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The Effect of Dictogloss and Jigsaw Collaborative Output Tasks on Iranian EFL Learners' Development of Conditional Sentences: Insights from Mobile-Assisted Task-Based Language Teaching

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Abstract

Drawing on the tenets of Task-Based Language Teaching (TBLT), this study aimed to investigate the impact of dictogloss and jigsaw tasks, facilitated by Mobile-Assisted Language Learning (MALL), on the acquisition of conditional sentences and perceptions among Iranian intermediate EFL learners. The participants included 75 learners aged 13 to 20. Following the results of an Oxford Quick Placement Test (OQPT) to ensure homogeneity, the participants were divided into two experimental groups (dictogloss, n = 25; jigsaw, n = 25) and one control group (n = 25). The experimental groups were provided with dictogloss and jigsaw tasks through Telegram. They were expected to produce the target grammatical forms while they were communicating with their peers. The results of the paired samples t-test and one-way ANOVA revealed that using dictogloss and jigsaw tasks through MALL, namely receiving instruction on mobile devices via the Telegram application, which supports both textual and voice messaging, resulted in significant improvement for the EFL learners compared to the control group. In addition, no significant difference was detected between the two experimental groups' grammar learning. The results of the semi-structured interview uncovered that learners favored mobile-assisted TBLT due to its prominent benefits, namely engagement, motivation, interactivity, and collaboration. On the implications side, it is suggested that incorporating MALL into dictogloss and jigsaw tasks allows learners to engage with the language, collaborate with peers, and receive immediate feedback. This can help improve their overall grammar skills.

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Introduction

Researchers and L2 practitioners have long been preoccupied with the question of how best to teach grammar as an indispensable component of L2 proficiency. One practical approach that has gained recognition is the use of collaborative output tasks (Swain & Lapkin, 2001). These tasks promote active engagement, critical thinking, and collaboration among learners, leading to improved grammar acquisition (Swain, 2000). They refer to activities where learners work together to produce linguistic output, such as written or spoken texts, through shared interaction and negotiation of meaning. These tasks are grounded in second language acquisition (SLA) theories, which emphasize the role of interaction in facilitating language development. According to Swain (2000), collaborative output tasks encourage learners to engage in "negotiation for meaning," where they refine their linguistic knowledge by resolving communication gaps and co-constructing language forms. Such tasks often involve problem-solving, joint text creation, or information-sharing activities that require active participation and mutual support among learners.

By incorporating tasks such as dictogloss and jigsaw tasks into grammar instruction, educators can create a more effective and engaging learning environment for language learners (Lapkin et al., 2002). In a dictogloss activity, learners listen to a passage read by the teacher at a natural pace, take notes on key points, and then work collaboratively in pairs or small groups to reconstruct the text using their notes (Kowal & Swain, 1994). On the other hand, jigsaw tasks are activities that promote interaction and comprehension by requiring learners to piece together information from different sources. In a jigsaw task, learners are divided into 'expert groups', where each member studies a specific portion of the material. They then regroup into 'home groups', where members share their respective knowledge to collaboratively construct a complete understanding of the topic (Swain & Lapkin, 2001). It has been noted that using such tasks in a new platform, such as Mobile-Assisted Language Learning (MALL), is an innovative research agenda (González-Lloret, 2017).

Educators and researchers in second and foreign language teaching have been exploring the integration of e-learning into language teaching since the 1960s (Wang, 2014). This journey has led to the development of Computer-Assisted Language Learning (CALL) and, more recently, MALL, both of which have transformed language education by offering flexible, accessible, and engaging learning experiences (Liu et al., 2019; Mohammadi et al., 2024; Venkataraman & Sivakumar, 2015). Despite these advancements, challenges persist in effectively utilizing technology for language learning (Mohammadi et al., 2024; Asadi & Taheri, 2024; Asadi et al., 2025; Asadi & Ebadi, 2025).

A significant research gap remains in understanding how these technological advancements can be leveraged to enhance specific aspects of language learning, such as

integrating MALL into Task-Based Language Teaching (TBLT) for teaching complex grammatical structures, like conditional sentences. While CALL and MALL have provided opportunities for real-life communication and technology-enhanced instruction, there is a need for further research on how MALL can support collaborative tasks, such as dictogloss and jigsaw activities, to enhance learners' grammatical competence. Although the use of MALL has been confirmed in developing learners' grammar learning (Baleghizadeh & Oladrostam, 2011; Khodabandeh & Soleimani, 2017; Wang & Smith, 2013), its integration with dictogloss and jigsaw collaborative output tasks leaves a gap in understanding the potential benefits and challenges of using mobile devices for learning conditional sentences. Conditional sentences were chosen for this study because they benefit from the contextual learning provided by dictogloss and jigsaw tasks. These tasks help learners see how conditional sentences are used in real-life contexts, making them more memorable and practical. Furthermore, they foster peer interaction, which is essential for resolving misunderstandings and reinforcing the correct use of conditional sentences. MALL was selected as it offers immediate feedback and allows learners to practice using conditional sentences in a supportive environment. Hence, our study aimed to address the aforementioned gap by exploring the effectiveness of MALL in facilitating these tasks and enhancing learners' understanding and use of conditional sentences. Additionally, it aims to explore learners' attitudes toward learning conditional sentences through MALL. To address these concerns, the following research questions were formulated:

- Does using dictogloss tasks through Telegram have a significant impact on the development of conditional sentences in Iranian EFL learners?
- Does using jigsaw tasks through Telegram have any significant impact on Iranian EFL learners' development of conditional sentences?
- Are there any differences between the impacts of dictogloss and jigsaw tasks on Iranian EFL learners' development of conditional sentences?
- How do participants perceive the motivational aspects of using dictogloss and jigsaw tasks through Telegram for learning conditional sentences?

