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ENHANCING CRITICAL THINKING IN SECONDARY SCHOOL EFL STUDENTS THROUGH TASK-BASED LEARNING

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ABSTRACT

Task-based learning (TBL) is globally recognized as a student-centered approach to enhancing critical thinking. However, its implementation in non-Western contexts remains underexplored, particularly within Azerbaijan's exam-driven secondary education system. While the literature identifies systemic challenges, such as overcrowded classrooms, gaps in teacher training, and resource limitations, few studies have examined how TBL can be adapted to overcome these barriers in Azerbaijan. This study addresses the gap by investigating the potential of TBL to enhance critical thinking skills among Azerbaijani students and the challenges teachers face in adopting this method. The study employs a convergent parallel mixed-methods design, combining quantitative data from 114 secondary school students (aged 15–18) collected via questionnaires with interviews with four English language teachers. The findings revealed that TBL significantly enhances students' critical thinking, collaboration, and problem-solving skills, irrespective of gender or grade level. However, students face challenges in applying classroom knowledge to real-world situations, underscoring a disconnect between classroom learning and practical application. Key barriers include time constraints, reliance on the native language, and inadequate institutional support. This study contributes to the literature by illustrating TBL's adaptability to exam-based, non-Western systems. It offers three actionable recommendations: (1) establish teacher training programs to align pedagogy with TBL principles, (2) implement curriculum reforms that balance exam preparation with critical thinking tasks, and (3) allocate resources for authentic, real-world activities. Policymakers and educators can harness the full potential of TBL to enhance 21st-century skills in Azerbaijan and similar contexts.

KEYWORDS: Task-Based Learning, Critical Thinking, Gender, Grade, Proficiency Level, Curriculum Reform.

1. INTRODUCTION

English as a foreign language (EFL) has improved significantly in recent decades, particularly in developing students' critical thinking skills, which are highly important for today's students. Listening, speaking, reading, and writing are the four skills of second/foreign language acquisition (SLA/FLA) [1]. Each skill requires a different learning method, so a separate course is created for each. Teaching and learning involve teachers transmitting these skills to students, and students mastering them. This scientific approach to SLA/FLA is common, but an alternative approach is emerging in the field: the integrated approach, which combines these skills in instructional practice (Zheng, 2009). TBL was introduced as part of the Bangalore Project in India and has gained momentum due to several factors, including its association with CLT and attention from leading second-language acquisition (SLA) experts (Prabhu, 2013).

This approach was first used in an Indian project (Prabhu, 2013) to teach a second language and later gained considerable interest in applied linguistics worldwide due to its connections with communicative language teaching (CLT) and the attention of leading figures in second language acquisition (SLA) (Richards & Rodgers, 2001; Prabhu, 2013). Peer interaction and task-based problem-solving are key factors in learning (Raji, 2020). According to Freire (2005), participants in education should engage in dialogue with one another. Teachers and learners should engage in dialogues when interacting, which implies conscious intentions toward the world (Freire, 2005). Accordingly, the conversation between the teacher and the learner enables both to teach and learn from each other. Morales-Ziga (2014) argues that critical pedagogy encourages dialogue between educators and learners to build an equitable reality, which becomes fairer as they become aware of power structures. In the TBL approach, students interact, complete, and apply theories in different ways. Collaboration and interaction tasks, such as group discussions and problem-solving activities, are significant components of the TBL (Suleymanova, 2018). Viet (2014) investigated TBLT in Vietnam and reported a significant gap between curriculum goals and classroom realities attributed to the use of inappropriate textbooks and insufficient teacher training. Harris (2016) explored teachers' beliefs in Japan and noted that educators favored Task-Based Language Teaching (TBLT) for its communicative effectiveness and alignment with real-world tasks.

Farfan (2019) reported that while teachers

recognized TBLT as a beneficial method, they also faced challenges. Large class sizes, limited time, and student attitudes hindered its implementation. Hadley (2000) demonstrated that TBL successfully met the needs of students in specific subjects, such as science and technology, and Mackey (1999) linked TBL interactions to improved second-language grammatical development. In Azerbaijan, where traditional methods prevail, further research is needed to explore the potential of TBL to foster critical thinking (Shukurova, 2024). In Azerbaijan, most secondary state schools do not utilize TBL because their resources are insufficient, and teachers lack sufficient training to implement effective teaching methods. Extensive research has been conducted in other educational fields and contexts; however, studies on TBL in the Azerbaijani context are limited.

Many studies are needed to understand how TBL can be effectively employed in high schools in Azerbaijan and its role in promoting critical thinking skills and challenging students' conceptions of reality. For this reason, this study aims to examine the challenges teachers face and to propose practical solutions to ensure that TBL is effectively implemented in Azerbaijani education. This study also investigates why Azerbaijani teachers employ or refrain from using task-based language teaching (TBLT) in their classrooms. It also examines how TBLT impacts students' critical thinking skills in secondary schools in Azerbaijan.

The following research questions guided the study

1. RQ1: Are there any significant similarities or differences in secondary school students' perceptions of the effectiveness of TBL in enhancing critical thinking based on gender, grade level, and proficiency?
2. RQ2: What are secondary school teachers' views on task-based learning for critical thinking skills?

