching practices during classroom deliberations.

### ASSUMPTIONS OF THE STUDY:

#### ASSUMPTION 1:

It is assumed that college teachers engage in structured self-reflection to identify, prioritize, and connect specific aspects of lesson design and delivery to observed student learning outcomes, using evidence from classroom events and performance to shape focal points.

#### ASSUMPTION 2:

It is assumed that college teachers vary in the depth and creativity of their reflective thinking across practices, demonstrating different levels of reflection on various aspects of their teaching within college courses, even as instruction and evaluation emphasize reflective practices in undergraduate programs.

#### ASSUMPTION 3:

It is assumed that reflective practice is credible for implementing and scaffolding a constructive, learner-centered approach (including collaboration, scaffolding, empowerment, and agency), and that these reflective changes are associated with increased student autonomy and improved academic outcomes across courses.

### RESEARCH QUESTIONS:

**RQ-1)** How do college teachers identify and prioritize specific aspects of their lessons during reflective practice and how do these focal points relate to observed student learning outcomes?

**RQ- 2) In what ways do college teachers creatively apply insights from reflection to modify or innovate teaching methods and how do these creative adaptations affect learner engagement, equity, and the learning environment?**

**RQ-3)** How do teachers use reflection to implement and scaffold a constructive approach (learner-centered instruction, collaboration, scaffolding, empowerment, and agency), and what is the relationship between reflective changes, student autonomy, and academic outcomes across courses?

**METHODOLOGY:****RESEARCH DESIGN:**

This study used a multiple case study methodology and a qualitative research design. A case study technique was employed in this qualitative approach to give a detailed picture of the practises of a group of college teachers while the teaching-learning session continued to progress. The case study approach emphasises in-depth analysis over generalisation (**Gagnon (2010)**). This approach focuses on the characteristics and complexity of an event and facilitates the use of a variety of data collecting methods concurrently (**Stake 1995b**). In order to illustrate categories and themes to explain the case and introduce current issues for future studies, a case study provides a full account of the experience of the participants (**Gravetter & Forzano, 2018**). This renders it more appropriate when the researchers concentrate on the initial phases. Consequently, a qualitative case study approach is appropriate to utilise in this study since it produces a thorough description and explanation of the practise of the college teachers.

The multiple case study design—also known as the "collective case"—is used in this study because it specifically focuses on the teaching methods of college teachers. According to **Aberdeen,(2013c)**, "the analytical benefits from involving more cases are substantial and produce an even stronger effect than in a single case.". The adaptable and facilitative capabilities claimed by (**Creswell 1998 and Stake 1994**) are another factor in my decision to choose this technique. As a result, the researcher was able to compare several examples to get insight into a challenge, to discover how processes and outcomes varied across all situations, and to facilitate a deeper understanding through more potent explanations and descriptions (**Creswell, 2012**).

**PARTICIPANTS:**

One of the deliberate sampling techniques, criterion sampling, was employed to choose the study's sample. The qualitative research group was established using the criterion sampling method, a type of purposeful sampling. This method is essential for gathering comprehensive insights regarding the topic being studied (**Mertens, 2010**). It aims to collect detailed data derived from the experiences of the participants involved in the research (**Merriam, 2023**). The study group of the present study meets the following criteria; Classroom teachers at a general degree college must hold a minimum of a Master's degree in accordance with UGC recruitment norms for college teachers. Additionally, they should have at least five years of experience working as college teachers.

As a result, the study's sample was made up five volunteer teachers who were working by three distinct general degree colleges in a city adjoining Kolkata in West-Bengal.

**DATA COLLECTION TECHNIQUES:**

In order to fulfil the intended objectives of this qualitative case study, three methods of data collection were used to

gather information for this qualitative case study: document analysis, classroom observations and interviews. These are the main threetechniques used to collect information for a qualitative case study (**Leavy, 2014**), which improves the data's credibility (**Yin, 2009**).

During the research process, participant teachers were also asked to write a reflective diary for 12 weeks to analyse their performance and practises at the end of the day and to evaluate their own teaching techniques in their own classes.

Each college teachers was requested to take part in online open-ended questions during a interview in order to get a thorough picture of the circumstances relating to reflective teaching practise in the college they each attend. The study sought data triangulation by involving three data collection techniques, i.e. documents, classroom observation, and semi-structured interviews of five participants.