Literature review

The primary tenet of sociocultural theory is that mental development is the result of social and cultural mediation. From Vygotsky's (1978) SCT perspective, humans act not directly but through meditational tools that help individuals make connections to the world. The symbolic tools or signs regulate our relationships with others, thus changing the nature of these relationships (Lantolf, 2000). For instance, symbolic artifacts help humans establish indirect or mediated relationships between the world and ourselves. This understanding has significant implications for educational settings, as stated by Wertsch (1991). He asserts that learning is an active process resulting from engagement

in socially mediated exchanges, and mediation is how humans' mental functioning is facilitated. The present study is based on the premise that learning through CALL and MALL is contingent upon the social context, a concept foregrounded in the work of the Russian psychologist Lev Vygotsky, one of the founders of sociocultural theory (SCT).

The teacher's provision of support in the classroom is reconceptualized as scaffolding. Bruner (1983) defines scaffolding as a sustained, interactive process during which learners receive contingent mediation, meaning that any assistance or support is gradually withdrawn when signs of independent functioning are observed in the learner. The fading of assistance and gradual task modifications help the learner move from a lower to a higher level of cognitive development.

In the context of MALL, the SCT theory is particularly relevant because MALL platforms facilitate collaborative learning environments where learners interact with peers and instructors through digital tools. By using MALL to support dictogloss and jigsaw tasks, learners engage in collaborative activities that mirror real-life communication scenarios, which are central to sociocultural theory. MALL serves as a mediator of learning by providing a platform for learners to engage in socially mediated activities. For instance, MALL enables learners to share resources, receive feedback, and collaborate on tasks in real-time, which aligns with the sociocultural emphasis on collaborative learning (Vygotsky, 1978). Moreover, MALL allows learners to access a wide range of cultural resources and interact with diverse perspectives, further enriching the learning experience and aligning with sociocultural principles. By integrating MALL into language learning, we can create learning environments that not only support the acquisition of language skills but also foster cultural awareness and social interaction, which are core components of sociocultural theory. This integration enhances the coherence of our approach by demonstrating how MALL can effectively mediate learning in a way that aligns with sociocultural principles.

TBLT is understood as a pedagogical development within Communicative Language Teaching (CLT) (Littlewood, 2014). What keeps TBLT distinct from CLT-based approaches, however, is that it is grounded in second language acquisition (SLA) research whose main concern is the careful and unique design of tasks in a way that supports successful learning (Samuda & Bygate, 2008). Research on TBLT has acknowledged the significance of using tasks to improve the learners' linguistic knowledge in ESL (Robinson, 2011) and EFL instructional settings (Parsa & Anjomshoa, 2022), demonstrating the researchers' interest in applying tasks to foster the learners' learning grammar in the context of meaningful interaction inspired from the focus on form approach. However, it appears that there is a paucity of research regarding TBLT in EFL learners' improvement of learning grammar, as it may be problematic for teachers to design specific tasks for target grammatical forms to be highly effective (Bygate et al., 2013; Robinson, 2007).

Among the tasks most frequently used in TBLT are dictogloss and jigsaw tasks. These tasks are output-based collaborative activities with a minor difference in their focus. Whereas dictogloss is a grammar-focused task that draws learners' attention to a distinct linguistic form, jigsaw is a meaning-driven task that fosters interaction among learners (Rashtchi et al., 2020). More precisely, a dictogloss task is a language learning activity that involves listening, note-taking, and reconstructing a text (Yilmaz, 2011). In a dictogloss task, the teacher reads a passage or sentence aloud at a natural pace, and learners listen and take notes. Afterward, learners work together in pairs or small groups to reconstruct the text based on their notes and understanding (Wajnryb, 1990).

On the other hand, a jigsaw task is an information gap activity in which learners are split into small groups, each having a distinct piece of information or text to study and understand. After studying their assigned piece in an 'expert group', the learners regroup with others as the 'home/jigsaw group', which has studied different pieces to share their information and collectively construct a complete understanding of the topic or text (Zeng, 2017). This task promotes collaboration, critical thinking, and active engagement in the learning process (Pica et al., 2006). Both dictogloss and jigsaw tasks are structured into three stages to enhance learning outcomes. In dictogloss tasks, the process unfolds as follows: a) Pre-task: The teacher introduces the topic, reviews relevant vocabulary and grammar, and encourages learners to brainstorm; b) During-task: Learners listen to a passage, take notes, and work together to reconstruct the text; and c) Post-task: They compare their version with the original, analyze any differences, and reflect on errors to improve. Similarly, jigsaw tasks follow a three-stage approach: a) Pre-task: Learners are divided into expert groups to study specific parts of the material; b) During-task: They collaborate within their groups to understand their segment, then regroup with others who studied different parts to share information and build a complete picture; and c) Post-task: The groups review the combined information, summarize key points, and engage in discussions to deepen their understanding (Wajnryb, 1990; Zeng, 2017). Dictogloss and jigsaw tasks complement each other well in TBLT because they cater to different aspects of language learning. Dictogloss focuses on accuracy and coherence, while jigsaw tasks emphasize fluency and collaboration. Together, they provide a balanced approach to language instruction, ensuring learners develop a range of skills necessary for effective communication.

Scholars have tested the efficacy of jigsaw tasks in a wide range of skills, namely reading (Yulian, 2012), writing (Zahra, 2014; Modarresi, 2021), speaking (Rashtchi et al., 2020), grammar (Khoshsima & Khoobkhahi, 2022), and listening (Duc & Tho, 2019). Likewise, dictogloss tasks have been the focus of several studies aiming at teaching grammar (Shabani & Vahedi, 2023), writing (Murad, 2017), dictation (Faghani et al., 2015), listening (Marashi & Khaksar, 2013), and speaking (Azkarai & García Mayo, 2015). However, with the advent of technology, researchers have speculated about the

potential benefits of teaching grammar through technology, especially web-based affordances, including mobile apps (Cavanaugh & Song, 2014).