2. LITERATURE REVIEW

2.1. Task-based Learning

The Task-Based Learning (TBL) approach is based on constructivism, emphasizing active engagement with the environment rather than passive absorption of information (Ellis, 2003, p. 30). According to Jean Piaget (1970) and Lev Vygotsky (1978), constructivism emphasizes social interaction, problem-solving, and real-world relevance in Learning. TBL is based on Vygotsky's Zone of Proximal Development (ZPD).

The ZPD is a range of tasks that learners can

perform with assistance or collaboration, enabling them to progress beyond their current abilities. Through guided practice, learners acquire new language skills through this interaction. With task-based Learning (TBL), learners reinforce fluency and accuracy using real-life tasks. Through TBL, learners engage in real-life, goal-oriented activities that enhance their cognitive Engagement (Ellis, 2003). Skehan (1998) notes that task-based learning (TBL) provides students with authentic learning environments to practice decision-making, reasoning, and analytical skills. In TBL, tasks form the foundation of instruction. The literature defines a task as an activity involving the target language and promoting forward learning (Willis & Burden, 1997). In addition, Ellis (2003) and Nunan (2004) note that tasks provide learners with authentic settings in which to practice language. In essence, pedagogical tasks are classroom activities that provide exposure to communicative learning experiences, encouraging learners to activate their interlanguage and achieve comprehension or expression in the target language. Within tasks, learners focus on conveying meaning rather than explicitly concentrating on grammar, instinctively manipulating their grammatical competence as they communicate (Nunan, 2004). Thus, a task is seen as a complete communicative act with a sense of purpose and meaningful outcomes.

The essential principles of TBLT (Ellis, 2003) include

- Emphasizing production and communication over mere processes;
- Focusing on tasks and purposeful activities that centre on meaning;
- Facilitating communicative and purposeful interaction during tasks to enable language learning;
- Incorporating real-life or pedagogically relevant tasks into the learning environment;
- Sequencing tasks based on their complexity and learner needs;

Recognizing that task difficulty may arise from the complexity, learners' prior knowledge, or the support provided (Feez & Joyce, 1998). Language learning is a complex process involving interaction, materials, activities, and tasks. As reflected in Willis' (1996) TBLT framework, these components are integrated across TBLT's three stages: pre-task, task cycle, and language focus. While teachers may initially lead in the pre-task stage, their role shifts to that of a facilitator during the task cycle, empowering learners to take active responsibility for completing tasks (Nunan, 2004). TBLT integrates the fundamentals of language learning through

authentic materials and creates a natural communicative environment for students (Ellis, 2003). Interactions, materials, activities, and tasks are important in language learning.

The TBLT framework is based on Willis' (1996) framework for enabling learners to engage with all aspects of language learning. Pre-tasks, task cycles, and language-focused TBLT stages can all be incorporated into TBLT stages. Although the teacher appears active in the pre-task phase, they act as a facilitator during the task cycle, while students are the primary agents. During a task, learners assume an active role (Nunan, 2004). A TBLT approach also uses authentic materials and provides natural situations for communicating about tasks in a classroom setting (Ellis, 2003). According to Carless (2007), TBL requires adaptations to address the time constraints imposed by exam-driven systems and institutional resistance. According to Ellis (2017), teacher training is essential to TBL's success, especially in bridging the gap between theoretical knowledge and classroom practice. According to Willis and Willis (2007), TBL emphasises cyclical task design to scaffold learner autonomy.

2.2. Critical Thinking

Vygotsky's (1978) sociocultural theory emphasizes the importance of collaborative tasks in developing metacognition, a fundamental aspect of critical thinking in the TBL. Critical thinking involves the willingness to analyze, evaluate, and improve one's thinking (Carter et al., 2017; Lin et al., 2016). The person who thinks critically uses analytical thinking, evaluates the problem, makes logically justified inferences, and develops well-reasoned solutions (Paul & Elder, 2019). Skehan (1998) links the effectiveness of the TBL to its capacity to engage learners in cognitively demanding, real-world problem-solving. Assessment, inference, and reflection are all part of critical thinking (Facione, 1990). Through tasks, students analyze, synthesize, and evaluate information (Ellis, 2003). Lee (2000) highlights the role of critical thinking in collaborative skill-building in analysis, citing Skehan's (1998) observation. Swan (2005) stated that TBL activities help students articulate reasoned arguments.

As Nunan (2004) noted, teachers require more effective training and assessment methods to evaluate critical thinking. According to Willis and Willis's 1996 research, TBL is an effective method for engaging students in meaningful learning. A critical thinking process consists of three crucial elements: assessing, inferring, and reflecting (Facione, 1990). Through the TBL, learners synthesize, analyze, and

evaluate information. Skehan (1998) argues that the TBL can help learners develop critical thinking skills by encouraging them to evaluate multiple perspectives. Lee (2000) noted that TBL fosters analytical skills through collaboration. Nunan (2004) recommended more teacher training and effective methods for assessing critical thinking in TBL.

TBL must be explored in educational settings beyond Western contexts, particularly in Azerbaijan. Students in high school classrooms worldwide benefit from TBL by developing critical thinking skills (Shukurova, 2024). The task-based learning approach has been successfully applied in South Korea, China, and Finland (Kim, 2008; Luoma, 2011). Role-playing, project-based tasks, and debates are TBL activities that enable students to evaluate information critically and express well-reasoned arguments (Swan, 2005).