These semi-structured inquiries were made by interviewers:

- What specific aspects of your lesson do you focus on when reflecting (e.g., learning objectives alignment, pacing, student understanding, and inclusivity)?
- When reflecting on teaching methods (lectures, discussions, group work), how do you decide which methods to emphasize for a given class or cohort?
- What methods do you use to document or guide your reflection (journals, video recordings, peer discussions, teaching portfolios, checklists)?
- How effective are these methods in helping you deepen your understanding of your teaching practices?
- What are the main challenges you face when reflecting (time constraints, lack of feedback, fear of critique)?
- What supports or conditions help you reflect more effectively (structured reflection prompts, time allocations, community of practice)?
- In what ways do you creatively incorporate reflective insights into your teaching (e.g., designing innovative activities, adopting new technologies, experimenting with learning theories)?
- How do you balance creative risk with maintaining quality and equity in student learning?
- How do you apply reflection to promote learner-centered instruction (e.g., personalized learning, differentiated tasks, active learning)?
- How do you scaffold student learning based on your reflections to build competence and confidence?

- What criteria do you use to decide whether a technology tool adds value to the learning experience?
- How do you manage time for reflective practice amidst teaching, research, and service responsibilities?
- What advice would you give to new college teachers about building a sustainable reflective habit?
- What are your goals for enhancing reflective practice in the coming semester or academic year?

A brief description of the research questions and the data collection methods used in addressing them in the table below.

**TABLE 1**  
**PRESENTS AN OVERVIEW OF THE RESEARCH QUESTIONS AND THE TECHNIQUES USED TO COLLECT THE DATA.**

Research Question	Data Collection Techniques
<b>RQ-1)</b> How do college teachers identify and prioritize specific aspects of their lessons during reflective practice and how do these focal points relate to observed student learning outcomes?	1)Document 2) Interview 3) Classroom Observations
<b>RQ- 2) In what ways do college teachers creatively apply insights from reflection to modify or innovate teaching methods and how do these creative adaptations affect learner engagement, equity, and the learning environment?</b>	Interview
<b>RQ-3)</b> How do teachers use reflection to implement and scaffold a constructive approach (learner-centered instruction, collaboration, scaffolding, empowerment, and agency), and what is the relationship between reflective changes, student autonomy, and academic outcomes across courses?	Interview

**DATA ANALYSIS:**

Qualitative data analysis is the categorization and interpretation of data used to uncover problems in the field and arrive at "statements by comparing various materials or various texts or several cases" (Flick, 2013)Document analysis is a form of qualitative research in which the researcher examines components in order to provide context and narrative for a particular subject of evaluation (Bowen, 2009).The six-phase thematic analysis proposed byBraun and Clarke (2006) was used for the data analysis in this study. The six stages of theme analysis are depicted in the following table.

**TABLE 2**  
**PHASE OF THEMATIC ANALYSIS**

A glimpse of the six phases of theme analysis	Descriptions of the Procedures
1.Getting familiar with the data	The first phase of data analysis involves familiarizing oneself with the reading and re-reading data and transcribing it for analysis. The amount of transcription depends on the project, but it should retain the necessary information.
2. Generate initial codes	In the second step, researchers started to meaningfully and systematically structure the data. Coding breaks down large amounts of data into smaller meaning chunks. There are several coding techniques, and the approach chosen will depend on the researcher perspective and research questions.
3. Search for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Review themes	In this stage, the first concepts that we found in Step 3 are reviewed, modified, and developed. It is helpful to compile all the information related to each subject at this time.Creating a thematic "map" of the analysis by determining how the themes relate to the coded extracts (Level 1) and the complete data set (Level 2).
5. Define themes	Continued analysis to improve the specifics of each theme and the overall narrative the analysis expresses, paving the way for clear definitions and labels for each theme.
6.Write-up	Usually the end-point of research opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

**Adopted from Braun and Clarke's (2006)**

The study presents its findings through individual case analyses, describing each case first. Next, a cross-case analysis compares the five cases to uncover insights into college teachers' reflective practices.

In the initial phase, researcher established three categories based on data analysis: Pedagogical practises, Creative practise andApplication of Constructive Approaches. These categories reflect the identified themes and sub-themes that emerged from data analysis.