Incorporating dictogloss and jigsaw tasks through mobile platforms enables learners to interact with the content in a format that appeals to them, enhancing their engagement. The use of multimedia resources, such as videos, images, and interactive quizzes, can boost motivation, increase participation, and create an enjoyable learning experience (Gan et al., 2015). Mobile technology offers flexibility in terms of time and location. Learners can engage in dictogloss and jigsaw tasks at their convenience, providing opportunities for self-paced learning. Additionally, mobile phones provide access to a wide array of authentic sources, including news articles, podcasts, and online forums. This accessibility empowers learners to explore real-world contexts and develop their language skills beyond the boundaries of the classroom (Puebla et al., 2022). Therefore, integrating mobile technology with dictogloss and jigsaw tasks not only enhances learner engagement but also bridges the gap between formal education and real-life language use, offering a more holistic and practical approach to language learning.

A new surge of interest has recently been evidenced in implementing MALL to enhance students' learning of grammar. Baleghizadeh and Oladrostam (2011) successfully demonstrated the positive effect of using mobile phones to support the development of verb tenses among L2 learners, specifically among a group of Iranian EFL students in large classes. A web-based teaching approach to grammar was adopted by Yusof and Saadon (2012) among university students, yielding promising findings. Alami et al. (2014) provided evidence for the impact of using internet materials on secondary school students' grammar learning. Likewise, Xin (2014) confirmed that m-learning (e.g., smartphones) is highly effective in learning English grammar; however, some students in his study expressed dissatisfaction with the use of mobile devices, citing them as a distractive factor in the classroom and complaining about technical problems. Recent studies (Mohammadi et al., 2024; Asadi & Taheri, 2024; Asadi et al., 2025) have highlighted the use of technology to learn grammar lessons due to its graphic and visual modes, which increase motivation and willingness to learn. Shuib et al. (2015) designed an i-MoL (i.e., Intelligent Mobile Learning Tool) for grammar learning through games and flashcards, thereby fostering learners' development of grammar. The intelligent and critical part of i-MoL is its potential to construct content for learning grammar through mobiles compatible with an individual's preferred learning styles. More recently, adopting a quasi-experimental design, Parsa and Anjomshoa (2022) investigated the effect of MALL on EFL learners' grammar and self-efficacy. They observed significant changes in the experimental group's grammatical knowledge after treatment but found no significant difference in the self-efficacy scores between the experimental and control groups. A study by Kim et al. (2013) attested to the positive impact of cellphones on students' grammar learning and motivation, while others (Goh, Seet, & Chen, 2012) confirmed their effects on collaboration and interaction between learners and teachers.

Drawing on the literature, it can be observed that no worthwhile attempt has been made to investigate the potential impact of dictogloss and jigsaw tasks facilitated through mobile devices on the development of conditional sentences in Iranian EFL learners. Therefore, the present study was designed to examine whether integrating dictogloss and jigsaw tasks through Telegram can enhance learners' development of conditional sentences.

Method

Design

The present study benefited from a sequential mixed-methods design, which allowed for the quantitative exploration of the impact of using dictogloss and jigsaw tasks on the language learners' development of conditional sentences, as well as the qualitative investigation of their perceptions of the treatment sessions. More precisely, the study employed a sequential explanatory design, a mixed-methods research approach in which quantitative data are collected and analyzed first, followed by the collection and analysis of qualitative data. The qualitative phase aims to provide a deeper understanding or explanation of the quantitative findings (Creswell & Creswell, 2018). Regarding the quantitative aspect, the participants' pre- and post-tests of grammar were examined as they underwent the treatment sessions to compare the effectiveness of the treatments. Regarding the qualitative phase of the study, semi-structured interviews were conducted with the learners after the treatment sessions to probe their perceptions about using dictogloss and jigsaw tasks via Telegram in their grammar learning.

Participants

Seventy-five EFL learners who were studying English at the intermediate level from a Language Institute participated in this study. The participants were chosen using convenience sampling from a pool of 90 students. This method was employed because it allowed for easy access to the subjects and aligned with the schedules of both the teacher and researcher, ensuring efficient data collection (Dörnyei & Csizér, 2012). To assess the homogeneity of the students in terms of their general proficiency level, the Oxford Quick Placement Test (OQPT) was used. After the administration of OQPT, 75 students whose scores ranged from 30 to 39 were selected as intermediate learners. They consisted of male and female language learners whose ages ranged from 13 to 20. They were divided into two experimental groups and one control group. The number of students in each group was 25. The participants in the experimental groups were exposed to mobile-assisted TBLT via Telegram, while the control group underwent conventional grammar teaching.

Instrumentation

Oxford Quick Placement Test (OQPT)

To ensure that all participants had a similar level of proficiency, the researchers administered the standard format of OQPT to the learners. The test consists of cloze and multiple-choice items to measure the participants' lexical, grammatical, and reading comprehension abilities. From the total group of 90 learners, only those who scored between 30 and 39 on the test were chosen as intermediate learners (Geranpayeh, 2003).

Grammar Pre-Test

A grammar pre-test was employed to assess the participants' initial knowledge of 'if-clauses'. The pre-test consisted of 25 multiple-choice questions on 'if-clauses' from a website (www.first-English.org). The total score was estimated to be 25 (each item scored 1). To determine the reliability index of the pre-test, 20 intermediate learners from a language institute with a similar age range and level were pilot-tested to ensure consistency in test scores. The estimate of reliability was found to be 0.76 (using the KR-21 formula), which falls within an acceptable range (Farhady et al., 1994).