3. METHOD AND MATERIALS

3.1. Research Design and Procedure

This study employs a convergent parallel mixed-methods design to examine English language teachers' attitudes and beliefs regarding Task-Based Learning (TBL) and how TBL fosters critical thinking in secondary school students. A mixed-methods study integrates quantitative and qualitative approaches to obtain a more comprehensive understanding by leveraging the strengths of both methodologies (Creswell & Clark, 2018). An online interview and questionnaire are triangulated to increase the validity of this study's conclusions (Johnson, Onwuegbuzie, & Turner, 2007). The students completed a short online questionnaire created in Google Forms in 30 minutes.

3.2. Population and Sample

This study included students and English language teachers from a single secondary school in Azerbaijan. Teachers and students were selected through purposive sampling, a nonprobability sampling technique often used to identify and access participants through referral networks (Goodman, 1961).

3.2.1. Questionnaire Participants

One hundred and fourteen secondary school students from a state school in Azerbaijan participated in this study. Among them, 46 were male, and 68 were female. The largest group in the sample is 16-year-olds, followed by 15-year-olds, 17-year-olds, and 18-year-olds. The study's participants were 9th-, 10th-, and 11th-graders, with 11th and 9th graders less prevalent than 10th graders.

3.2.2. Interview Participants

The study included four female educators, aged 28-64 years, with teaching experience ranging from 5 to 40 years. Two participants held Master's degrees, while the others had a Bachelor's degree.

3.3. Data Collection Tools

3.3.1. Questionnaire for Students

The questionnaire used in this study evaluates students' perceptions of TBL and its role in enhancing their critical thinking skills. Before the survey, participants received guidance on completing it smoothly. The study employed a five-point Likert scale, ranging from "strongly agree" to "strongly disagree." The 20-item questionnaire administered to the students assessed their engagement in TBL, their perspectives on improving critical thinking skills, and their satisfaction with TBL-based activities. Each student completed the online questionnaire within 45 minutes via Google Forms.

3.3.2. Interview for Teachers

This study used semi-structured interviews to examine teachers' experiences, attitudes, and challenges in implementing TBL. The research employs semi-structured (open-ended) questions to foster detailed responses. Semi-structured interviews represent a standard format guided by a set of questions and topics to investigate, although neither their exact wording nor their sequence is predetermined (Merriam, 2009).

Four English teachers were interviewed individually in a semi-structured format via Google Meet. Each interview lasted approximately 30 minutes, resulting in a total of 120 minutes of interview data. The primary aim of each session was to elicit detailed responses from participants. The primary aim of each session was to elicit detailed responses from participants regarding the impact of TBL implementation on critical thinking and the application of TBL strategies. To reveal teachers' practical experiences, difficulties, and preferred strategies in applying TBL, as well as their perceptions of its impact on student engagement and critical thinking skills.

3.4. Data Analysis

3.4.1. Questionnaire

The data from the student questionnaire were analyzed using SPSS (version 25). Statistical methods were used to summarize students' perceptions of TBL (e.g., mean, median, and standard deviation).

An Independent Samples T-test was employed to examine sex differences. An Independent Samples T-test and a one-way ANOVA were used to examine differences in demographic factors, such as age and school level. Effect sizes were calculated to understand the practical significance of the results (Field, 2018).

Cronbach's alpha coefficients were calculated for all five thematic scales of the student questionnaire to ensure reliability: critical thinking and problem-solving skills ($\alpha = 0.82$), engagement and motivation in learning ($\alpha = 0.78$), and collaboration and communication skills. ($\alpha = .85$), organizational and presentation skills ($\alpha = .76$), and instructional clarity and real-world application ($\alpha = .80$). All scales demonstrated good to excellent internal consistency ($\alpha \geq .70$), met the threshold for reliable measurement instruments (Field, 2018), and confirmed the robustness of the questionnaire for assessing students' perceptions of task-based learning. This reliability analysis supports the validity of the quantitative findings reported in this study.

3.4.2. Interviews

Conceptual content analysis was used for the qualitative analysis. The interview was transcribed via the transcription tool Tactiq. A draft comprising five questions was initially developed based on the framework of Willis and Willis (1996). The researchers generated themes, categories, and codes using MAXQDA, a software program for computer-assisted qualitative and mixed-methods data analysis, text analysis, and multimedia analysis. The teacher interview data were analyzed according to Braun and Clarke's (2006) six-phase framework: familiarization, coding, theme identification, theme review, definition, and reporting. Emerging themes, such as "engagement through real-life tasks" and "barriers to implementation," were cross-referenced with the literature to confirm their validity.

3.5. Ethical Considerations

The study was ethically approved by the Scientific Research and Publication Ethics Committee (BAYEK) of a private university under reference NEU/ES/2025/1148 before the survey was conducted. Written consent was obtained from the participants.

4. FINDINGS

4.1. Effectiveness of the TBL

This study aimed to evaluate the practice and effectiveness of TBL in enhancing critical thinking skills among Azerbaijani secondary school students.