The cross-case analysis in the second phase creates a more detailed description, generates abstraction among the cases, and provides a more compelling justification for college teachers' reflective practice at Kolkata in West Bengal.

In this study, an electronic coding using a Computer-Aided Qualitative Data Analysis Software (CAQDAS) program, Atlas ti 0.7 programme was applied to organize and control the coding process. According to **Saldana (2015)**, employing such programs is crucial and necessary, especially in studies involving multiple participant interviews extended fieldwork. The Atlas ti 0.7 program enabled the researcher to systematically analyse the data in order to interpret the phenomena within the unstructured data. It made it easier to analyse qualitative data as well as multiple types of research data that were collected via multiple techniques (**Friese, 2014**).

For each of the five cases, 13 rich text format and pdf files were loaded into the Atlas ti programme for coding. The researcher then started carefully reviewing and scrutinizing each file to find codes. "Descriptive coding" (**Saldana, 2013**) was employed because it offered an inventory of topics for categorization and proved effective across diverse data types (**Miles et al., 2014**). The initial step involved generating new codes by reading and highlighting text segments (quotes) and labelling them. This coding process consisted of two rounds. The first round began with coding the data for each of the five cases. During this phase, the codes generated in the previous step were analysed further. This involved grouping, categorizing, and clustering the codes according to their reflected commonalities (**Marshall & Rossman, 2011**).

**Saldana (2015)** states that a theme arises from coding, categorization, or analysis, rather than being something that is inherently coded (p. 14). However, it is distinct from a code in that it can take the form of a word or a sentence and expresses more indirect and implied processes. To develop overarching themes, similar codes and relevant excerpts were grouped into categories, referred to as families. Pedagogical practices, Creative practices and Application of Constructive approaches were the main three key categories created. Each of them had a few main themes and/or sub-themes. The main themes that formed in the earlier stage were refined. To create cohesive patterns, these themes were compared to their codes and gathered quotations (**Braun & Clarke, 2006**).

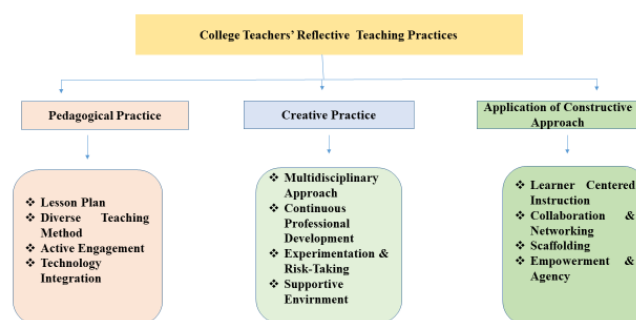
The analysis revealed three main themes within the first category, pedagogical practice: Lesson planning, diverse teaching strategies, active engagement and technology Integration. Each of these themes includes several sub-themes. The other two categories contained various themes addressing multiple relevant issues. Within the second category, creative practice; Multidisciplinary approach, continuous professional development, experimentations and risk taking and supportive environment. Within the third category, Application of constructive approach; Learner-Centric-Instructions,

collaboration and networking, scaffolding, empowerment and agency. The themes developed in the earlier phase were refined by clarifying each theme's specifics and creating clear definitions and names for them (**Braun & Clarke, 2006**). Identifying each theme helped capture related elements more effectively. The researcher then referenced the collected data excerpts for each theme and organized them into a detailed analysis.

The following figure provides a visual representation of the thematic map.

**FIGURE 1**

**THEMATIC MAP: EMERGING THEMES**



**FINDINGS:**

**RQ-1) How do college teachers identify and prioritize specific aspects of their lessons during reflective practice and how do these focal points relate to observed student learning outcomes?**

**Respondent1:** "I always take time to reflect on my lesson plans after each class. This helps me see what worked well and what didn't, allowing me to adjust future lessons for better student understanding."

**Respondent 2-**"I regularly consider the different teaching methods I use, such as lectures, discussions, and group work. I reflect on how well these approaches meet the diverse learning needs of my students and strive to incorporate more varied techniques."

**Respondent 3**"I focus on active engagement strategies, like group discussions and hands-on activities. After each class, I reflect on student participation and look for ways to increase engagement to enhance learning."

**Respondent 4**"Technology is a vital part of my teaching. I reflect on how effectively I integrate it into my lessons. I assess if the tools I use truly enhance learning and how students interact with them."

