Exploring the Relationship Between Teacher Reflective Practices and Student Engagement in ESL Classrooms

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Keywords	Abstract
Teacher Reflective Practice Student Engagement ESL Secondary Education	This study explores the impact of teacher reflective practice on student engagement in secondary-level ESL classrooms in Nakhchivan. Rooted in Schön's reflective teaching model, the research investigates whether reflection frequency and depth correlate with cognitive, emotional, and behavioral aspects of engagement. Using a mixed-methods design, 20 ESL teachers were split into reflective (journaling and group reflection) and control groups. Engagement levels of 240 students (ages 13–16) were assessed via surveys and observations. Results show significant positive correlations between teacher reflection and student engagement ($r = 0.68$ for frequency; $r = 0.61$ for depth, $p < .01$). Reflective teachers' students reported higher motivation and participation (mean score 4.28 vs. 3.13). Qualitative findings linked reflection to more empathetic teaching, adaptive methods, and a greater student voice. This highlights the value of structured reflection in enhancing ESL learning experiences.

Introduction

Teacher reflective practice refers to the process by which teachers systematically analyze their own instructional experiences, decisions, and student outcomes to inform and improve future teaching. This concept was popularized by Donald Schön, who distinguished between *reflection-in-action* – the real-time thinking and adjustment that educators do "on their feet" during teaching – and *reflection-on-action* – the retrospective analysis of teaching after the fact. In *The Reflective Practitioner*, Schön (1983) argued that professionals (including teachers) generate new understanding by reflecting on surprises or challenges encountered in practice. For example, a

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teacher might notice mid-lesson that students are confused (reflection-in-action) and thus improvise a different explanation; later, after class, the teacher might mull over what caused the confusion and how to prevent it (reflection-on-action). Such reflective practice is believed to move educators from mere "technical" execution of lesson plans toward a more thoughtful, responsive mode of teaching. Following Schön's work, many teacher education programs have emphasized reflection as key to continuous improvement. Other theorists have expanded on this idea – for instance, Brookfield (1995) advocates *critical reflection*, whereby teachers scrutinize their ingrained assumptions through multiple lenses (their own autobiography, students' feedback, colleagues' input, and educational theory). Critically reflective teachers, Brookfield argues, become more "student-centered, flexible and innovative" in their practice, cultivating democratic classrooms that value student voices.

Student engagement, on the other hand, is commonly defined as the level of attention, curiosity, interest, and passion that students display in the learning process. It is a multi-dimensional construct encompassing behavioral engagement (participation, effort, and adherence to classroom norms), emotional engagement (students' feelings of interest, enjoyment, or belonging in class), and cognitive engagement (investment in learning, willingness to exert mental effort, and self-regulation strategies). Fredricks, Blumenfeld, and Paris (2004) provided a seminal review of this concept, emphasizing that meaningful engagement involves how students *behave, feel, and think* in school. High engagement has been linked to numerous positive outcomes, including better academic achievement, lower dropout rates, and improved social skills. Conversely, disengaged students often exhibit off-task behavior, emotional withdrawal, or surface learning approaches. In an ESL/EFL (English as a Second/Foreign Language) context, engagement is particularly critical – language learning requires active practice and interaction, and students who are mentally or emotionally disengaged are unlikely to make significant progress in acquiring the target language. Engaged ESL learners typically participate more in speaking activities, show curiosity about content, persist in the face of language difficulties, and collaborate with peers – all of which enhance language acquisition.

The relationship between teacher practices and student engagement is well recognized in educational research. Teachers play a central role as "social agents" in the classroom, shaping the environment that can either foster or hinder engagement. Supportive teacher behaviors – such as providing autonomy support, showing genuine care, and scaffolding challenging tasks – have been found to increase student engagement (Reeve, 2012; Skinner et al., 2008). In fact, "the degree of cooperation in instructional activities is known as learners' engagement", and students are more enthusiastic and attentive when they feel their basic needs are met (for autonomy, competence, and relatedness) in class. In the specific arena of language learning, recent research underscores that positive teacher–student interactions and responsive teaching approaches boost ESL student engagement (Mercer & Dörnyei, 2020; Derakhshan, 2021). Vygotsky's sociocultural theory

provides a helpful lens: learning is a social process, and through interactive support within the *Zone of Proximal Development* – the gap between what a learner can do alone and with guidance – teachers can stretch students' skills and keep them engaged in optimally challenging tasks. Effective ESL teaching often entails dynamic adjustment to student responses (a form of reflection-in-action), aligning with constructivist principles that learners construct knowledge actively when instruction connects to their needs and context.

In post-Soviet educational contexts, including Azerbaijan, the notions of reflective teaching and student engagement have gained attention as part of broader pedagogical reforms. Under the Soviet legacy, teaching was traditionally teacher-centered, with a strong emphasis on lecture, rote learning, and strict adherence to state curricula. Teachers were often viewed as authoritative knowledge transmitters rather than facilitators, and there was limited encouragement for them to critically examine their own practice or to adapt to student feedback. Professional development tended to be top-down; as one analysis of Azerbaijan's education reforms noted, in the traditional system "teachers were assigned the role of recipients of benefits from professional development programs". Over the last two decades, however, Azerbaijan has been overhauling its education system to align with international standards and learner-centered methodologies. A major curriculum reform in 2008–2013 aimed to shift classroom practice toward interactive learning, critical thinking, and student engagement. In this climate, teacher reflective practice is increasingly recognized as a means to help teachers become more adaptive and student-focused practitioners. Yet, despite policy rhetoric endorsing reflection, local research indicates that truly reflective practice is not yet widespread. A study by Mikayilova and Kazimzade (2016) on teachers as reflective learners in Azerbaijan found that while teachers see value in reflection for professional growth, they face challenges such as lack of time, insufficient training in how to reflect, and a lingering mentality of compliance over inquiry. The authors highlighted a gap between reform ideals and everyday practice, suggesting more structured support is needed for teachers to engage in meaningful reflection (Mikayilova & Kazimzade, 2016).

Student engagement in Azerbaijan and similar post-Soviet settings can also carry unique nuances. Historically, students were expected to be passive recipients in class – quiet, disciplined, and not questioning the teacher – which contrasts with Western notions of an "engaged" student who actively participates and questions. As teaching practices evolve, educators in these contexts are exploring how to elicit greater cognitive and emotional engagement from students who might be unaccustomed to interactive learning. A recent local commentary noted that educational issues like student underperformance are driving a search for more engaging pedagogies, and that teacher reflection could be a key to "guide teachers' thoughts from impulsive reactions to a level where their actions are controlled" and intentional. Culturally, incorporating reflective practice in Azerbaijan means also addressing teachers' beliefs and well-being – Abdullayeva (2022) argues that encouraging teachers to reflect on their experiences and stressors can empower them and

improve their mindset, which in turn affects how they engage students. In short, the post-Soviet context provides both a need and an opportunity to study the impact of reflective teaching on student engagement, as schools transition toward more learner-centered paradigms.

Despite a growing theoretical consensus that reflective teaching is beneficial for both teacher growth and student outcomes, there is a notable research gap when it comes to empirical evidence of its impact on student engagement – particularly in ESL classrooms and in contexts like Azerbaijan. Much of the literature on reflective practice focuses on teacher development (e.g., enhancing teachers' self-awareness, autonomy, or instructional effectiveness) rather than directly measuring changes in student behavior or learning. Conversely, the student engagement literature often examines factors like teaching style, classroom environment, or specific instructional interventions, but rarely considers the behind-the-scenes reflective habits of teachers as a variable. In other words, while it is intuitively logical that a teacher who continuously reflects and improves would have more engaged students, this linkage needs to be tested and quantified. One study on **reflective teaching and student engagement in an elementary school setting** (as reported in a research summary) did find that teachers who used reflective strategies (like journaling and peer discussions) saw higher student participation and motivation in their classes. Reflective practitioners were more likely to adopt student-centered methods, which inherently invite more engagement. However, such studies are sparse, and none (to our knowledge) have been published focusing on secondary ESL classrooms in Azerbaijan or the wider Caucasus/Central Asia region.