Examining the distribution of gender, age, and class helps characterize the participants and ensures a balanced sample that represents diverse student groups. The study's findings empirically justify assessing students' awareness and gains through TBL methodologies to enhance analytical and real-world skills.

Problem-solving skills. Tables 1 and 2 show the distribution of responses for each survey item across five thematic categories: critical thinking and problem-solving skills; engagement and motivation in learning; collaboration and communication skills; organizational and presentation skills; instructional clarity; and real-world application. It includes the number of students selecting each response category (strongly disagree to agree), along with the mean (M) and standard deviation (SD) for each item.

Student Perceptions of TBL Effectiveness: Gender, Grade Level, and Proficiency Differences

Table 1 shows the TBL of the student participants and the items that received the highest mean scores. ($M \geq 3.75$) show strong student agreement regarding the motivational and instructional aspects of TBL, especially its link to real-world scenarios and the clarity of teacher instructions. Item 1 has a mean of 4.10 (SD = 1.08), with 57 students strongly agreeing and seven strongly disagreeing, indicating a generally positive perception of TBL activities in inspiring deeper inquiry.

Item 2 also has a mean of 4.10 (SD = 1.26), with 63 students strongly agreeing and 10 strongly disagreeing, reflecting a strong recognition of task-based reflection in learning. Item 3 has a mean score of 4.18 (SD = 1.18), with 66 students strongly agreeing and nine strongly disagreeing, indicating a strong preference for tasks relevant to real-world applications. Item 4 has a mean of 4.03 (SD = 1.28), with 61 students strongly agreeing and 11 strongly disagreeing, indicating variability in the perceived impact on perspective improvement. Item 5 has a mean score of 4.07 (SD = 1.16), with 57 students strongly agreeing and 10 strongly disagreeing, indicating overall comfort with group idea sharing, but also some dissatisfaction.

Item 6 has a mean of 4.01 (SD = 1.25), with 57 students strongly agreeing and 12 strongly disagreeing, indicating a moderate consensus on encouraging creativity. Item 7 shows a mean of 4.18 (SD = 1.17), with 63 students strongly agreeing and eight strongly disagreeing, confirming the clarity of teacher instruction, with minor exceptions.

Most students agreed that TBL activities improved their understanding and engagement, especially in real-world relevance ($M = 4.18$) and

clarity of teacher instructions ($M = 4.18$).
Nonetheless, applying knowledge outside the

classroom scored lower, indicating difficulties with
real-life application ($M = 3.19$)

Table 1: Student Questionnaire (Higher Mean Scores, $M \geq 3.75$).

Items	Strongly Disagree (N)	Disagree (N)	Neutral (N)	Agree (N)	Strongly Agree (N)	Mean (M)	Std. Deviation
TBL activities inspire me to ask questions and explore a deeper understanding.	7	12	12	26	57	4.10	1.08
Completing tasks in the lesson reflects on my learning process.	10	6	10	25	63	4.10	1.26
I enjoy working on tasks that are meaningful and relate to real-world scenarios.	9	5	7	27	66	4.18	1.18
The tasks we complete in lessons help me improve my views.	11	10	13	19	61	4.03	1.28
I feel comfortable sharing ideas during group tasks in TBL classes.	10	8	15	24	57	4.07	1.16
The tasks we do in class encourage creativity in finding solutions.	12	5	17	23	57	4.01	1.25
My teacher provides clear instructions for TBL tasks.	8	8	16	19	63	4.18	1.17

Table 2: Student Questionnaire (Lowest Mean Score, $M < 3.75$).

Items	Strongly Disagree (N)	Disagree (N)	Neutral (N)	Agree (N)	Strongly Agree (N)	Mean (M)	Std. Deviation
Task-based learning activities help me analyze problems more effectively.	14	8	8	30	54	3.93	1.36
Doing TBL tasks has strengthened my critical thinking skills.	20	4	27	24	39	3.44	1.41
The tasks I complete in class require me to think critically about the topic.	18	11	21	19	45	3.51	1.42
TBL activities improve my problem-solving skills.	9	14	22	19	50	3.76	1.23
TBL lessons have positively affected my critical thinking.	8	9	21	21	55	3.93	1.26
TBL lessons make me feel more engaged in Learning.	11	12	24	24	43	3.66	1.23
Group tasks in class have developed my collaborative skills.	14	5	13	21	61	3.96	1.39
Our lessons include enough time to plan, complete, and reflect on tasks.	17	7	15	23	52	3.69	1.46
TBL tasks help me enhance my organizational and presentation skills.	14	9	23	21	47	3.75	1.34
My lessons often include real-life situational tasks.	18	10	27	20	39	3.50	1.29
I often apply TBL knowledge in real-life situations.	22	12	28	16	36	3.19	1.43