**Respondent5-**"In general, I believe reflection is crucial for improving my teaching practices. I make it a point to evaluate my approach regularly, considering student feedback and academic outcomes to continually enhance my effectiveness as an educator."

**FINDINGS 1-**

- College teachers do indeed reflect on their pedagogical practices during classroom

deliberations, with a focus on helping students achieve their learning objectives and continuously improving as educators.

- The use of diverse teaching methods was associated with better engagement and accommodation of different learning styles among students.
- Classes incorporating active engagement techniques resulted in higher levels of student participation, indicating a positive correlation between engagement and motivation.
- Effective integration of technology into lessons was linked to increased student interest and interaction, although some teachers noted challenges in ensuring all students were comfortable with the technology.
- Regular reflection on teaching practices was recognized as essential for continuous improvement, helping teachers adapt and enhance their teaching strategies.
- Teachers who solicited and reflected on student feedback were more likely to make successful adjustments to their teaching methods.
- An emphasis on evaluating academic outcomes helped teachers identify successful practices and areas needing improvement.

The **findings-1** indicate that teachers actively engage in reflective practice by critically evaluating their teaching methods, which includes analysing the effectiveness of structured lesson plans. They seek feedback from students to understand their learning experiences and identify areas for improvement. Additionally, teachers observe other classrooms to gather new cues and strategies that can be integrated into their own pedagogical practices.

Through self-reflection and self-observation, teachers consciously review their lesson plans, noting what aspects resonate with students and which do not. This ongoing process enables them to enhance their teaching effectiveness by addressing specific challenges encountered during lessons.

By documenting their reflections, teachers can identify patterns in student responses and engagement, allowing them to adapt future lesson plans to better meet the needs of diverse learners. This systematic approach to self-evaluation aligns with previous research indicating that self-reflection is a powerful tool for professional development and enhancing teaching practices.

**RQ- 2) In what ways do college teachers creatively apply insights from reflection to modify or innovate teaching methods and how do these creative adaptations affect learner engagement, equity, and the learning environment?**

**Respondent1: "By integrating concepts from different disciplines into my lessons, I encourage students to make connections and see the relevance of their**

**learning in the real world."**

**Respondent2: "I regularly attend workshops and training sessions, which inspire me to implement new ideas and techniques in my classroom, enhancing my teaching and keeping my methods fresh."**

**Respondent3: "I am not afraid to try out new teaching strategies, even if they might fail initially. This willingness to experiment has led to innovative lessons that surprise and engage my students."**

**Respondent4: "Creating a classroom culture where students feel safe to express themselves and take risks encourages them to share ideas and collaborate, enhancing their overall learning experience."**

**Respondent5: "I encourage my students to keep reflective journals, which help them articulate their thoughts on their learning process and provide me with insights to adjust my teaching strategies effectively."**

#### **FINDINGS-2**

- Teachers integrate knowledge from various subjects, allowing students to connect concepts and see broader applications of what they are learning.
- By participating in ongoing training and workshops, teachers gain fresh perspectives and innovative techniques, which they apply to enhance their teaching effectiveness.
- Teachers embrace new teaching methods and strategies, even if they may not yield immediate success, fostering a culture of innovation and curiosity in their classrooms.
- Creating a classroom culture that encourages openness and support helps students feel safe to express their thoughts and take intellectual risks, enhancing their learning experience.
- Teachers use reflective practice to analyze student feedback, allowing them to adjust their teaching approaches based on students' needs and preferences, ultimately improving engagement.

**findings 2** Illustrate how reflective practice can be creatively utilized by teachers to enhance their teaching approaches and create a dynamic learning environment. Teachers creatively integrate multiple subjects into their lessons, enabling students to see connections between different areas of knowledge. This approach fosters critical thinking and makes learning more relevant. Engaging in regular training and workshops cultivates teachers' skills and inspires them to implement innovative strategies in the classroom. This ongoing learning enhances their teaching effectiveness and adaptability. Teachers actively try new instructional techniques and methods, even if they may not be fully successful initially. This mind-set encourages a culture of innovation, inviting

students to think creatively and explore new ideas. Establishing a classroom atmosphere that promotes safety, openness, and collaboration allows students to express their ideas without fear of judgment. This supportive environment fosters student engagement and deeper learning. Teachers reflect on and analyze feedback from students, using it to inform their teaching practices. This responsiveness to student needs helps them refine their methods and enhance the overall learning experience.