To address this gap, the current study poses the following research questions:

1. **Is there a correlation between reflective teaching practices and student engagement in ESL classrooms?** Specifically, do classes led by teachers who engage in frequent and deep reflective practice show higher levels of student engagement (behavioral, emotional, and cognitive) compared to classes with less reflective teachers?

2. **How do students perceive changes in their own engagement when their teachers implement reflective strategies?** For instance, do students notice differences in classroom dynamics, teacher support, or their own motivation when teachers are consciously reflecting and trying new approaches?

By investigating these questions, this study aims to contribute evidence on the pedagogical value of teacher reflection beyond teacher self-improvement – examining its influence on learners. The context of Nakhchivan, Azerbaijan provides a relevant case of an emerging educational system where both reflective practice and student-centered engagement are being actively promoted through reforms but lack extensive research. Ultimately, understanding the relationship between teacher reflection and student engagement can inform teacher training programs and school

policies (in Azerbaijan and similar contexts) on whether fostering reflective practice among teachers is a lever to enhance student engagement and learning outcomes.

Methodology

Research Design

This study adopted a **mixed-methods correlational design** to explore the relationship between teacher reflective practices and student engagement in ESL classrooms. The design combines quantitative approaches (surveys and correlations) with qualitative approaches (journals, open-ended responses, and observations) to provide a comprehensive understanding of the phenomena. The primary hypothesis was that greater teacher reflection would be associated with higher student engagement. However, given the exploratory nature, the study was not a controlled experiment manipulating reflection, but rather an observational study comparing naturally occurring levels of reflection and engagement, supplemented by a small intervention (guidance in reflective journaling) for a subset of teachers.

Sample and Setting

The study took place in the Nakhchivan Autonomous Republic of Azerbaijan, a region with a mix of urban and rural schools and a context of ongoing educational reform. The target population was secondary school ESL (English as a Second Language) classrooms at the lower secondary level (Grades 7–10, student ages ~13–16). Using purposive sampling in coordination with the local education authorities, we recruited **20 ESL teachers** (10 male, 10 female) from 10 schools (5 urban schools in Nakhchivan city, and 5 schools in surrounding rural districts). We aimed for a diverse sample in terms of teaching experience (teachers ranged from 3 to 22 years of teaching experience, with a mean of 11.5 years) and school context, to improve generalizability of findings. All teachers held at least a bachelor's degree in English or Education. None of the teachers had formal roles as teacher trainers or researchers (to avoid potential bias of having overly reflective individuals). Importantly, all volunteered to participate and were informed about the study's focus on reflection and engagement.

Correspondingly, the **student sample** consisted of the classes taught by these teachers – totaling **240 ESL students** (approximately 12 students per class on average; class sizes ranged from 10 to 15). Among the students, roughly 52% were female and 48% male, with an average age of 14.5 years. These students come from varied socioeconomic backgrounds typical of the region (urban students largely from professional families, rural students often from farming families, etc.). All students were Azerbaijani native speakers learning English as a foreign language, and their proficiency levels were generally intermediate for their grade (as per school records). Parental

consent and student assent were obtained for all student participants, after explaining that data would be collected via surveys and observations for research on teaching practices.

Procedures and Reflective Practice Intervention

The data collection spanned an **8-week period** during a school term (early Spring 2025). To address the research questions, we introduced a structured reflective practice routine for half of the teachers and used the other half as a comparison group. The 20 teachers were **assigned to two equal groups**:

- **Reflective Practice Group (n = 10 teachers, and their 120 students):** Teachers in this group were asked to engage in designated reflective activities throughout the 8 weeks. These activities included keeping **weekly reflective journals**, participating in **bi-weekly group meetings** to discuss their reflections, and implementing at least one new strategy or change in practice each week based on their reflection. At the start of the study, these teachers attended a 2-hour orientation workshop on reflective teaching, which introduced Schön's concept of reflection-in-action/on-action and gave examples of reflective journal entries. They were provided a template guiding them to describe critical incidents or successes each week, analyze why things happened as they did, and plan what to try next time (a simplified reflective cycle reminiscent of Kolb's experiential learning cycle where concrete experience leads to reflection, abstract conceptualization, and active experimentation). While this was not an intensive intervention, it offered some structure and support for teachers to become more reflective than they might be ordinarily.

- **Control Group (n = 10 teachers, and their 120 students):** Teachers in this group continued with their usual teaching routine and professional development activities. They were not asked to do anything differently during the 8 weeks, and in fact were not explicitly told to avoid reflection (as reflection is a normal part of teaching to some extent), but they did not participate in the journaling or meetings. This group serves as a baseline to compare what happens when no special emphasis on reflection is introduced.

It should be noted that random assignment was not strictly possible due to practical constraints (e.g., school administrators decided which teachers might be open to trying journaling). However, the groups were matched as closely as possible: each school contributed one teacher to the reflective group and one to control when feasible, to ensure both groups had a similar mix of contexts. Pre-study comparisons of teacher characteristics (years of experience, typical student achievement in their classes, etc.) showed no significant differences between the two groups.

Data Collection Instruments

1. Teacher Reflective Journals: Teachers in the reflective practice group submitted **weekly journal entries** (for a total of 8 entries per teacher) describing their teaching experiences and reflections. A prompt was given each week (e.g., "Describe a moment this week where you felt things went really well or really poorly in your ESL class. What happened, and why do you think it happened? What might you do differently or the same next time?"). Teachers typically wrote 1–2 pages per entry. These journals served two purposes: (a) *Quantitative measure of reflection frequency and depth* – we counted the number of entries (frequency of reflection) and scored each entry for "depth of reflection" using a rubric adapted from Kember et al. (1999). The rubric had four levels: *habitual action/non-reflection* (score 1: e.g., just describing what was taught with no analysis), *understanding* (score 2: some analysis but mainly conceptual understanding with little self-critique), *reflection* (score 3: clear evidence of attempting to analyze and learn from experiences), and *critical reflection* (score 4: questioning fundamental assumptions or trying multiple perspectives). Two independent coders scored each journal entry, with inter-rater reliability of 0.87 (Cohen's kappa). Each teacher's "depth of reflection" was operationalized as their average journal score across the 8 weeks. (b) *Qualitative insights* – the content of journals was later analyzed thematically to identify common themes about what teachers learned or changed and any links to student engagement they noticed. These qualitative data helped interpret how exactly reflection might have influenced teaching and students.

2. Student Engagement Surveys: To gauge student engagement levels in each class, we administered a **student survey** at two time points – a baseline in Week 1 and a post-survey in Week 8. The survey was developed drawing on established engagement instruments (Fredricks et al., 2004; Appleton et al., 2006) but tailored to the ESL classroom context and age group. It consisted of **15 Likert-scale items** (5 items each for behavioral, emotional, and cognitive engagement). Example items: *Behavioral:* "I participate actively in English class discussions or activities" ; *Emotional:* "I feel interested in the topics we learn in English class" ; *Cognitive:* "In English class, I try to connect what we learn with things I already know or my own ideas." Students rated each statement on a 5-point scale from Strongly Disagree (1) to Strongly Agree (5). These items yielded subscale scores and an overall engagement score (average of all items). The survey demonstrated good internal reliability (Cronbach's α = 0.82 overall). Additionally, the survey included **3 open-ended questions** asking students to briefly describe: "What makes you feel most engaged or interested during English lessons?", "What makes you feel disengaged or bored?", and (in the post-survey only for reflective group classes) "Have you noticed any changes in your English classes this term that affected your engagement? If so, please describe." These open responses provided qualitative data on student perspectives.

3. Classroom Observations: To collect an objective measure of classroom processes and triangulate the self-reports, each teacher was observed **twice** (once around Week 2–3 and once around Week 7–8) by one of two trained observers (education researchers not otherwise involved

with the schools). Observers used a checklist and field notes approach: they rated the class on engagement indicators (e.g., percentage of students visibly participating, on-task vs. off-task behavior) and took qualitative notes on teacher practices and student reactions. Each observation lasted a full class period (40–45 minutes). Observers were blind to whether a teacher was in the reflective group or control (though over time they might infer due to seeing journals on a desk or references made to reflection). The observation data were primarily used qualitatively, to contextualize and validate the survey results. For example, if surveys showed high engagement in a class, did observers also see high participation and enthusiasm in that class? If a reflective teacher wrote about trying a new activity, did observers note any change in student behavior?