Grammar Post-Test

To investigate the effect of using dictogloss and jigsaw tasks via Telegram on learners' acquisition of 'if-clauses', a grammar post-test was administered. Similar to the pre-test, it contained 25 multiple-choice reshuffled items taken from the same website (www.first-English.org) and focused on the target structure, i.e., 'if-clauses'. The reliability coefficient of the post-test was calculated as 0.79, implying a logical level of consistency measure (Farhady et al., 19994). Both the pre-test and post-test were designed to assess a comprehensive range of grammatical structures, including conditional sentences, which were the focus of our study. This ensured that the tests covered relevant areas of grammar that learners were expected to master. We also considered contextual factors that might have influenced test performance, such as test-taking conditions. Efforts were made to maintain consistent conditions for both the pre-test and post-test to minimize external influences on test scores. It is noteworthy that the validity of the pre- and post-tests of grammar was ensured by three experienced M.A. colleagues who majored in Teaching English as a Foreign Language (TEFL).

Learners' Semi-Structured Interview

Regarding the exploration of learners' perceptions of the treatment sessions, ten participants from the experimental groups were randomly selected to participate in semi-structured interview sessions. Some qualitative questions (Appendix 1) were designed to elicit the learners' opinions on the effects of MALL-assisted tasks on learning the English conditional sentences. The content and construct validity of the interview questions was

consulted with, checked, and confirmed by the supervisor. The interview questions were audio-recorded and conducted in the English language.

Another instrument was Piktochart, a web-based infographic application that allows users to create infographics easily. Piktochart can be used for websites, social media, blogs, and reports. It is a cloud-hosted graphic design that presents information in a high-quality and professional manner. It features numerous themes and templates, allowing users to easily customize the icons and graphics to suit their needs. One of the advantages of using Piktochart is its HTML publishing capability, which allows users to create various infographics with clickable buttons. Namely, users can add interactive maps, charts, videos, and hyperlinks. High-resolution final work can be downloaded in JPG, PDF, and PNG formats. Piktochart is suitable for beginners and professionals, and it is a user-friendly application.

The last instrument was Jitsi Meet, which connects users via the website or apps. The URL of the website is https://meet.jit.si/. Jitsi supports Windows and Unix systems as an application, and mobile apps are available for both the App Store and Google Play. It is an open-source application used for audio and video conferencing. Jitsi Meet allows users to share their desktops during conferences, and invites can be sent to everyone through a simple custom URL. It is completely open-source, enabling any user to utilize it throughout the day without needing an account.

Procedure

Describe the process: typical verbs in the passive form. Indicate statistical procedures or thematic processes of different methods. The present study aimed to investigate the impact of disctogloss and jigsaw tasks on intermediate EFL learners' acquisition of 'if-clauses.' Primary coordination was made with the head of a language institute. To homogenize the learners concerning their general language proficiency, they administered an OQPT to select intermediate language learners from the entire student population. Then, the selected intermediate participants were split into two experimental and one control group. They were given detailed explanations of the research objectives and assured of confidentiality. Prior to administering the pre- and post-tests, a pilot test was conducted to ensure the reliability of the instruments. Then, the two groups took the grammar pre-test to understand their initial knowledge of 'if-clauses'. Next, each group received specific grammar instruction, as follows.

The first experimental group attended six 2-hour treatment sessions of instruction, conducted through dictogloss tasks provided by the teacher via the Telegram messaging app. The tutorials were not based on a specific course book but were designed to focus on the targeted grammatical structure of conditional sentences, particularly 'if-clause' structures. This approach enabled us to tailor the content to the specific needs of the learners, ensuring that the material was both relevant and engaging. The reason behind opting for six 2-hour sessions was multifold: a) Duration and Depth: Each session was

designed to provide in-depth coverage of the grammatical concepts, allowing learners sufficient time to engage with the material, receive feedback, and interact with peers; b) Consistency and Progression: Conducting six sessions ensured consistency in the learning process, allowing learners to build upon previously learned concepts and gradually develop a deeper understanding of conditional sentences; c) Practicality and Feasibility: Given the constraints of time and resources, six sessions were deemed sufficient to achieve the research objectives while being feasible for both the learners and the instructors. This duration also helped maintain learner engagement and motivation throughout the study; and d) Feedback and Interaction: The sessions were structured to include both teacher feedback and peer interaction, which are crucial for language learning. The six sessions provided ample opportunities for learners to receive oral and textual feedback on their work and engage in collaborative learning activities, enhancing their understanding of the target structures.

The reason for selecting the Telegram app was its widespread use among Iranian language learners as one of the most popular educational apps (Ebrahimpour et al., 2016), which features an instant messaging function that allows users to share textual and voice messages in the chat box. While Telegram was chosen for its availability and user-friendliness, we recognized potential technological limitations. Participants with unreliable internet connections were encouraged to use a stable connection and offered alternative arrangements. A brief tutorial was also provided to ensure participants understood Telegram's features. Telegram's cross-platform compatibility minimized issues related to device differences. Following Nassaji and Fotos (2011), the implementation of the dictogloss task proceeded in four main stages:

1. The preparatory stage: The students became acquainted with the purpose of the activity and its expectations.
2. The dictation stage: the text was read by the teacher twice at a natural speed. Initially, the students were required to listen attentively. For the second time, they were supposed to listen and take notes on the important points.
3. The reconstruction stage: Students were asked to reconstruct the text together as accurately as possible, relying on their notes and previous work. During this stage, the teacher monitored the students' contributions and provided relevant feedback.
4. The analysis and correction stage: The teacher and students cooperated to compare the reconstructed text with the original and make any necessary corrections. The students shared their educated conjectures and choices while the teacher scaffolded them, offering any assistance to help them address their problems.