The items in Table 2 with lower mean scores ($M < 3.75$) reveal students' perceptions of challenges, most notably in applying TBL knowledge to real-life situations (lowest score, $M = 3.19$) and in perceived strengthening of critical thinking skills. Item 1 has a mean of 3.93 ($SD = 1.36$), with 54 students strongly agreeing and 14 strongly disagreeing, revealing mixed views on the effectiveness of TBL in problem analysis. Item 2 has a mean of 3.44 ($SD = 1.41$), with 39 students strongly agreeing and 20 strongly

disagreeing, indicating a weak perceived impact on critical thinking. Item 3 has a mean of 3.51 ($SD = 1.42$), with 45 students strongly agreeing and 18 strongly disagreeing, reflecting inconsistent demands for critical thinking in tasks. Item 4 has a mean of 3.76 ($SD = 1.23$), with 50 students strongly agreeing and nine strongly disagreeing, indicating moderate improvement in problem-solving skills. Item 5 has a mean of 3.93 ($SD = 1.26$), with 55 students strongly agreeing and eight strongly disagreeing, suggesting

a favorable view of the benefits of critical thinking. Item 6 has a mean of 3.66 (SD = 1.23), with 43 students strongly agreeing and 11 strongly disagreeing, indicating limited engagement among some students. Item 7 has a mean of 3.96 (SD = 1.39), with 61 students strongly agreeing and 14 strongly disagreeing, highlighting generally positive but varied development of collaborative skills. Item 8 has a mean of 3.69 (SD = 1.46), with 52 students strongly agreeing and 17 strongly disagreeing, indicating concerns about time management during task execution. Item 9 has a mean of 3.75 (SD = 1.34), with 47 students strongly agreeing and 14 strongly disagreeing, showing uneven enhancement of organizational and presentation skills. Item 10 has a mean of 3.50 (SD = 1.29), with 39 students strongly agreeing and 18 strongly disagreeing, indicating insufficient integration of real-life tasks. Item 11 has a mean of 3.19 (SD = 1.43), with 36 students strongly agreeing and 22 strongly disagreeing, indicating limited real-world applicability of TBL knowledge. The highest mean score is observed for the statement, "I enjoy working on meaningful tasks that relate to real-world scenarios" (M = 4.18, SD = 1.18), indicating that students find real-world connections highly engaging and valuable to their learning. In contrast, the lowest mean score for TBL is for "I often apply

knowledge of TBL in real-life situations" (M = 3.19, SD = 1.43), indicating that students infrequently apply their TBL knowledge in real-life situations outside the classroom.

The findings showed that students generally viewed TBL as beneficial for enhancing their critical thinking and problem-solving skills, with mean scores ranging from 3.44 to 4.18 across various items. For example, the students strongly agreed that TBL activities inspired questioning (M = 4.10) and connected to real-world scenarios (M = 4.18). However, they noted challenges in applying knowledge outside the classroom (M = 3.19) and managing time for complex tasks (M = 3.69). These findings align with qualitative data from teacher interviews, in which educators emphasized the effectiveness of TBL in fostering engagement but highlighted systemic barriers, such as time constraints and limited real-world application.

4.1.1. The Impact of Gender

Table 3 shows the results of the t-test, which provides a statistical comparison of the students' responses across genders (9th, 10th, and 11th-grade levels).

Table 3: Independent Sample T-Test Results Comparing the Effects of Gender on the Perceptions of the Students.

Scale Dimensions	Female (N=68)		Male (N=46)		p-value
	M	SD	M	SD	
Critical thinking and problem-solving skills	3.71	1.05	3.75	1.25	.88
Engagement and Motivation in Learning	3.99	.92	3.97	1.25	.91
Collaboration and communication skills	4.01	1.06	3.88	1.35	.54
Organizational and presentation skills	3.72	1.19	3.72	1.36	.99
Instructional clarity and real-world application	3.72	0.99	3.64	1.39	.69

The independent-samples t-test results summarized in Table 3 show no statistically significant differences ($p > .05$) in male and female students' perceptions across all five TBL dimensions. The analysis reveals no statistically significant gender differences in any measured construct, as all p-values exceed the conventional 0.05 threshold ($p > 0.05$ for all dimensions).

Compared with male students, female students (N = 68) presented marginally higher mean scores for engagement (3.99 vs. 3.97) and collaboration (4.01 vs. 3.88), whereas male students scored slightly higher in critical thinking (3.75 vs. 3.71). Compared with female responses, male responses showed greater variability across all dimensions, as indicated by consistently larger standard deviations (SD range:

1.25--1.39) than female responses (SD range: 0.92--1.19). The most significant variability was observed in instructional clarity (male SD = 1.39 vs. female SD = 0.99), suggesting less consensus among male students on this aspect. These results indicate that, while gender does not systematically influence TBL perceptions in this sample, male students' views tend to be more dispersed.

The lack of significant differences suggests that TBL has a similar impact on both genders in this context. The Independent-Samples T-Test results indicated no significant gender differences in students' perceptions of TBL (all p-values $> .05$), with males and females reporting similar levels of engagement, collaboration, and critical thinking development. The smallest p-value (.54) was

observed for Collaboration and Communication Skills; however, it still does not indicate a statistically significant gender-based difference.

These results highlight that gender does not substantially influence students' perspectives on the effectiveness of task-based learning in the surveyed areas. This quantitative finding was supported by qualitative insights, where teachers noted the intentional use of pedagogical strategies to ensure equitable participation, such as assigning balanced

roles in group tasks. The triangulation of this research strengthens TBL's role as a gender-neutral tool for critical thinking.

4.1.2. The Impact of Grade

Table 4 presents the results of the one-way ANOVA, which provides a statistical comparison of students' responses across grade levels (9th, 10th, and 11th).