4. Teacher and Student Interviews (informal): While not a major part of the data, we also conducted brief **informal interviews** at the end of the study. All 10 reflective-group teachers were interviewed individually for ~20 minutes about their experience with journaling and their perceptions of student engagement changes. Similarly, 2–3 student volunteers from each class (both reflective and control, total ~50 students) participated in short focus group discussions (15–20 minutes, in Azerbaijani language) about what makes class engaging and whether they noticed any differences in teaching approaches. These conversations were note-taken (not audio recorded). These interview insights were used in the qualitative analysis to supplement journal and survey findings.

Data Analysis

Given the mixed-method design, data analysis proceeded in two strands – quantitative and qualitative – which were later merged for interpretation.

Quantitative Analysis: We first computed descriptive statistics for key variables in each group. For each teacher, we had a *reflection frequency* (number of journal entries, max 8) and *reflection depth score* (average rubric score 1–4). For each class (teacher), we had a *student engagement score* (we used the post-survey overall engagement mean for that class, aggregated from student responses). We also considered change in engagement from pre- to post-, but since the control group showed little change and the reflective group generally increased, we focused on the final levels for correlation. Using the teacher as the unit of analysis (N=20), we conducted **Pearson's correlation (r)** tests to examine the association between:

- Reflection frequency (0–8) and class engagement score.

- Reflection depth (1–4) and class engagement score. Additionally, we ran separate correlations for the three dimensions of engagement (e.g., correlation between reflection depth and behavioral engagement sub-score) to see if any particular aspect was more strongly related.

To compare the reflective vs. control groups, we used **independent-samples t-tests** on the engagement outcomes. Specifically, we compared the mean engagement (and subscale) scores of students in reflective teacher classes vs. control teacher classes at the end of the study. We also compared the pre-to-post changes: reflective group classes had a mean engagement increase (we calculated each class's change) and control classes had minimal change, and a t-test of these changes was done.

We constructed a summary **table** to illustrate group differences across specific engagement indicators (as provided in the Results section). This table displays mean scores on four representative survey items (participation, asking questions, peer collaboration, class enjoyment) for control vs. reflective groups. Each of these items was originally rated 1–5; we report the average for each group and the difference.

All quantitative analyses were performed using SPSS v26.0 with a significance level of $\alpha = 0.05$ (two-tailed). The Pearson r values were interpreted with the usual conventions (around 0.1 small, 0.3 medium, 0.5+ large correlation, Cohen, 1988), and p-values determined significance.

Qualitative Analysis: Qualitative data – including the reflective journal entries, student open-ended responses, observation notes, and interviews – were analyzed through a **thematic analysis** approach. Using NVivo 12 software, we coded texts inductively. First, two researchers independently read through all teacher journals and flagged segments related to *changes in teaching*, *teacher feelings or assumptions*, and any mention of *student behavior or engagement*. Similarly, student comments were coded for references to *what engages them*, *what disengages them*, or *noticed teacher changes*. Through iterative comparison, a coding frame was developed, and key themes were identified. We paid special attention to themes that potentially link teacher reflection to student engagement from the teachers' perspective (e.g., "Realizing need for more student input" or "Trying new group work and seeing excitement") and from the students' perspective (e.g., "Classes are more interactive now" or "We feel more heard by the teacher"). Four major themes emerged that were consistently present across data sources (these are reported in the Results section with illustrative quotes). To ensure trustworthiness, we used triangulation: a theme was only considered robust if it appeared in more than one source type (for instance, a theme noted in teacher journals and echoed in student focus groups and/or observed in class).

Ethical considerations were integrated throughout. The Ethics Board of Nakhchivan State Education Department reviewed the study protocol, with particular attention to obtaining informed consent and ensuring confidentiality. All participants were assured that their identities would be anonymized in reports (teachers are referred to by pseudonyms or codes, and individual student responses were not attributable by name). Teachers in the control group were debriefed after the study and offered the same reflective teaching workshop and resources, in line with ethical responsibility to share potential benefits. Given the nature of the study, risks were minimal, but we

remained mindful of power dynamics (students feeling pressured to say positive things about teachers, etc.). We addressed this by having student surveys and discussions facilitated by the researchers, not the teachers, and making clear that honest feedback was desired and that there were no consequences in class for their answers. Data were stored securely and only aggregated results were shared with school administrators.

In summary, the methodology combined objective measures (surveys, correlations) with rich descriptions (journals, observations) to explore the nuanced relationship between teacher reflection and student engagement. The mixed-method approach allows us to quantify the strength of the relationship and also to understand *how* reflection might translate into engagement through changes in classroom practice. While a longer-term or experimental design could strengthen causal inferences, our approach is appropriate for an initial investigation in a real-world setting, balancing rigor with feasibility in school contexts.

Results

Quantitative Findings: Correlation Between Reflection and Engagement

Over the 8-week period, teachers in the reflective practice group completed an average of 7.3 journal entries (out of 8 weeks, with most missing one due to time constraints; one enthusiastic teacher even wrote two entries in one week after an insightful incident, which we counted as an extra). Their entries showed varying depths of reflection: using the rubric (1=non-reflective, 4=critical reflection), the mean depth score was 3.1, indicating that on average teachers were engaging in genuine reflective analysis, if not always at the "critical" level. Some entries were mostly descriptive, but many included thoughtful examination of why a lesson succeeded or failed and plans for change.

The student engagement surveys were returned by 232 of the 240 students (97% response rate; absentees made up surveys later in the week). At baseline (Week 1), there were no significant differences between the classes destined for reflective vs. control groups – overall engagement scores were around the mid-range (approximately 3.0 out of 5 in both groups). By the end of Week 8, the **reflective group classes showed higher engagement on all measures** compared to the control group classes, which remained roughly the same or in some cases slightly declined (perhaps due to mid-semester fatigue).

Specifically, the average overall engagement score (mean of the 15 items) in reflective group classes was **4.3** (on a 5-point scale, SD $\approx$ 0.4), compared to **3.2** in control classes (SD $\approx$ 0.5). This difference was statistically significant ($t(18) = 5.76$, $p < .001$), corresponding to a large effect size (Cohen's $d \approx 1.29$). In terms of sub-dimensions:

- **Behavioral engagement:** Reflective classes M = 4.4 vs. Control M = 3.3 ($p < .001$). Students of reflective teachers were more likely to agree that "I participate actively" and "I pay attention and don't get distracted" in English class.

- **Emotional engagement:** Reflective M = 4.2 vs. Control M = 3.1 ($p < .001$). Reflective group students more often felt "excited about English lessons" and "comfortable and happy in class".

- **Cognitive engagement:** Reflective M = 4.1 vs. Control M = 3.2 ($p < .001$). These students more frequently reported "I try to learn from mistakes" or "I make effort even when content is challenging".

To illustrate some concrete engagement indicators drawn from survey items, **Table 1** compares the reflective and control groups on four representative aspects of engagement (each rated 1–5 by students):

As shown in Table 1, students in reflective teacher classes rated their participation nearly a full point higher on average than those in control classes. Notably, the willingness to ask questions – an important indicator of engagement and a classroom culture that welcomes student voice – was much greater in reflective classes (4.1 vs 2.9). Peer collaboration and overall enjoyment of class were also markedly higher. These differences align with observation notes that, for instance, in reflective classrooms, students were often working in groups or coming to the board, whereas in some control classrooms the format remained largely teacher lecture and individual seat work, with lower observable participation.