Similarly, six 2-hour treatment sessions of teaching grammar through jigsaw tasks on Telegram were allocated to the second experimental group (N = 25). The participants were asked to work on grammar exercises containing 'if-clause' structures while the

teacher provided oral and textual feedback on the learners' answers, helping them understand the target structure. The learners were encouraged to have peer interaction while working on the tasks. More precisely, implementing the jigsaw task was carried out as follows:

1. At the outset, the teacher presented a brief description of the topic to the whole class in the main Telegram group. Then, the students were divided into five 'home groups' (See Figure 1). Care was taken to form heterogeneous groups in terms of age and language proficiency.
2. One student from each group (N=5) was appointed as the leader. Initially, this person was the most mature and knowledgeable student, responsible for guiding the interactions and encouraging members to participate in the discussions.
3. The lessons (i.e., conditional sentences) were divided into five segments, each being assigned to one of the members. Each member was responsible for learning and explaining the assigned segment (i.e., Conditional sentences: Type 0 to 1, 2, 3, and Mixed) to his/her group members later on.
4. Five temporary 'expert groups' were then formed in Telegram by having one student from each jigsaw group join other students assigned to the same segment (See Figure 1). Students in these expert groups had time to get familiar with the different aspects of the segment and to discuss the segment they learned with their respective expert groups. Instructional materials, including video files, pictures, PDF documents, and online resources and websites (e.g., Wakelet), were shared in each subgroup to enhance the members' comprehensive understanding of the respective lesson. Any misconceptions or knowledge gaps about the segment were addressed at this stage.
5. The students returned to their original home groups.
6. Each student in the home group was asked to present their segment to the group. The other students in the group were encouraged to ask questions for clarification.
7. The teacher entered the chat rooms, moving from group to group, and observed the process. If any group was having trouble (e.g., a member was dominating or disruptive), she made an appropriate intervention.

At the end of the session, all the students rejoined the main Telegram group. A comprehensive quiz testing all five segments (Type 0, 1, 2, 3, and Mixed Conditional Structures) was given to the entire class. All the students were encouraged to answer the questions, and the teacher intervened to provide any required tips, if needed, both orally and in written format. The classification of participants into the home and expert groups is depicted in the following figure.

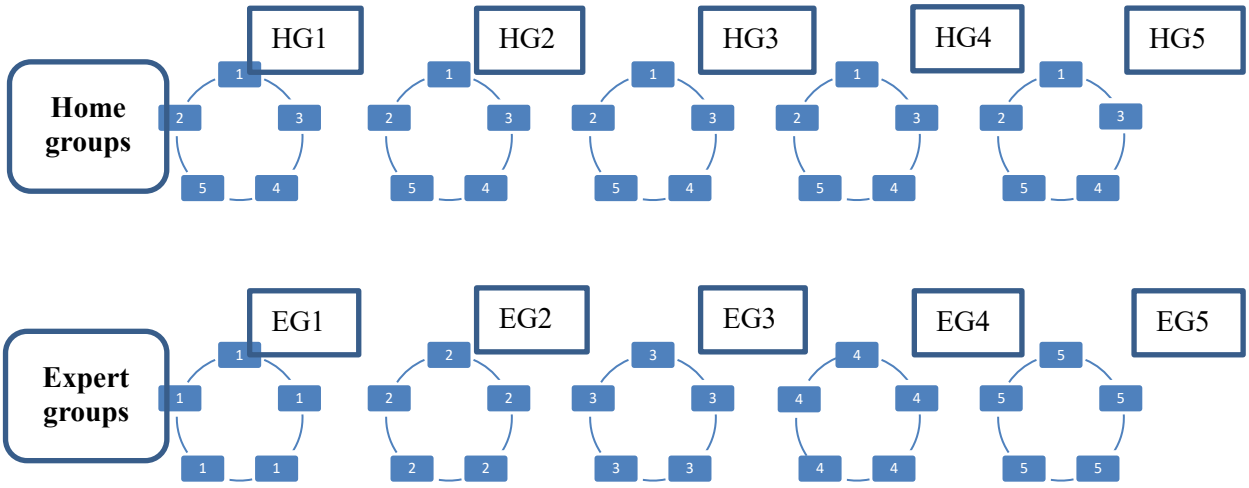

Figure 1. Schematic representation of the home and expert groups in the jigsaw group

The study incorporated several key aspects of the TBLT approach: a) Task Design: The dictogloss and jigsaw tasks were designed to be authentic and meaningful, requiring learners to use language to achieve a real communicative goal. These tasks focused on 'if-clause' structures, which are commonly used in everyday communication; b) Learner Interaction: By encouraging peer interaction during the tasks, we leveraged the benefits of collaborative learning, which is effective across age groups. Younger learners benefited from working alongside older peers, while older participants enhanced their understanding by explaining concepts to younger learners. c) Focus on Form: Although the primary focus was on completing the tasks, the teacher provided targeted feedback on grammatical accuracy, particularly regarding the 'if-clause' structures. This feedback helped learners develop their grammatical competence while engaging in meaningful tasks. Additionally, the tasks were designed to mirror real-life scenarios where conditional sentences are used, helping learners see the practical relevance of the language they were learning. By incorporating these elements, our study aligns with the TBLT approach, emphasizing learner-centered, task-based learning that integrates form and function in a meaningful way.

The control group did not receive the aforementioned techniques but underwent traditional grammar instruction without the use of MALL-assisted TBLT. Specifically, their lessons included: a) Grammar Lectures: Teachers provided detailed explanations of conditional sentences, focusing on their structures and usage rules; b) Workbook Exercises c) Drills and Repetition: While some peer interaction occurred during group work, it was not as extensive or structured as in the experimental groups using dictogloss and jigsaw tasks.

It is noteworthy that, before participating in our study, most students had limited or no prior experience with dictogloss and jigsaw tasks. This was determined through a brief survey administered at the beginning of the study. The lack of prior experience with these tasks meant that participants were introduced to them as part of our study. This allowed us to observe their initial reactions and engagement with the tasks without any preconceived notions or biases based on previous experiences. After the treatment sessions, the participants took the grammar post-test, based on grammar items, for the second time to assess the experimental groups' achievement in grammar learning. Participants in the experimental groups were interviewed.