Table 4: One-Way ANOVA Comparing the Effect of Grades on the Views of the Students.

Scale Dimensions	Sum of Squares	df	Mean Square	F value	Sig.
Critical thinking and problem-solving skills	1.72 (Between Groups)	2	.86	.67	.52
	143.09 (Within Groups)	111	1.29		
	144.81 (Total)	113	-		
Engagement and motivation in learning	1.63 (Between Groups)	2	.81	.72	.49
	125.68 (Within Groups)	111	1.13		
	127.30 (Total)	113	-		
Collaboration and communication skills	.43 (Between Groups)	2	.22	.15	.86
	157.38 (Within Groups)	111	1.42		
	157.81 (Total)	113	-		
Organizational and presentation skills	11.84 (Between Groups)	2	5.92	3.97	.02*
	165.67 (Within Groups)	111	1.49		
	177.52 (Total)	113	-		
Instructional clarity and real-world application	4.20 (Between Groups)	2	2.10	1.56	.21
	149.24 (Within Groups)	111	1.35		
	153.45 (Total)	113	-		

The one-way ANOVA results reveal limited differences in grade-level perceptions of TBL across the measured dimensions. The analysis revealed statistically nonsignificant effects of grade level on critical thinking ($F=.67$, $p=.52$), engagement ($F=.72$, $p=.49$), collaboration ($F=.15$, $p=.86$), and instructional clarity ($F=1.56$, $p=.21$), indicating that these aspects of TBL are perceived similarly by ninth-, 10th-, and 11th-grade students. However, organizational and presentation skills demonstrate a marginally significant grade-level effect ($F = 3.97$, $p = .02$), suggesting that older students outperform their peers in this area. The small effect size ($\eta^2 \approx .07$) indicates that while grade level accounts for some variance in organizational skills, the practical significance is modest. The overall pattern indicates that the cognitive and motivational benefits of TBL remain relatively stable across secondary grade levels, except for organizational competencies, which appear to develop in conjunction with academic maturity. The one-way ANOVA results indicate that grade level significantly influences organizational and presentation skills ($F = 3.97$, $p = .02$), with 11th graders outperforming their younger peers. In teacher interviews, educators reported that older students demonstrated better task management and metacognitive awareness. Critical thinking and

engagement did not significantly differ across grades, suggesting that the cognitive and motivational benefits of TBL are consistent. Further qualitative analysis revealed that scaffolding techniques were consistently applied, which explains the stability of these results. All of these findings highlight the developmental nature of organizational skills while affirming the applicability of the TBL. Triangulating quantitative and qualitative data consistently validated the TBL's effectiveness in promoting critical thinking.

4.2. Teachers' Perceptions

Responses from teacher participants were categorized into five key themes: incorporation, challenges, effectiveness, critical thinking, and needs.

4.2.1. Incorporation of the TBL

All the participants emphasized the importance of communication skills in their TBL practices. Three out of four participants noted the significance of communicative skills in their task-based learning (TBL) implementation. For example, T1 highlighted, "TBL is aimed mainly at enhancing students' speaking skills."

Additionally, three teachers mentioned using a three-part task cycle in their methodology. T2

clarified, "I do TBL in three stages: pre-task, planning, and reporting." Furthermore, three teachers noted the inclusion of real-life situation tasks in their instructional practices. For example, T3 noted, "Students present on natural disasters they may encounter in real life." Additionally, two teachers reiterated the value of interactive tasks. T4 further elaborated, "I design tasks to foster student interaction and collaboration."

4.2.2. Challenges in TBL Implementation

All the participants identified several challenges. Half of the teachers reported difficulties related to students expressing their ideas during team-based learning (TBL) activities. Two participants noted challenges regarding students articulating their thoughts during Team-Based Learning (TBL). For example, all the teachers stated, "Students use their native language (Azerbaijani) during TBL." Time constraints emerged as a significant barrier. T2 explained, "Forty-five-minute sessions force compromises, causing complex tasks to either be shortened or left unfinished." This issue was exacerbated in resource-limited settings, as T3 noted: "In rural schools, where English is taught once a week, TBL's iterative nature is impractical." Student-related difficulties included low proficiency and low confidence. T4 reported, "Many lack the vocabulary to express ideas, leading the students to rely on their native language and emphasize that they find it interesting." T3 stated, "Students are afraid of making mistakes... they lack confidence," whereas T4 highlighted, "Traditional assessment methods do not capture holistic language use in TBL." Similarly, all the teachers explained, "Understanding learners' needs, interests, and proficiency levels is challenging."

4.2.3. Effective TBL Activities

Three participants mentioned incorporating problem-solving activities into their team-based learning (TBL) lessons. For instance, T1 stated, "I use comparison and problem-solving activities." Similarly, two teachers emphasized brainstorming as one of the most effective TBL activities. As T2 explained, "Students brainstorm their opinions about the events." In addition, two teachers highlighted the use of information-gap activities. For example, T3 noted, "I give students gap-filling tasks, such as planning a trip by asking guided questions." Furthermore, two teachers noted the effectiveness of the presentation tasks. T4 remarked, "I ask students to gather information and present their findings to the class." Teachers also noted the role of peer

discussion; T3 and T4 observed that "defending their solutions in peer discussions pushed students to evaluate their reasoning."