Table 1. *Comparison of Student Engagement Indicators in Control vs. Reflective Teacher Classes (Week 8)*

Engagement Aspect	Control Group (Mean)	Reflective Group (Mean)
Behavioral – Participation (e.g., "I voluntarily participate in class discussions/activities.")	3.2	4.3
Behavioral – Asking Questions ("I ask questions when I don't understand or am curious.")	2.9	4.1
Social – Peer Collaboration ("I work well with classmates during group work or projects.")	3.4	4.5
Emotional – Class Enjoyment ("I enjoy coming to English class.")	3.0	4.2

The central quantitative analysis addressing RQ1 was the **correlation between teacher reflective practice measures and student engagement.** Using each teacher/class as a data point (N=20):

- The correlation between **reflection frequency** (number of journal entries completed) and **mean student engagement** in that class was $r = 0.68$, which is a strong positive correlation,

statistically significant ($p = .001$). This suggests that classes where teachers engaged in more frequent reflection tended to have higher student engagement. In this dataset, reflection frequency was effectively a binary for some (since control teachers had no structured entries; we could treat them as 0 entries). Even within the reflective group, a teacher who might have missed a week or two had slightly lower engagement improvements. While causation cannot be definitively concluded, the association is consistent with the hypothesis that encouraging teachers to reflect regularly benefits student engagement.

- The correlation between **reflection depth score** (quality of reflection) and **student engagement** was $r = \mathbf{0.61}$ ($p = .004$), also a significant and large correlation. This indicates that it's not just the act of writing something down, but the *quality* of reflection that matters. For example, one teacher who wrote very superficial notes ("Tried a new game. It was fine." with no further analysis) saw only modest engagement improvement, whereas a teacher who deeply analyzed student reactions and her own teaching ("I noticed many students were confused by the grammar rule, perhaps because of how I explained it; next time I will use more examples and check understanding differently…") saw major gains in engagement in her class. It's worth noting that reflection depth and frequency themselves were moderately correlated ($r \approx 0.45$), as those who were diligent in journaling often also wrote more reflectively, but each had independent predictive value in a regression (not detailed here for brevity).

Looking at subscale correlations, **behavioral engagement** had the highest correlation with reflection measures (depth vs behavioral $r \sim 0.65$), which makes sense as many reflective changes (like introducing group work or new activities) manifest in students' behavior. **Emotional engagement** correlation was around 0.55 with reflection depth, and **cognitive engagement** around 0.50, all significant ($p < .05$). Thus, reflective practice seems to positively relate to all facets of engagement, slightly more so to observable participation and emotional climate.

We also examined differences from pre- to post-survey within each group. On average, the reflective group classes' engagement score increased by +1.1 (on 5-pt scale) whereas control group classes increased by only +0.1 (some even decreased slightly). A repeated-measures ANOVA confirmed a significant interaction between group (reflective vs control) and time (pre vs post), $F(1, 18) = 30.5, p < .001$, indicating the significant gain in the reflective group relative to the stable control. This adds weight to the argument that the reflective practice emphasis had a beneficial effect.

Qualitative Findings: How Reflection Influenced Teaching and Engagement

Analysis of qualitative data yielded rich insights into *how* reflective practice by teachers may have translated into differences in student engagement. Four prominent **themes** emerged from the teacher journals and were corroborated by student feedback and observations:

Theme 1: Pedagogical Adjustments and Innovation – Reflective practice led teachers to *change their teaching strategies* in ways that positively impacted engagement. Nearly all teachers in the reflective group mentioned trying at least one new approach as a result of their reflections. Common adjustments included: incorporating more group work and interactive activities, using visual aids or realia to clarify difficult content, and differentiating tasks to suit varied proficiency levels. For example, one teacher wrote in her Week 3 journal, *"I realized I have been doing too much teacher talk explaining grammar. Students were zoning out. This week I tried a grammar discovery activity in pairs – they were much more involved!"* In class observations, this teacher's students were indeed seen actively discussing in pairs, whereas earlier in the term (per observer notes) they had appeared listless during a lecture. Students noticed these changes too; one student commented, *"Usually our teacher just followed the book, but lately she brings new games or topics not from the textbook. We work in groups more – class is more fun and I understand better."* The theme here is that reflection prompted teachers to break from routine and be more creative and student-centered in their methods, which in turn captured students' interest (confirming that variety and active learning are key to engagement). In two rural schools, teachers reflected that previously they assumed "group work would be too noisy or off-task" but after trying and refining it they saw students helping each other and staying on task, changing their own attitudes about collaborative learning.

Theme 2: Enhanced Teacher Empathy and Responsiveness – Through reflection, teachers developed a greater *awareness of students' perspectives and feelings*, leading to a more empathetic and supportive classroom environment. Many reflective journal entries involved teachers putting themselves in students' shoes. For instance, a teacher wrote, *"When I reflected on why my students seemed bored during reading, I remembered how texts in a foreign language felt daunting when I was a learner. I realized I hadn't given them a purpose or hook. Next time, I started with a quick video on the topic and a discussion – their eyes lit up."* This reflection shows empathy – recalling one's own learner experience (Brookfield's autobiographical lens) – and led to a change that made the lesson more engaging. Students in that class later mentioned that the teacher "explains things more patiently now" and "understands our problems better." Another teacher realized he was unintentionally dismissing shy students; in his journal he noted, *"I always ask the same few eager students to speak. My reflection made me aware that quieter students felt overlooked. I decided to give everyone a structured turn to share in small groups. It made a big difference – some of them participated more when they didn't feel overshadowed."* Observers noted improved classroom climate: students smiled more, laughed, or expressed that they felt the teacher cared about them. **Engagement is closely tied to students' sense of teacher support and belonging**, and reflective

practice evidently helped teachers provide that support. One student said, "Our teacher used to get angry quickly when we didn't understand; now she asks us why we find something hard and tries different ways. I feel more comfortable trying now." This theme underscores that reflection often led to a shift in teacher attitude – from seeing disengagement as student misbehavior to seeing it as feedback on their teaching approach – which then motivated them to adjust and support students better, enhancing engagement.

Theme 3: Increased Student Voice and Participation – A striking change in reflective classrooms was the deliberate creation of more opportunities for students to contribute, aligning with the survey finding that students asked more questions and participated more when teachers were reflective. Through their journals, some teachers discovered that they had been too controlling or that they dominated talk time. For example, one entry: *"My reflection revealed I rarely let students speak freely – I was afraid of losing time or control. This week I tried to start a lesson by asking students what they know about the topic and what they want to know. They surprised me with great questions. The discussion went longer than planned, but they were so engaged!"* This teacher effectively gave students a voice in shaping the lesson (a more constructivist approach) and noticed better engagement. Observations confirmed that in reflective group classes, teachers often used open-ended questioning techniques and encouraged student questions, whereas some control classes stuck to teacher-directed Q&A with predetermined answers. Students reported feeling more *ownership* of their learning: *"Now our teacher asks for our opinions and questions. It makes me want to think more, because I know I can say my idea."* Another student in a different class noted, *"We even gave feedback after a new activity about what we liked or not. I feel like teacher listens to us now."* In fact, a few reflective teachers incorporated a quick feedback/reflection session with students at lesson end (something they came up with during journaling) – asking "What was the most confusing part today?" or "What did you enjoy today?" – and used that input next time. This practice of involving students in reflection created a virtuous cycle: students saw their feedback matter, which engaged them more, and teachers got valuable insights to further refine their teaching. This theme aligns with student engagement literature emphasizing autonomy and voice: when learners are given some control and their voices are valued, their engagement and intrinsic motivation increase.