Data Analysis Procedure

Data……..

Results

The first research question of the study aimed to examine the impact of using jigsaw tasks through Telegram on the development of conditional sentences in Iranian EFL learners. To do so, a quantitative analysis of the learners' pre-and post-test scores was conducted using SPSS. To answer this question and the remaining quantitative research questions of the study, the first step was to check the normal distribution of the data, as shown in Table 1.

Table 1

Kolmogorov-Smirnov Normality Distribution for the Three Groups

	Statistic	df	Sig.
PRE-Dictogloss	.125	25	.200
POST-Dictogloss	.147	25	.171
PRE-Jigsaw	.150	25	.152
POST-Jigsaw	.131	25	.200
PRE-CONTROL	.169	25	.057
POST-CONTROL	.127	25	.200

Table 1 presents the p-values for the pre-tests (Sig = .200) and post-tests (Sig = .171) of grammar learning for the dictogloss group. Similarly, p values for both the pre-and post-tests of grammar for the jigsaw group included as (Sig = .152; .200). Finally, the same value for the pre-and post-tests of the control group involved (Sig = .057; .200). All p values for the three groups were greater than .05, indicating that the data followed a normal distribution. This allowed for the use of parametric tests such as paired samples t-tests and one-way ANOVA. Table 2 presents descriptive statistics for the pre- and post-test scores of grammar learning among learners who underwent MALL-assisted TBLT through dictogloss.

Table 2

Descriptive Statistics for the Grammar Pre- and Post-Tests for Dictogloss Tasks

	Mean	N	Std. Deviation	Std. Error Mean
POST-Dictogloss	18.88	25	3.919	.784
PRE-Dictogloss	15.00	25	2.784	.557

According to Table 2, learners who used dictogloss tasks through Telegram showed improvement in their learning of conditional sentences from the pre-test (M = 15.00; SD = 2.74) to the post-test (M = 18.88; SD = 3.91). To inferentially analyze the mean development from the pre-test to the post-test, a paired-samples t-test was conducted, as shown in Table 3.

Table 3

Paired Samples T-Test for the Grammar Pre- and Post-Tests for Dictogloss Tasks

	Paired Differences							
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
POST-Dictogloss-PRE-Dictogloss	3.880	3.113	.623	2.595	5.165	6.231	24	.000

Table 3 shows a significant change between the pre- and post-tests of the learners regarding their grammar learning ($t(24) = 6.23$; $p = .00<.05$). In other words, using dictogloss tasks through Telegram had a significant impact on Iranian EFL learners' development of conditional sentences, which denoted the rejection of the first null hypothesis of the study.

The primary concern in the second research question was to investigate whether using jigsaw tasks via Telegram had any significant impact on the development of conditional sentences among Iranian EFL learners. To do so, descriptive statistics for the pre-and post-test scores of the learners' grammar learning in the jigsaw group are provided in Table 4.

Table 4

Descriptive Statistics for the Grammar Pre- and Post-Tests for Jigsaw Task

	Mean	N	Std. Deviation	Std. Error Mean
POST-Jigsaw	18.60	25	3.606	.721
PRE-Jigsaw	14.40	25	2.533	.507

Table 4 shows that the learners' development of grammar learning improved form the pre-test (M = 14.40; SD = 2.23) to the post-test (M = 18.60; SD = 3.60). To inferentially analyze the mean development from the pre-test to the post-test, a paired samples t-test was run, as shown in Table 5.

Table 5

Paired Samples T-Test for the Grammar Pre- and Post-Tests for Jigsaw Tasks

	Paired Differences							
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
POST-Jigsaw - PRE-Jigsaw	4.200	2.566	.513	3.141	5.259	8.185	24	.000

Table 5 reveals that there was a significant change between the pre-and post-tests of the learners regarding their development of conditional sentences (t(24) = 8.18; p = .00<.05). In other words, using jigsaw tasks through Telegram had an impact on Iranian EFL learners' development of conditional sentences, which confirmed the rejection of the second null hypothesis of the study.

The third research question of the study examined the differences in the development of conditional sentences among the three groups, as affected by dictogloss and jigsaw tasks through Telegram. Table 6 presents the results of descriptive statistics for the pre- and post-tests of learners' grammar learning among three groups.

Table 6

Descriptive Statistics for the Grammar Pre- and Post-Tests of the Three Groups

						95% Confidence Interval for Mean	
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
pre	Dictogloss	25	15.00	2.784	.557	13.85	16.15
	Jigsaw	25	14.40	2.533	.507	13.35	15.45
	control	25	14.52	2.600	.520	13.45	15.59
post	Dictogloss	25	18.88	3.919	.784	17.26	20.50
	Jigsaw	25	18.60	3.606	.721	17.11	20.09
	control	25	14.64	3.026	.605	13.39	15.89

Table 6 shows the increases from the pre-tests to the post-tests for the two experimental groups. Using dictogloss tasks through Telegram could help learners improve their learning of conditional sentences from the pre-test (M = 15.00, SD = 2.74) to the post-test (M = 18.88, SD = 3.91). Similarly, there was a pre-test (M = 14.40, SD = 2.53) increase to a post-test (M = 18.60, SD = 3.60) for learners' learning of conditional

sentences through jigsaw tasks. However, very small and negligible improvement was descriptively found in the control group's pre- (M = 14.52, SD = 2.60) and post-test (M = 14.64, SD = 3.02). Before the treatment sessions, learners exhibited similar performance levels, as indicated by descriptive data. However, there were noticeable differences in their post-test results. Inferential analysis was used to compare the average scores. Initially, the homogeneity of variances through Levene's test had to be fulfilled for running one-way ANOVA, as shown in Table 7.

Table 7

Levene's Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
pre	Based on Mean	.208	2	72	.813
post	Based on Mean	1.838	2	72	.167

As to Table 7, the homogeneity assumption for the variances of the study groups was met since all the sig. Values are more than .05. Table 8 provides the results of one-way ANOVA.