4.2.4. Critical Thinking Development

All the participants emphasized the importance of TBL in developing critical thinking skills. T1 noted, "I encourage students to take a moment to think about their thought processes." As T2 noted, "Students debate ideas within and across teams." T3 emphasized, "I ask open-ended questions about global issues." T4 mentioned, "Students demonstrate metacognitive behaviors."

4.2.5. Needs for Teachers

The participants shared the need for the Ministry of Education to effectively support task-based learning (TBL). T1 noted, "The ministry should collaborate more closely with teachers." Moreover, the other three teachers called for specialized TBL training. All the teachers stated, "I would benefit from professional development courses on TBL methodologies." They also stressed the importance of creating relevant tasks. As noted at T2, "Tasks should help students in their daily lives." As T3 explained, "I would benefit from attending professional development courses on TBL methodologies." Additionally, two teachers stressed the need to design tasks relevant to real life. T4 emphasized, "Tasks should be directly connected to students' daily experiences." This qualitative analysis examines the implementation of TBL, highlighting its advantages and challenges. TBL in language classrooms needs targeted support and innovative strategies to be effective. This study supports previous research (Ellis, 2017) on the TBL's ability to foster communicative competence and higher-order thinking. However, challenges such as time and institutional constraints are evident in Carless' findings, which suggest that TBL's success is context-dependent. This emphasis on social scaffolding in development aligns with Vygotsky's (1978) emphasis on collaborative professional learning networks.

5. DISCUSSION

The results of this research both align with and diverge from the literature on TBL critical thinking. Like Ellis's (2003) and Nunan's (2004) studies, this research confirms that the TBL fosters collaboration, communication, critical thinking, creativity, and problem-solving skills by emphasizing real-world tasks. Nonetheless, unlike studies in South Korea (Jeon & Hahn, 2006) and Vietnam (Viet, 2014), which identified teacher resistance and curriculum

misalignment as primary barriers, educators in Azerbaijan expressed a willingness to adopt the TBL approach. However, they face systemic challenges, such as exam pressure and insufficient resources, that hinder interactive teaching. This discrepancy highlights the importance of contextual factors in TBL implementation, as noted by Carless (2007). Additionally, while research in Western contexts (Skehan, 1998; Willis, 1996) emphasizes the effectiveness of TBL in fostering critical thinking, this study reveals that Azerbaijani students struggle to apply TBL skills outside the classroom—a gap that has been less emphasized in previous literature. This finding differs somewhat from those reported by Ellis (2017), who found that students demonstrated stronger transfer of skills to real-world situations. This study is essential because it identifies critical gaps in implementing task-based learning in Azerbaijani secondary schools, particularly in fostering higher-order thinking skills. Curriculum designers, teacher trainers, and policymakers can use this to enhance pedagogical practices and optimize TBL's potential. These differences underscore the necessity for context-specific adaptations of TBL methodologies. This study contributes to the literature by demonstrating that the TBL can promote critical thinking in non-Western, exam-oriented educational systems when addressing structural and pedagogical challenges. Additionally, it supports the theories of Vygotsky and Piaget, which suggest that active, collaborative tasks promote cognitive development. Furthermore, it highlights the challenges of implementing task-based learning (TBL) in Azerbaijan, including a lack of teacher training and limited use of the native language. Finland and China, which have strong TBL integration, have fewer of these issues. The findings of this study suggest that certain modifications to the school curriculum for teaching English are warranted. First, teachers should receive training to implement TBL effectively by integrating critical thinking. Second, the school curriculum should be adjusted to combine exam preparation with the development of critical thinking skills. Third, the Ministry of Education must ensure the availability of resources to carry out tasks and activities during the TBL. This study highlights these gaps and provides a framework for adapting TBL to analogous educational contexts.

5.1. Student Perceptions of TBL Effectiveness: Gender, Grade Level, and Proficiency Differences

The quantitative analysis revealed no significant gender differences in students' perceptions of TBL

effectiveness (all $p > .05$). Despite differences in gender roles, male and female students reported similar levels of engagement, collaboration, and development of critical thinking skills. The ANOVA revealed significant differences in organizational skills across only grade levels ($F = 3.97, p = .02$), with 11th graders outperforming younger students. This aligns with Vygotsky's (1978) theory of cognitive development, which suggests that older students exhibit greater metacognitive awareness. Older students manage task planning and reflection more effectively, suggesting that metacognition matures as they age. The gains in critical thinking did not vary significantly across grades, providing further evidence of the TBL's adaptability to a diverse range of ages. Qualitative and quantitative data indicate that lower-proficiency students struggle more with task demands, often resorting to their native language. This finding aligns with Tabatabaei and Hadi's (2011) findings in Iran, where language barriers limit the effectiveness of the TBL. Teachers found that scaffolding (e.g., simplified instructions and peer support) mitigated these challenges.