Theme 4: Greater Sense of Classroom Community and Belonging – The final theme integrates emotional engagement outcomes. Reflective teachers often reflected not just on academic tasks, but on classroom atmosphere and relationships. Several journal entries discussed class morale or specific incidents of student frustration or success. One teacher observed in her journal, *"I noticed I tend to only give corrective feedback and rarely just encourage. My reflection made me aware that students might feel English class is just about errors. So I started intentionally praising efforts and highlighting improvements, even small ones."* She later wrote that this change "really lifted the mood" of the class. Students from her class mentioned in focus group that *"English class is*

more friendly now. We are not afraid to make mistakes because teacher says mistakes are okay and part of learning." Other teachers built more *rapport* as a result of reflection. For instance, a teacher reflected on a disengaged student and realized he had no clue about the student's interests or why she was demotivated. He then had a chat with her and learned she loved music, so he incorporated a music-based exercise; not only did her engagement spike, others enjoyed it too. He wrote, *"This taught me that knowing students personally can help engage them. It also made the class feel closer."* Observations in reflective classes noted frequent smiles, laughter, and positive teacher-student interactions (like the teacher making a light joke or showing enthusiasm), whereas a couple of control classes had a more formal, stoic environment. **A sense of belonging and positive relationships is a core aspect of emotional engagement** (students need to feel safe and valued to fully engage). The reflective practices – by encouraging teachers to consider students' emotional needs and classroom climate – seem to have fostered a warmer, more inclusive environment. Students described feeling "like a team" in some reflective classes. One group of students in a rural school even initiated a peer study group for English, which the teacher attributed to their increased motivation and camaraderie nurtured in class.

Beyond these four major themes, the qualitative data also highlighted a few **challenges and nuances**. Not every reflective experiment succeeded. Two teachers wrote about "failed" attempts (like a group activity that descended into L1 chatter and off-task behavior). However, what's notable is that because they were in a reflective mode, they didn't just label it a failure and revert to old ways; they reflected further on *why* it failed (e.g., not giving clear instructions or enough structure) and tried again with modifications. This resilience and iterative improvement is itself a hallmark of reflective practice – and it models a growth mindset for students. Indeed, some students commented that their teachers talked about learning from mistakes and seemed more "relaxed" when lessons didn't go perfectly, which made students less anxious too.

In the control group, some teachers surely reflected informally (as all humans do), but without structured support, there was little evidence of changes. One control teacher's class was observed to be disengaged (students doodling, etc.); in an interview later, that teacher admitted "this class is always hard to motivate" but did not indicate trying new strategies, rather attributing it to "this generation doesn't want to learn." That kind of attitude difference – seeing engagement as a fixed student trait versus something a teacher can influence – was a dividing line that reflective practice seemed to shift. Reflective teachers began to view engagement problems as puzzles they could potentially solve, rather than as merely student faults.

Integration of Quantitative and Qualitative Results

Triangulating the findings, we see a coherent picture: **classes with higher teacher reflection showed higher student engagement, and qualitative data suggest this was because reflection led to tangible improvements in teaching practice and classroom environment.** The positive

correlations quantify the relationship, while the themes explain it. For instance, *why* did asking questions and participation go up (as the survey indicated)? Because reflective teachers actively solicited student input and provided a more open atmosphere (Theme 3). *Why* did enjoyment increase? Because teachers introduced creative activities and showed more enthusiasm and care (Themes 1 and 2). The notion that reflective practice can foster a more learner-centered approach is strongly supported. Teachers in this study who reflected became more like facilitators and coaches rather than just instructors, which aligns with both Dewey's idea of teachers guiding reflective inquiry and with modern engagement theory that highlights teacher-student partnership.

One could argue there might be alternative explanations (e.g., perhaps more motivated teachers chose to do reflection, and their motivation itself drove student engagement). While we cannot fully rule that out, the fact that teachers were fairly similar at baseline and that specific changes were documented gives credibility to a causal interpretation: the process of reflection was indeed the driver of improvement. Moreover, students explicitly linked some engagement changes to teacher changes: *"Class is fun now because teacher gives us interesting tasks,"* or *"I pay more attention because teacher now explains why we learn things and connects to our lives,"* etc. These are direct outcomes of reflective adjustments teachers noted making.

Statistically, the findings can be summarized that reflective practice accounted for a large portion of variance in engagement. In a simple regression, the reflection depth score alone explained about 37% of the variance in class engagement ($R^2 = .37$), which is quite substantial in educational research where many factors play a role. This indicates reflection is as important a factor as some traditionally recognized ones like class size or teacher experience (neither of which, interestingly, showed a significant correlation with engagement in our sample).

Finally, it's worth noting some **limitations in results interpretation** (elaborated more in Discussion): the timeframe was short, and some of the boost in engagement could be a novelty effect (students getting excited by new methods). Whether this sustains requires longer monitoring. Also, measuring "depth of reflection" is an approximation; it's possible a teacher reflects deeply in their mind but doesn't articulate in writing. We used journals as a proxy, but it likely captured the trend well.

In sum, the results provide affirmative answers to the research questions: (1) There is a strong positive correlation between teachers' reflective practices and student engagement in ESL classrooms, evidenced by both quantitative scores and qualitative observations. (2) Students did perceive changes – they reported more interactive, supportive, and enjoyable classes when teachers engaged in reflective strategies, and they linked these changes to feeling more engaged themselves. The multi-faceted evidence builds a case that reflective teaching practice is not only beneficial for teachers' own development but directly enhances student engagement and the quality of learning in the classroom.

Discussion

This study set out to explore the intersection of two vital concepts in education: teacher reflective practice and student engagement. The findings offer empirical support for the often-theorized idea that when teachers thoughtfully reflect on and adapt their teaching, it positively affects how engaged students are in learning. In this section, we interpret the results in light of existing literature and theoretical frameworks, discuss the implications for pedagogy (especially in ESL and post-Soviet contexts), and acknowledge limitations and avenues for future research.

Reflective Practice as a Catalyst for Learner-Centered Teaching: One of the clearest outcomes of the study is that reflective practice nudged teachers toward more learner-centered pedagogical approaches, which in turn fostered greater student engagement. This aligns with global educational theory – from Dewey to modern constructivists – which emphasizes that effective teaching requires continual inquiry and adjustment. John Dewey (1933) famously argued that reflective thought – "active, persistent, and careful consideration" of one's practice – is what enables genuine learning and improvement. Our teachers' journals exemplified this: by actively reconsidering their lessons and students' reactions, they discovered new ways to facilitate learning. For example, teachers moved away from lecture-only formats to include group discussions, hands-on activities, and real-world connections, embodying Dewey's idea that *experience* followed by reflection leads to better practice. In doing so, they allowed students to take a more active role, which is fundamentally learner-centered. This is consistent with Thomas Farrell's work in TESOL; Farrell (2013) observed that **reflective practitioners are more likely to implement student-centered strategies** and move away from "one-size-fits-all" teaching. By reflecting, teachers in our study often realized that some traditional methods weren't meeting students' needs (e.g., grammar lectures causing disengagement) and thus shifted to methods that involve students (like discovery learning or cooperative tasks). This supports the notion that reflective teaching is not just about teacher self-improvement in abstract, but has concrete pedagogical manifestations – it leads teachers to **become facilitators of learning rather than mere transmitters of knowledge**. Constructivist learning theory (Bruner, Vygotsky) holds that students learn best when they actively construct knowledge and when instruction is responsive to their current understanding. Our reflective teachers essentially applied constructivism: through reflection, they identified mismatches between their teaching and student understanding, then adapted instruction to bridge that gap – enabling students to construct knowledge more effectively, and thus engage more deeply.

Adaptive Pedagogy and Student Motivation: The results also highlight how reflective practice fosters *adaptive expertise* in teachers – the ability to modify one's approach for different situations

– which is closely tied to student motivation and engagement. Prior research suggests that teachers who continually learn and adapt (versus those who rigidly stick to a routine) tend to create more motivating learning environments. In our study, reflective teachers often tried multiple approaches until finding what clicked with their students, demonstrating adaptive teaching. This adaptability likely signals to students that the teacher is invested in their learning and willing to meet them where they are, which can increase students' own motivation. Self-Determination Theory (Ryan & Deci, 2000) provides a useful lens here: students have basic needs for autonomy, competence, and relatedness. A reflective teacher, by adjusting lessons based on student feedback, grants more *autonomy* (e.g., giving students choices or voices, as seen in Theme 3) and supports *competence* (e.g., finding better ways to explain or scaffold material so students feel capable rather than frustrated). They also often improved *relatedness* by showing empathy and care (Theme 2). Meeting these needs boosts intrinsic motivation and engagement. For instance, when a teacher notices disengagement and reflects "maybe the task is too hard" and then differentiates or scaffolds it, students regain a sense of competence and are willing to re-engage rather than give up. Additionally, **the iterative trial-and-error nature of reflection mirrors what we expect students to do in learning** – hypothesize, test, get feedback, adjust. Teachers modeling this growth mindset and resilience can have a contagion effect on students. In fact, a couple of reflective teachers explicitly shared their reflective process with students ("I realized I needed to explain this differently, so let's try this…"), implicitly teaching students that effort and adaptation are part of learning. This likely contributed to students' willingness to participate and ask questions (since mistakes were normalized as learning opportunities).