Table 8

One-Way ANOVA for the Grammar Pre- and Post-Tests of the Three Groups

		Sum of Squares	df	Mean Square	F	Sig.
pre	Between Groups	5.040	2	2.520	.361	.698
	Within Groups	502.240	72	6.976		
	Total	507.280	74			
post	Between Groups	281.147	2	140.573	11.241	.000
	Within Groups	900.400	72	12.506		
	Total	1181.547	74			

No significant differences among the three groups for the pre-test were found in Table 8 (F 2.72 = .361, p = .69) because the significance level is more than .05. However, significant differences for the post-test (F 2.72 = 11.24, p = .00) of learners' development of conditional sentences were found as the level of significance is less than .05. Table 9 shows multiple comparisons among the three groups' grammar learning.

Table 9

Post-Hoc Scheffe Test for the Grammar Post-Tests of the Three Groups

Dependent Variable	(I) CODE1	(J) CODE1	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
POST	Dictogloss	Jigsaw	.280	1.000	.962	-2.22	2.78
		control	4.240*	1.000	.000	1.74	6.74
	Jigsaw	Dictogloss	-.280	1.000	.962	-2.78	2.22
		control	3.960*	1.000	.001	1.46	6.46
	control	Dictogloss	-4.240*	1.000	.000	-6.74	-1.74

Jigsaw	-3.960*	1.000	.001	-6.46	-1.46

Table 9 indicates that there were significant differences between dictogloss and control (p = .00), jigsaw and control (p = .02). Finally, there was no significant difference between dictogloss and jigsaw tasks (p = .96>.05). According to inferential results, the third hypothesis of the study was confirmed and there were not any significant differences between the impacts of dictogloss and jigsaw tasks through Telegram on Iranian EFL learners' development of conditional sentences.

The fourth research question aimed to qualitatively evaluate the participants' views on using dictogloss and jigsaw tasks through Telegram in grammar learning. The learners' responses were analyzed using Dörnyei's (2007) three-step coding process, which involves open, axial, and selective coding. This was done to categorize the responses and identify the most representative themes that reflect the learners' perceptions in an organized manner. The two key themes that emerged from the interview data were 1) Engagement and Motivation, and 2) Interactivity and Collaboration. Each category is explained below, and two interview extracts are subsequently provided to clarify learners' perceptions. Interviews were conducted in Persian to facilitate the elicitation of responses. The English translations were provided in the following extracts.

Engagement and Motivation

One potential advantage of using tasks through mobile apps, such as Telegram, for grammar learning is that learners may perceive them as more interesting and enjoyable compared to traditional classroom activities. This perception can lead to increased engagement and motivation to learn grammar. Mobile apps offer a unique and interactive learning experience that can capture learners' attention and make the learning process more enjoyable. Tasks through mobile apps often incorporate multimedia elements, such as videos, audio recordings, and interactive exercises, which can make the learning materials more engaging and appealing to learners. These multimedia elements can provide a more dynamic and immersive learning environment compared to traditional classroom activities, which typically rely on textbooks and lectures.

The learners' interviews revealed that the majority of learners (n = 8) agreed that the use of mobile apps also facilitates a more personalized and self-paced learning experience. Learners can access the tasks at their own convenience and progress through the materials at their own pace. This flexibility can enhance learners' autonomy and sense of control over their learning, which can contribute to increased motivation. Participants' interview extracts are provided below:

Extract 1.

The use of mobile apps can provide learners with instant feedback on their performance. Many language learning apps have built-in assessment features that provide immediate

feedback on exercises and tasks. This immediate feedback can help learners track their progress, identify areas for improvement, and feel a sense of accomplishment when they achieve correct answers or complete tasks successfully. This feedback loop can reinforce learners' motivation and encourage them to continue engaging with the tasks.

Extract 2.

The use of tasks through mobile apps like Telegram for grammar learning can be perceived as more interesting and enjoyable by learners. This perception can lead to increased engagement and motivation to learn grammar. The interactive and multimedia-rich nature of mobile app tasks, coupled with the personalized and self-paced learning experience contributes to making the learning process more engaging and enjoyable for learners.

Interactivity and Collaboration

One advantage of using mobile tasks for grammar learning is that they set the context for learners to interact with the language and collaborate with their peers. Mobile apps like Telegram often feature tools that enable learners to engage in discussions, share their progress, and seek assistance from others. This fosters a sense of community and creates a more social learning environment. By participating in discussions and collaborating with their peers, learners can practice using the grammar rules they have learned in a more authentic and meaningful way. They can engage in conversations, ask questions, and receive feedback from their peers, which can help reinforce their understanding of grammar concepts. This interaction with others also gave the learners the chance to learn from different perspectives and gain insights into various language usage patterns. Collaboration through mobile tasks can also enhance learners' motivation and engagement. Working together with peers on grammar tasks can create a sense of accountability and responsibility, as learners feel a sense of commitment to contribute to the group's progress. This collaborative approach can also foster a supportive and encouraging learning environment, where learners can motivate and inspire one another to strive for improved performance.

As to interview data, almost all learners (n = 9) concurred that the social aspect of mobile tasks can help learners overcome feelings of isolation or boredom that may arise during individual self-study. Engaging with peers through discussions and collaborative activities can make the learning process more enjoyable and dynamic. Learners can share their experiences, exchange tips and strategies, and celebrate their achievements together, creating a sense of camaraderie and shared progress. The interview extracts are as follows:

Extract 3.

Collaboration through mobile tasks can foster the development of essential language skills, including communication, negotiation, and problem-solving. Learners need to

effectively communicate their ideas, negotiate meaning, and collaborate to find solutions when working together. These skills are not only essential for language learning but also transferable to real-life situations where effective communication and collaboration are required.

Extract 4.