**RQ-3) How do teachers use reflection to implement and scaffold a constructive approach (learner-centered instruction, collaboration, scaffolding, empowerment, and agency), and what is the relationship between reflective changes, student autonomy, and academic outcomes across courses?**

**Respondent 1:** "By focusing on student feedback, I tailor my lessons to better align with their interests and learning styles. This has increased student motivation and participation in my classes."

**Respondent 2:** "Collaborating with colleagues has opened up new teaching strategies for me. Sharing experiences and insights has enriched my practice and created a supportive environment for professional growth."

**Respondent 3:** "Reflecting on my scaffolding techniques allows me to better support my students through challenging material, ensuring they have the necessary resources to grasp complex concepts, which in turn boosts their confidence."

**Respondent 4:** "Encouraging student agency through reflective practice means that I actively involve them in decision-making about their learning. This has transformed my classroom into a space where students feel valued and engaged in their own education."

**Respondent 5:** "Establishing regular feedback loops with my students has allowed me to adapt my teaching methods in real-time. Their input has been invaluable in making my instruction more effective and responsive to their needs."

### FINDINGS-3

- Teachers find that understanding students' needs allows for tailored instruction, leading to improved learning outcomes.
- Customizing content based on student interests fosters higher engagement and enthusiasm in class activities.
- Collaborating with peers helps teachers discover effective teaching strategies and resources, resulting in enhanced instructional quality.
- Networking expands their professional horizons and encourages continuous learning and development, making them more effective educators.
- Reflecting on scaffolding techniques helps teachers effectively guide students through challenging material, leading to better

comprehension of complex concepts.

- Students gain confidence as they receive appropriate support, enhancing their overall academic performance and self-esteem.
- Allowing students a voice in their learning decisions creates a more dynamic classroom environment, enhancing student ownership of learning.
- Teachers notice that empowered students often exhibit greater enthusiasm and satisfaction with their educational experience.

The **finding-3** shows that teachers who intentionally experiment and take instructional risks strengthen their practice, spark innovation, and increase student engagement. Understanding students' needs enables tailored instruction, which improves learning outcomes. Customizing content to student interests boosts engagement and enthusiasm in class activities. Collaboration with peers helps teachers discover effective strategies and resources, enhancing instructional quality.

Reflecting on scaffolding techniques helps guide students through challenging material, improving comprehension of complex concepts. When students receive appropriate support, their confidence grows, boosting academic performance and self-esteem.

Giving students a voice in learning decisions creates a dynamic classroom and increases ownership of learning. Empowered students often show greater enthusiasm and satisfaction with their educational experience.

### DISCUSSION AND CONCLUSION:

The findings of the study revealed some issues in the college teachers' reflective teaching practices. These findings provided information to better understand the college teachers' pedagogical practices in terms of lesson planning, diverse teaching strategies active engagement and technology integration. The findings indicate that college teachers actively engage in reflective practice by critically evaluating their teaching methods, seeking student feedback, and observing other classrooms to inform their pedagogy. This aligns with a broader body of research showing that structured reflection and feedback are key drivers of instructional improvement in higher education.

The emphasis on self-review of lesson plans and identifying what resonates with students corresponds to established theories of reflective practice. **Schön, (2017)** described professional reflection as a means to bridge theory and practice, enabling educators to adapt in real time. More recent syntheses, such as **Aljohani and Ahmad (2025)**, underscore that deliberate reflection—on actions, assumptions, and results—promotes deeper professional learning and more effective teaching. Similarly, **Dembo et al. (2007)** note that reflective journaling and self-monitoring help instructors tailor instruction to diverse learner needs. Research by **Korthagen et al. (2022)** explored the role of self-study and reflection in

teacher professional development. They found that teachers who regularly document their teaching experiences and reflect on their practice are more likely to identify areas for improvement and make positive changes to create more effective learning environments. This supports the idea that taking notes on teaching strategies can lead to continuous improvement in teaching practice. Pairing with a colleague for short feedback cycles adds perspective and informs subsequent self-evaluations. Framing reflection as a learning habit with a positive stance on imperfection fosters psychological safety and ongoing improvement.