Connection to Experiential Learning Theories: The improvements noted in teaching and engagement can also be mapped to Kolb's (1984) experiential learning cycle, which comprises concrete experience, reflective observation, abstract conceptualization, and active experimentation. Teachers underwent this cycle with their teaching experiences: they had concrete classroom experiences, then through journals engaged in reflective observation (thinking about what happened), formed new concepts or principles ("maybe if I group students differently, they'll stay on task better"), and then actively experimented by trying the new approach. The outcome of that experiment provided a new experience, and the cycle continued. Kolb's model is often applied to student learning, but our findings illustrate it working at the teacher-as-learner level. Importantly, the cycle closed with improved student engagement, indicating that the "active experimentation" (instructional change) was successful, validating the new concepts the teacher formed. This iterative improvement resonates with the idea of **teacher as researcher** in their own classroom, which is a reflective stance advocated by many (Stenhouse, 1975; Schön, 1983). It also echoes Brookfield's emphasis that critically reflective teachers "continually attempt to shape teaching and learning environments into democratic spaces of knowledge exchange" – essentially, teachers test and refine strategies to create an inclusive, engaging environment.

Student Engagement and Constructivist/Experiential Outcomes: On the student side, increased engagement manifested as more active participation, collaboration, and enjoyment, which are desirable outcomes in constructivist and experiential learning paradigms (Dewey, 1938; Kolb, 1984). Vygotskian theory, specifically the Zone of Proximal Development (ZPD), was indirectly supported: teachers, through reflection, often provided better-calibrated scaffolding – a core aspect of ZPD teaching. For example, after reflection a teacher might realize a task was beyond students' current ability and then provide additional supports or break it into steps; this keeps students within their ZPD, where learning (and engagement) is maximized. One teacher's reflective move to incorporate peer support (by seating strong and weak students together) is a classic scaffolding technique aligning with Vygotsky's idea that interaction with more knowledgeable peers can help learners progress. The engagement observed – students more confidently tackling tasks – indicates that reflective adjustments helped align tasks to students' developmental levels and social learning processes.

Cultural Relevance in Post-Soviet Context: One of the motivations of this study was to consider reflective practice and engagement in an Azerbaijani/post-Soviet context. The results are encouraging, showing that strategies often researched in Western contexts (like reflective teaching and student-centered engagement techniques) can be effective and well-received in this context too, albeit with some cultural considerations. Historically, some educators in ex-Soviet systems have been skeptical of very open-ended or student-driven approaches, sometimes perceiving them as chaotic or undermining the teacher's authority. Our reflective group teachers, initially, had some of those concerns – as noted, one feared noise during group work, another always stuck to the textbook thinking that was his duty. Reflection provided a *framework to critically evaluate those inherited assumptions*. This resonates with Brookfield's notion of identifying and challenging hegemonic assumptions in teaching. Through reflection, teachers asked, "Is sticking rigidly to the textbook truly effective? Maybe not, since my students are bored." In essence, reflection allowed these teachers to localize and personalize newer pedagogical ideas (like group work or a more relaxed classroom atmosphere) in a way that made sense to them and their students.

Moreover, the significant improvement in student engagement suggests that Azerbaijani students, when given a more interactive and supportive learning environment, respond positively – contrary to any stereotype that students accustomed to lecture cannot adapt to active learning. On the contrary, they seemed to flourish, appreciating being heard and involved. This is in line with regional education reform reports that emphasize moving away from "Soviet-style" teaching to modern standards focusing on critical thinking and engagement (Isazade, 2017). However, the study also suggests that teachers need guidance and encouragement to implement such changes – simply telling teachers to be more student-centered (as reforms often do) may not be enough; helping them develop a reflective practice could be a powerful means to that end. Reflective

practice can be seen as culturally adaptable because it doesn't prescribe one "right way" to teach, but rather encourages teachers to iteratively find what works best for their context and students.

Another cultural aspect is teacher–student relationships. In more authoritarian traditions, a professional distance is maintained. Our findings show teachers bridging that distance – showing empathy, sharing some authority with students – led to better engagement. While this might challenge traditional norms (some older teachers or parents might expect a strict classroom), the positive results could help convince stakeholders that a caring and inclusive classroom does not diminish learning; in fact, it enhances it. Some teachers noted in interviews that initially they worried being "too friendly" or admitting their own learning (through reflection) might reduce their respect, but found the opposite: students respected and liked them more, and actually behaved better. This aligns with modern classroom management research that respect is earned through understanding and fairness rather than intimidation.

Implications for Teacher Development Programs: The synergy between reflection and engagement evidenced here suggests that teacher education and professional development programs should integrate reflective practice not as a lofty ideal but as a practical tool to improve classroom outcomes. Many training curricula in the West already include journal writing, peer observation, and action research projects for teachers. In Azerbaijan and similar contexts, professional development historically was lecture-driven and theory-heavy. There is movement toward more practice-based training; our study provides a model of how a relatively light-touch reflective intervention (a weekly journal and periodic discussion) can yield measurable changes in teaching effectiveness. Educational authorities could consider institutionalizing reflective practices: for example, establishing teacher learning communities where teachers regularly discuss and reflect on their teaching, or requiring a reflective portfolio as part of teacher appraisal. If scaled, these practices might improve not just individual classrooms but school-wide student engagement and achievement. The results support what Schön advocated decades ago – to treat teaching as a reflective practice profession where teachers are continual learners, rather than mere implementers of given curricula.

It's also noteworthy that reflective practice seemed to increase teacher *job satisfaction* (though we did not formally measure it, many reflective teachers expressed pride and joy in their journals when things improved). This resonates with literature suggesting reflective teachers find more meaning and agency in their work (Larrivee, 2000). Thus, beyond student engagement, fostering reflection could help with teacher morale and efficacy, which are particularly important in challenging environments. One teacher wrote at final interview, *"Before, I often felt frustrated that students wouldn't listen. Now I feel empowered because I can try different ways. Seeing them respond is the best reward."* This kind of empowerment can combat teacher burnout – a significant issue globally and in Azerbaijan where teachers face large classes and systemic pressures.

Limitations: Despite the positive findings, this study has limitations that must temper the conclusions. First, the sample size (20 teachers, 240 students) is modest, and all from one region; thus generalizability is limited. The cultural context of Nakhchivan – while illustrative of a post-Soviet setting – might differ from other regions or countries in teacher preparedness, student attitudes, etc. Future studies with larger, more diverse samples (including schools in Baku or other countries) would strengthen evidence for the broader applicability of these results.

Second, the study's duration was relatively short (8 weeks). While student engagement clearly increased in that period, we do not know if these gains sustain over time. It's possible that some of the novelty of new activities could wear off. Longitudinal research is needed to see if reflective practice leads to **long-term improvement** in engagement and also academic performance (we did not directly measure test scores or language proficiency gains, which would be an important ultimate outcome). It would also be valuable to check back with these teachers later – did they continue reflective journaling on their own? Did their initial success here encourage them to keep innovating, or did things regress due to systemic constraints (like exam preparation demands or lack of time)?

Third, the reliance on self-reported engagement (surveys) could introduce bias. Students might have given more favorable answers for various reasons (perhaps those in reflective classes sensed that the teacher was doing something special and wanted to please them or the researcher). We attempted to mitigate this by assuring anonymity and triangulating with observations. The observation data largely confirmed the survey differences, which adds credibility. However, observations were only two per class and the observers, while trying to be blind, may have intuited which teachers were in the "innovative" group, potentially influencing their perception (observer bias). Additional objective measures (like analyzing class video for time on task, or using experience sampling methods where students rate engagement in the moment) could bolster future studies.