5.2. Teachers' Perspective on Task-Based Learning for Critical Thinking

The study results indicate that Azerbaijani secondary school teachers recognize task-based learning (TBL) as a valuable approach for developing students' critical thinking skills. The teachers emphasized that the TBL's real-world tasks, collaborative problem-solving, and structured task cycles (e.g., pre-task, planning, and reporting) actively engage students in higher-order thinking. Participants stated that activities such as debates and project-based tasks enhance students' ability to analyze, evaluate, and defend their ideas, as noted by Facione (1990). The findings of this study align with those of Ellis (2003), who emphasized the importance of teacher training and task design for the TBL to succeed. Teachers reported several systemic barriers to implementation, including overcrowded classrooms, time constraints, and misalignment between curricula and exam questions. These challenges have also been identified in studies from Vietnam (Viet, 2014) and South Korea (Jeon & Hahn, 2006). In their feedback, teachers expressed enthusiasm for TBL but stressed the need for professional development to bridge the gap between theoretical knowledge and classroom practice. As Ellis (2003) argues, TBL is successful because of the teacher training that supports it. Despite teachers recognizing the pedagogical value of TBL, Azerbaijan's education system does not fully

integrate it.

6. CONCLUSION

The results of this study confirm the potential of TBL to improve students' critical thinking in Azerbaijani secondary schools; however, contextual challenges, such as exam pressure, resource limitations, and inadequate teacher training, hinder its effectiveness. The findings are broadly consistent with the global literature on the TBL but highlight unique barriers in non-Western, exam-driven systems. Addressing these challenges through targeted teacher training, curriculum reform, and resource allocation could maximize the benefits of TBL, as suggested by Carless (2007) and Ellis (2017). Future research should investigate the longitudinal effects of TBL and the role of scaffolding on diverse proficiency levels. Additionally, this study recommends essential changes to enhance the Teaching-Learning-Becoming (TBL) approach in Azerbaijani secondary schools.

First, these schools need to train secondary school teachers to bridge the gap between theory and practice, a crucial step for the success of TBL. Second,

curriculum reforms must align with national examination requirements using task-based teaching materials. In addition, class sizes should be adjusted and lesson durations extended to enhance student engagement. Authentic materials and technology should support real-world activities, as students often struggle to apply classroom concepts to real-life situations. The effects of TBL on critical thinking should be examined across different task types. TBL should be promoted while addressing local challenges and opportunities in an educational environment. This study shows that TBL can enhance critical thinking in Azerbaijani secondary schools. However, its effectiveness depends on structural changes, teacher empowerment, and curricular flexibility. Policymakers and educators can address these challenges to create a more dynamic and interactive learning environment that prepares students for the real-world challenges they will face. While the researchers compared quantitative and qualitative data regarding their similarities and differences in this study, the limited data made a comprehensive analysis difficult. Researchers recommend that future research address these limitations.

REFERENCES

- Asma, B. (2019). Examining the role of task-based language teaching in fostering EFL learners' attitudes and motivation. December 2018.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Carless, D. (2007). The suitability of task-based approaches for secondary schools: Perspectives from Hong Kong. *System*, 35(4), 595-608. <https://doi.org/10.1016/j.system.2007.09.003>
- Creswell, J. W., & Clark, V. L. P. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- Ellis, R. (2017). Position paper: Moving task-based language teaching forward. *Language Teaching*, 50(4), 507-526. <https://doi.org/10.1017/S0261444817000289>
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. The California Academic Press.
- Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). Sage Publications.
- Freire, P. (2005). *Education for critical consciousness*. Continuum.
- Goodman, L. A. (1961). Snowball sampling. *The Annals of Mathematical Statistics*, 32(1), 148-170.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Liu, X. (2019). The cultivation of college students' critical thinking ability based on task-based cooperative writing. *Journal of Pedagogical Research*, 10(3), 557-568.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Nunan, D. (2004). *Task-based language teaching*. Cambridge University Press.
- Paul, R., & Elder, L. (2019). *The miniature guide to critical thinking concepts and tools* (8th ed.). The Foundation for Critical Thinking.
- Piaget, J. (1970). *Science of education and the psychology of the child*. Orion Press.
- Prabhu, N. S. (2013). *Second language pedagogy*. Oxford University Press.

- Qing, Z., Ni, S., & Hong, T. (2010). Developing critical thinking disposition by task-based learning in chemistry experiment teaching. *Procedia Social and Behavioral Sciences*, 2(2), 4561–4570. <https://doi.org/10.1016/j.sbspro.2010.03.731>
- Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching* (2nd ed.). Cambridge University Press.
- Rodríguez, A., Leonor, G., Flórez, R., Edith, E., Barreto, R., & Maritza, A. (2014). Increasing critical thinking awareness through a task-based learning approach, 11, 189–205.
- Setiawan, H. J., & Islami, N. (2020). Improving critical thinking skills of senior high school students using problem-based learning model. <https://doi.org/10.1088/1742-6596/1655/1/012060>
- Shukurova, F. (2024). Foreign language teaching methods in task-based learning. *Arab World English Journal*, 15(1), 44–55. <https://doi.org/10.24093/awej/vol15no1.4>
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Willis, D., & Willis, J. (2007). *Doing task-based teaching*. Oxford University Press.
- Zheng, C. (2022). Exploring a task-based English learning and teaching practice: An integrated approach. <https://doi.org/10.1177/17577438211049131>
- Zhou, Q., Huang, Q., & Tian, H. (2013). Developing students' critical thinking skills by task-based learning in chemistry experiment teaching, 4 (12), 40–45.