The findings' also claim documenting reflections to identify patterns in student responses is consistent with evidence from practitioner inquiry and action research supported by multiple studies. **Dana and Yendol-Hoppey (2009)** emphasize cycles of planning, acting, observing, and reflecting as core to sustained instructional improvement. Use of diverse teaching methods improving engagement and accommodating learning styles This finding aligns with research on varied instructional approaches supporting a range of learning preferences. Chalmers (2012) emphasize constructive alignment and diverse activities to meet learning outcomes. Hattie and **Donoghue (2016)** highlight the benefits of varied instructional methods for engaging different cognitive processes.

Active engagement techniques correlate with higher student participation and motivation. Active learning is well-supported in college settings. **Prince (2004)** provides a meta-analysis showing active learning improves exam performance and reduces failure rates. **Freeman et al. (2014)** synthesize extensive evidence that active-learning reduces failure rates across STEM disciplines.

Results revealed that the technology integration linked to increased interest and interaction, with equity considerations. Techniques like online forums, multimedia presentations, and interactive simulations promote collaborative learning and critical thinking. **Duarte et al. (2025)** study found that technology-based teaching practices in higher education increase student engagement and motivation. However, barriers exist, including digital literacy gaps, access issues, and cognitive load. Davis (1989) stated Technology Acceptance Model (TAM) can help explain adoption factors, and **Selwyn (2014)** shows cautions against assuming tech automatically improves learning without alignment to pedagogy.

Based on Findings, teachers creatively employ reflective practice to strengthen teaching approaches and foster a dynamic learning environment. Teachers integrate concepts from multiple subjects to help students make connections and see broader applications. This cross-disciplinary approach supports critical thinking and relevance. These findings are congruent with the results of previous research on interdisciplinary teaching highlights that connecting disciplines enhances deep learning and transfer of knowledge. **Drijvers et al. (2009)** encountering real-world contexts that span subjects,

students develop higher-order thinking and problem-solving skills. Teachers notice where subject boundaries can be bridged and purposefully design tasks that require integrating concepts. This aligns with Schön's concept of reflection-in-action and reflection-on-action guiding instructional design (Schön, 1983). Ongoing training and workshops inspire teachers to implement new ideas, enhancing teaching effectiveness. **Darling-Hammond et al., (2017)** encounters ongoing professional development (PD) is consistently linked to improved instructional practices when it is collaborative, job-embedded, and tied to teachers' classrooms realities. Teachers try new teaching methods even if results are uncertain, fostering a culture of innovation and curiosity. Experimental pedagogies (e.g., inquiry-based learning, project-based learning, and gamification) often require iterative experimentation. Hwang et al. (2019) the literature notes that iterative cycles of hypothesis, implementation, and revision lead to more robust teaching practices. A growth-oriented classroom culture, where risk-taking is normalized, is associated with higher student engagement and resilience; these finding are aligned with the number of previous studies (**Dweck, 2006**).

Findings also shows that the supportive environment where students feel safe to express themselves and take risks enhances engagement and learning. Psychological safety is a known predictor of open inquiry, collaboration, and risk-taking in classrooms (**Dignen et al., 2020**). In a study by **Luetkemeyer et al. (2021)** it was found that teachers who actively engage in creative practice, such as reflection and experimentation with teaching strategies, are better equipped to adapt to changing student needs and create more dynamic and engaging learning environments. By taking notes on their experiences and outcomes, teachers can make informed decisions about how to enhance their teaching practices. Creatively reflective practice supports culture-building: teachers reflect not only on content but on the classroom climate and relational dynamics.

The classroom is a living laboratory where every teaching decision shapes student learning in real time. Yet, amidst busy schedules and standardized demands, educators often struggle to translate theory into practice in ways that are both effective and sustainable. The Constructive Approach offers a lens for reflective discussions by emphasizing four interrelated pillars: learner-centered instruction, collaboration and networking, scaffolding, and empowerment and agency. By centering students' needs, interests, and voices, teachers can tailor content, share proven strategies with peers, support difficult concepts with deliberate scaffolds, and foster a classroom culture where students take ownership of their learning.