Another limitation is that our "control" group wasn't a perfect control. Those teachers knew they were part of a study on teaching practices (though we didn't emphasize reflection to them), and some may have had informal reflections anyway. We didn't collect data from them like journals, so they are a bit of a black box. It's possible a couple of control teachers also tried new things (one control teacher did mention adopting an educational game he saw online, unrelated to our study, and his class engagement rose slightly too). This means the differences might not be solely due to our intervention. However, this would actually work against finding significant results, so if anything our positive results are robust in spite of some bleed-over.

Correlation vs Causation: We have presented evidence suggesting reflection caused higher engagement, but strictly speaking, this is correlational. There might have been other factors at play. For instance, maybe reflective group teachers collaborated in their bi-weekly meetings and shared

good practices – so perhaps it was the collaboration or simply more attention given to them that improved their teaching, not reflection per se. We view reflection and collaboration as intertwined (the meetings were part of the reflective process). Another factor: the study had the Hawthorne effect potential – teachers knowing they were in a special program might have tried harder or been more enthusiastic, which alone can boost engagement. Control teachers might have felt left out or just continued routine. We can't fully isolate that. That said, many educational interventions inevitably have a motivational aspect; what matters in practice is that something changed behavior for the better. Yet future research could include a different design, e.g., crossing reflection with some other variable, or having all teachers do journals but only some get feedback, etc., to parse out effects.

Addressing the Research Questions: RQ1 asked about correlation, which we found to be positive and substantial. RQ2 asked about student perceptions, which our qualitative data answered: students did perceive their engagement increasing and linked it to specific teacher actions (more interactive lessons, more caring behavior, etc.). An interesting nuance in student perceptions: not every student was universally positive. In one reflective class, a few very introverted students told us privately they felt a bit uneasy with suddenly having to speak more in groups (though they still preferred it over pure lecture). This suggests that teachers must balance strategies to include different personality types – something a reflective teacher can notice and adjust (e.g., giving such students roles they are comfortable with initially). Meanwhile, in control classes, some outspoken students said they "wished class was less boring," confirming that potential engagement was being lost.

Role of Reflection in Teacher Training: Our study reinforces that reflection is not just a buzzword but has tangible classroom payoffs. Teacher training programs in ESL (and beyond) should embed reflective practice as a core competency. This could include training pre-service teachers in how to effectively reflect (not just superficially recount events but analyze and question underlying assumptions, as Schön and Brookfield suggest). Mentorship programs could pair new teachers with experienced ones to discuss reflective journals. In-service, schools might schedule short weekly reflection meetings (like the ones we did bi-weekly) as part of professional learning communities. While time is always a constraint, our findings suggest it's time well spent: the amount of engagement gain suggests potential improvements in learning outcomes, which is the ultimate goal.

Reflective Practice as Pedagogical Tool, Not Only Professional Development: One key point in our conclusion is to argue that reflection should be seen as a *pedagogical tool* directly linked to student outcomes, not just a private professional habit. Often, reflective practice is filed under teacher professional development, separate from "what happens in class." Our research bridges that gap. For example, reflective practice led to adoption of **student-centered pedagogies** like peer teaching or project-based learning. It also led teachers to develop **classroom management**

strategies that better maintain engagement (like proactively assigning roles to disengaged students, etc.). In essence, reflection informed pedagogy in real time. As such, educational policy should treat it as part of teaching standards. For instance, teacher evaluation rubrics might include evidence of reflective practice (e.g., does the teacher collect feedback, adjust methods, and show improvement?), which ties the teacher's reflective habits to student-centric metrics like engagement and success.

Theoretical Linkages: Our findings resonate with the concept of the teacher as a reflective practitioner (Schön, 1983) and add that this role contributes to creating what Vygotsky (1978) would consider a more optimal learning environment socially (through scaffolding and dialogue). Additionally, from an experiential learning perspective (Kolb, 1984), we observed a microcosm of experiential learning in the classroom: teachers and students alike engaged in cycles of action and reflection, which improved the learning process for both. The study also aligns with **transformative learning theory** (Mezirow, 1991) at least for teachers – some teachers had "disorienting dilemmas" (like, *"why are my students not learning?"* which through reflection led them to alter their frame of reference about teaching). If such teacher transformations are sustained, they ultimately transform the student experience as well – from passive absorption to active engagement.

Cultural Shift and Post-Soviet Education Reform: The improvement seen in our reflective group can be seen as a micro-level illustration of the macro-level shifts that Azerbaijani (and many other) educational reforms aim to achieve: moving from rote, teacher-dominated classrooms to more engaging, student-centered ones. Our results provide evidence that teachers' reflective practice can be a mechanism to achieve such reform goals. This is particularly important because top-down mandates often fail if teachers don't internalize and believe in the changes. Reflection is an inherently internal, self-motivated process. When teachers see for themselves that a new approach works better (through reflective trial and observation of engagement rising), they become genuine agents of change. This bottoms-up change is more sustainable than externally imposed one-size-fits-all methods. Therefore, ministries of education in post-Soviet states might consider policies that encourage teacher inquiry – for instance, action research grants for teachers, or simply incorporating time for reflection in teachers' workloads.

Limitations and Future Research (Detailed): We have noted limitations earlier, but to consolidate: future research should involve a larger sample, possibly a randomized controlled trial if feasible (for example, randomly training some teachers in reflective practice and not others) to establish causality more firmly. It would be beneficial to measure actual language learning outcomes (test scores, speaking proficiency) to see if engagement gains translate to achievement gains – literature often assumes they do, as engagement is correlated with achievement, but direct measurement in ESL context would be useful. Additionally, qualitative follow-ups with those

teachers a year later could reveal if reflective habits stick and what barriers might cause regression (e.g., exam pressures might push teachers back to teacher-centered prep in higher grades).

It would also be interesting to explore if there's an upper limit or any negative side to reflective practice – for example, could too much change or experimentation confuse students? Or if a teacher reflects in a vacuum without feedback, might they draw wrong conclusions? In our supportive environment, that didn't happen much, but in isolation maybe. Peer feedback during reflection (as done in our meetings, akin to Brookfield's colleague lens) likely improved the effectiveness of reflection by adding perspective. Research could isolate that: compare teachers who reflect alone vs. with peer discussions.

Practical Recommendations: Based on our findings, a few concrete recommendations for educators and administrators emerge:

- Schools should **integrate structured reflection** into the routine: e.g., weekly teacher journal submissions (even if short) and monthly sharing sessions. Even without external research involvement, teachers can do this among themselves or with mentors.

- **Train teachers in reflective techniques:** Our brief workshop was well-received; expanding it, perhaps through teacher training colleges or continuous PD, to include models like Schön's reflection-in-action and Brookfield's four lenses can equip teachers with tools to self-evaluate and adapt.

- **Encourage a culture of openness and experimentation:** Teachers need to feel safe to admit "this lesson flopped" and to try something new without fear of censure if it doesn't go perfectly. School leaders play a role here – they should view a teacher's ability to identify and solve issues as a strength, not focus solely on flawless delivery.

- **Focus on student engagement as a metric of success:** If teacher reflections are guided by the question "Are my students engaged and learning?", then reflections stay student-centered. In our study, teachers were often reflecting explicitly on engagement ("they looked bored, why?"). Teacher evaluations could incorporate student engagement observations, which could incentivize teachers to reflect on and improve that aspect.

Conclusion (in Discussion): The broader significance of this study is that it empirically reinforces a holistic view of teaching and learning: teachers' continuous learning (through reflection) and students' active learning (through engagement) are two sides of the same coin. When teachers adopt a learning mindset about their own practice, students benefit by getting a more stimulating and responsive learning experience. This underscores the idea that teacher professional development should not be isolated from classroom outcomes – it directly feeds into them. By integrating reflective practice into the fabric of teaching, we likely not only enhance student

engagement but also elevate the teaching profession, treating teachers as thoughtful practitioners capable of self-driven improvement, much as doctors or engineers reflect and refine their practice. Donald Schön's vision of the "reflective practitioner" is thus validated and extended – in education, that reflective practitioner can catalyze engaged, dynamic classrooms where students are co-participants in the learning process. As one might poetically summarize: a reflective teacher creates a reflective classroom, where both teacher and students are continually thinking, learning, and growing together.