Understanding students' needs allows for tailored instruction, leading to improved learning outcomes. "The Impact of Collaborative Learning on Student Engagement" by **Smith, J., & Doe, A. (2017)** highlights the positive impact of collaborative learning on student engagement and learning outcomes, even in the face of limited

classroom space. "Overcoming Constraints in Implementing Learner-Centered Teaching Practices" by **Evangelou (2023)** delves into the specific barriers educators encounter, such as scheduling constraints, and offers strategies to overcome these challenges.

Additionally, "Optimizing Classroom Layout for Collaborative Learning Environments" by **Brown, K., & Smith, T. (2020)** provides insights into how classroom design can be optimized to facilitate more effective learner-centered teaching practices, helping educators make the most of their limited space. These studies collectively underscore the importance of overcoming constraints to create engaging and collaborative learning environments for students.

Consistent with the research by **Johnson & Johnson (2018)** on the benefits of cooperative learning, collaborative learning fosters a supportive classroom environment where students can actively engage with course material. Despite logistical challenges, the integration of group activities and projects can enhance student collaboration and critical thinking skills.

Collaboration with peers helps teachers discover effective teaching strategies and resources, resulting in enhanced instructional quality. Networking expands professional horizons and encourages continuous learning.

**Trede, et.al (2012)** stated that the reflective practice not only improves immediate learning outcomes but also supports sustainable independence by tailoring supports to individual progress, thereby strengthening differentiation, motivation, and long-term learning gains. In reflective practice, scaffolding emerges as a dynamic, data-informed mechanism that supports students toward deeper independence. Teachers scrutinize which supports—modeling, prompts, exemplars, **Ball and Fairlamb (2025)** demonstrates how targeted scaffolds improve transfer of learning.

Customization and responsive support foster deeper understanding and confidence, while student voice and empowerment cultivate ownership and motivation. **Spanner et.al (2017)** stated that these interconnected elements create a more dynamic, satisfying, and effective learning environment for both students and educators.

This study demonstrates that reflective teaching aimed at promoting learner agency—through differentiated tasks, collaborative learning, and opportunities for choice—enhances student responsibility, goal setting, and self-assessment. Increased autonomy correlates with clearer learning objectives, better alignment between activities and outcomes, and more meaningful feedback loops. As instructors adapt tasks to student needs and provide scaffolding, students gain confidence to regulate their learning, monitor progress, and seek resources when needed. Equity considerations (ensuring autonomy-promoting practices are accessible to all students, including those with diverse needs) this study reinforces reflective teaching as a pragmatic, evidence-informed practice capable of elevating teaching

quality and enriching the learning experience through reflective-minded practice.

#### IMPLICATIONS FOR EDUCATIONAL PRACTICE:

- Build structured reflection routines into course design (e.g., post-lesson reflection prompts, rubrics for evaluating lesson objectives alignment, and regular peer observations).
- Foster a culture of sharing reflections and strategies among colleagues via teaching circles or micro-Professional Development sessions, leveraging observed practices from peers as evidence to inform own teaching.
- Provide institutional support for reflective practice, such as time allocations, reflection templates, and access to peer mentorship, to sustain continuous improvement.
- Design unit plans that intentionally weave multiple subject concepts around a central project or Essential Question.
- Use reflective journaling or debrief protocols to capture what connections students are making and where conceptual gaps remain.
- Create Professional Development formats that emphasize co-planning and peer observation, enabling teachers to trial and refine innovations in a supportive environment.
- Implement post-Professional Development reflection cycles where teachers document what worked, what didn't, and why, feeding back into ongoing practice
- Establish norms and routines that explicitly value diverse perspectives, feedback, and respectful disagreement.
- Create a feedback loop map that shows how student input influences specific instructional adjustments.

#### FUTURE DIRECTIONS FOR THE STUDY

- Longitudinal impact: Conduct longitudinal studies to assess how sustained reflective practice influences student outcomes (achievement, engagement, metacognition) and teacher growth (instructional repertoire, adaptability, professional identity).
- Technology-enhanced reflection: Explore how digital tools (learning analytics, e-portfolios, video coaching) support timely feedback, data-informed decision-making, and scalable reflective practices.
- Equity focus: Investigate how reflective practice can address learning gaps and ensure inclusive, culturally responsive pedagogy, examining whether adaptations are needed to support diverse learners and multilingual populations.
- Policy and leadership implications: Examine how

institutional leadership, professional development structures, and policy constraints influence the adoption and sustainability of reflective practices at scale.

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