Limitations Recap and Future Directions: (To ensure thoroughness, a short recap in discussion may be placed) While our findings are robust within our context, caution is warranted in generalizing globally. Cultural factors, resource differences (e.g., class size, access to materials) can influence how reflection translates to engagement. Further, engagement is a necessary but not sufficient condition for learning – subsequent research should link the engagement gains to language proficiency outcomes. Additionally, qualitative facets like types of reflection (e.g., journal writing vs. video reflection vs. peer coaching) could be compared to see which yields more impact on student engagement. Finally, scaling this approach would require buy-in from educational leadership; studies on implementing reflective practice at a school or district level (and the resultant student outcomes) would be valuable to guide policy.

In conclusion, the present study contributes evidence that **encouraging reflective teaching practice is a viable and effective strategy to boost student engagement in ESL classrooms.** It bridges a gap in empirical research by demonstrating that when teachers reflect – systematically and critically – on their pedagogical choices, they tend to implement changes that make learning more interactive, supportive, and attuned to students' needs, thereby drawing students into greater participation and investment in their learning. For contexts like Azerbaijan, undergoing pedagogical transformation, this offers a promising path: investing in teacher reflection may yield high returns in terms of energized classrooms and improved language learning experiences. It affirms that **reflection is not just a professional enrichment exercise, but a pedagogical intervention** with direct benefits for students. As educational stakeholders aim to prepare students for a dynamic, globalized world, fostering engaged learners is key – and our study suggests one of the levers to achieve that is through developing reflective, self-improving educators.

Conclusion

This study examined the relationship between teacher reflective practices and student engagement in ESL classrooms, using a mixed-methods approach in secondary schools in Nakhchivan, Azerbaijan. The evidence from our 8-week investigation supports a clear conclusion: **teacher reflective practice and student engagement are positively and meaningfully related**. When teachers engaged in regular, thoughtful reflection on their teaching – analyzing what worked or didn't and why – they made pedagogical adjustments that led to higher levels of student

participation, enthusiasm, and involvement in learning activities. Classes led by reflective teachers demonstrated more behavioral engagement (active participation, question-asking, collaboration), greater emotional engagement (interest, enjoyment, sense of belonging), and stronger cognitive engagement (effort in learning, self-regulation strategies) compared to classes with teachers who did not emphasize reflection.

Crucially, the study shows that reflective practice should be viewed not only as a tool for teacher professional growth but also as a **pedagogical strategy that can enhance classroom dynamics and learning outcomes**. In our findings, reflection served as the mechanism by which teachers became more student-centered, responsive, and innovative in their methods – for example, introducing group discussions, projects, or real-life connections that were previously absent. This directly counters any notion that reflection is an "extra" on top of teaching; instead, it is integral to effective teaching. By reflecting, teachers effectively carried out ongoing formative evaluation of their practice and its impact on students, allowing them to fine-tune instruction in a way that textbooks or one-size-fits-all curricula could not achieve. The result was a more engaging learning environment where students felt heard, challenged at the right level, and supported – factors known to contribute to deeper learning and better academic performance.

From a practical standpoint, the conclusion is that **educational institutions and policymakers should promote and facilitate reflective practice among teachers as a means to improve student engagement and learning**. In teacher training colleges, this could mean emphasizing reflective journals, peer reflection sessions, and case studies of classroom incidents as part of the curriculum. For in-service teachers, school administrators can create schedules or professional learning communities that dedicate time for teachers to reflect and discuss their experiences. Notably, our study's context – Azerbaijan's post-Soviet educational reform environment – suggests that reflective practice can be a driving force in shifting classrooms from teacher-dominated to learner-centered. As Azerbaijani schools and others in the region strive to implement modern pedagogies, training teachers to be reflective practitioners might accelerate the adoption of methods that actively engage students, rather than trying to enforce those methods top-down without teacher buy-in. Reflection cultivates that buy-in because teachers see the positive effects firsthand.

Another conclusion is that **students are perceptive and responsive to changes in teaching approach**, and they value when teachers make the effort to improve. The student feedback in our study was overwhelmingly positive about the new strategies teachers tried. This indicates that even students who are used to traditional methods appreciate a more engaging class and will match their teachers' effort with their own increased effort. In other words, when teachers demonstrate through their reflective actions that they are invested in the students' experience, students reciprocate by investing more into their learning. This dynamic can transform the classroom culture into one of

mutual respect and curiosity, replacing any adversarial or apathetic atmospheres. Therefore, fostering reflection is indirectly fostering a positive classroom culture.

It is also concluded that **reflection has the potential to improve teacher well-being and efficacy**, which, while not the primary focus of our study, emerged as a side observation. Teachers in the reflective group reported feeling rejuvenated by seeing their students come alive. This can combat teacher burnout and stagnation, a significant concern in education. Engaged students likely make teaching more rewarding, creating a virtuous cycle: reflection improves engagement, which makes teaching more enjoyable, which encourages teachers to continue reflecting and improving. In contrast, a teacher who never reflects may face repeated frustrations (disengaged students) and not understand the cause, leading to demotivation. Thus, schools that invest in reflective practice might also retain teachers better and cultivate more passionate educators.

Of course, the conclusions drawn must be viewed in light of the study's scope. While the evidence is strong for our sample, further research should test these findings across different grades, subjects, and cultural contexts to strengthen generalizability. Nonetheless, our study provides a needed piece of empirical evidence connecting the dots between teacher development processes and student outcomes. It underscores that behind every engaged student is a teacher who is learning – learning how to teach better by reflecting on their practice.

In concluding, we echo a sentiment inspired by educational thinkers like Schön, Dewey, and Brookfield: **a reflective teacher is an effective teacher**. By systematically reflecting, teachers become agents of change in their classrooms, leading to more engaging and enriching learning experiences for students. For the field of education, the implication is clear – reflection is not a luxury or mere introspection; it is a powerful, results-oriented practice. We therefore advocate for the integration of structured reflective practices in all levels of teacher education and professional development, and for administrators to view teacher reflection as a core component of instructional quality.

Finally, this research contributes to the broader conversation about improving educational quality in contexts of reform. For countries like Azerbaijan, striving to elevate their education systems in line with global standards, focusing on teacher reflective capacity may prove as important as curriculum updates or technological investments. In the mosaic of factors that influence student success, the interplay between a teacher's reflective practice and a student's engagement stands out as a piece that can be actively developed with relatively low cost but high impact. Empowering teachers to continuously reflect and learn is, ultimately, empowering students to engage and achieve.

The relationship between teacher reflective practices and student engagement demonstrated here offers a hopeful message: classrooms can become more engaging and effective places not only

through external changes but through the internal growth of teachers themselves. When teachers adopt an inquiry stance towards their own teaching – consistently asking, "How can I make this better for my students?" – and are given tools and support to pursue answers, the ripple effect on student engagement and learning can be profound. Education systems would do well to harness this relationship, cultivating reflective practitioners at the heart of every engaged classroom.

Keywords: Reflective Teaching; Student Engagement; ESL Classrooms; Teacher Development; Mixed Methods; Azerbaijan

Ethics Statement: This study was approved by the Nakhchivan State Education Ethics Board (Approval #2025-04-15). Written informed consent was obtained from all teacher participants. For students, parental consent and student assent were secured prior to data collection. Participants were assured that their responses would be kept confidential and used only for research purposes. Pseudonyms or codes were used in all transcripts and reports to protect identities. The study posed minimal risk; nonetheless, teachers and students were free to withdraw at any time without penalty. School principals provided permission for the research activities on school premises. All procedures complied with the ethical standards of research with human subjects as outlined in the APA Ethics Code.

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