Using tasks through mobile for grammar learning provides opportunities for learners to interact with the language and collaborate with their peers. This fosters a sense of community and creates a more social learning environment. By engaging in discussions, sharing progress, and collaborating on tasks, learners can practice applying grammar rules in a meaningful way, gain insights from diverse perspectives, enhance their motivation and engagement, and develop essential language skills.

Discussion

This study aimed to investigate the impact of using dictogloss and jigsaw tasks through MALL on the development of conditional sentences in intermediate EFL learners in Iran. It is also intended to bring to light the learners' perceptions of the treatment sessions. The results indicated that the use of dictogloss and jigsaw tasks through MALL led to a significant improvement in learners' development of conditional sentences, with only minimal differences in the experimental groups' performance in the posttest. This finding is commensurate with that of Rashtchi et al. (2020), who reported a similar result in their instruction of speech acts through dictogloss and jigsaw tasks. In a similar vein, they highlighted that both tasks were equally effective in drawing learners' attention to the target structures.

The reason underlying this typical result could be the involvement of younger learners in both studies. However, our finding contradicts that of Yilmaz and Granena (2010), who found dictogloss to be superior to jigsaw in generating language-related episodes. A potential reason for this contradiction may be the presence of adult learners in their study, who typically focus more on linguistic form than meaning in dictogloss tasks (Swain & Lapkin, 2010). This could have led to increased attention to grammatical structures and, consequently, better performance. Based on the qualitative findings, the learners reported feeling engaged and motivated, as well as experiencing interactivity and collaboration when using mobile-assisted TBLT for their grammar learning. These findings align with the underlying tenets of sociocultural theory, which emphasizes learning as a socially mediated process where knowledge is constructed through interactions (Vygotsky, 1978). Mobile-assisted TBLT facilitates this by providing tools for real-time communication and collaboration, supporting learners within their Zone of Proximal Development (ZPD), and enhancing shared meaning-making (Wertsch, 1991; Chen & Chih-Cheng, 2018; Hwang et al., 2024).

Concerning the effectiveness of TBLT in facilitating learners' development of grammar skills, the findings highlight the importance of meaning-focused activities. These activities encourage learners to focus on the meaning of the language rather than solely on grammatical accuracy (Izumi, 2002). By engaging in meaningful tasks, learners are more likely to notice and internalize grammatical structures and patterns (East, 2012). TBLT also promotes the use of authentic and meaningful language input, simulating real-life communication situations that allow learners to interact with authentic language (Douglas & Kim, 2014). This exposure helps learners develop a better understanding of how grammar is used in context and facilitates the acquisition of grammatical structures. Additionally, TBLT encourages learners to engage in language production and practice through tasks like jigsaw or dictogloss, allowing them to experiment with different grammatical structures and receive feedback (Plew & Zhao, 2010; Andon & Eckerth, 2009). TBLT further promotes learner autonomy and engagement by involving learners in task design and decision-making, increasing their motivation and investment in the learning process (Baralt & Bravo, 2016).

Building on the strengths of TBLT, MALL further enhances grammar learning by providing learners with easy access to a wide range of language resources, including grammar exercises and interactive activities (Baleghizadeh & Oladrostam, 2011). This accessibility complements TBLT's focus on meaning and authenticity by allowing learners to practice and reinforce their grammar skills at their own pace and convenience (Yusof & Saadon, 2012). MALL also offers interactive and engaging grammar learning apps and games, incorporating multimedia elements that make learning more enjoyable and motivating (Alami et al., 2014). The immediate feedback provided by many mobile apps aligns with TBLT's emphasis on feedback through peer interaction and self-correction, allowing learners to learn from their mistakes efficiently (Xin, 2014). Moreover, MALL facilitates personalized instruction, enabling learners to choose resources based on their needs and track their progress, which aligns with TBLT's learner-centered approach (Alodail, 2014). By promoting learner autonomy and self-directed learning, MALL empowers learners to take control of their grammar learning, fostering a sense of ownership and responsibility (Shuib et al., 2015). Therefore, MALL complements TBLT by enhancing learners' motivation, engagement, and self-efficacy in grammar learning, leading to improved proficiency.

Mobile-assisted TBLT allows for the integration of technology-mediated communication tasks that focus on grammar. Learners can engage in interactive activities, such as online discussions, video chats, or collaborative writing tasks, where they have to use grammatical structures accurately and appropriately to communicate their ideas effectively (Khodabandeh & Soleimani, 2017). These tasks prepare the learners for practicing and applying grammar in real-life communication situations, enhancing their grammatical accuracy and fluency. It enables learners to receive feedback on their grammar performance during and after completing tasks. Finally, from the SCT

perspective, mobile-assisted TBLT offers learners opportunities to engage in social interactions and meaningful tasks that promote the integration of form and meaning in grammar learning (Lantolf, 2004). Through mobile devices, learners can access authentic language input and resources, such as articles, videos, or podcasts, which are embedded within meaningful tasks. These tasks require learners to analyze and manipulate grammatical structures in a real-life context, promoting the integration of form and meaning. These communication tasks facilitate social interaction and negotiation of meaning, which are central to sociocultural theory (Vygotsky, 1978).

Overall, the findings indicated that incorporating dictogloss and jigsaw tasks through MALL resulted in a notable enhancement in learners' proficiency in conditional sentences compared to the control group. No discernible difference was observed in the development of the target structure between the two experimental groups. The learners expressed feelings of engagement, motivation, interactivity, and collaboration when utilizing mobile-assisted TBLT for their grammar learning. The study underscored the potential of mobile-assisted TBLT in facilitating grammar learning and creating a positive learning environment for EFL learners.

Conclusion

This study began with the assumption that using MALL-assisted TBLT could enhance learners' understanding of conditional sentences. By utilizing mobile technology and incorporating task-based approaches, educators can effectively enhance grammar instruction and promote active learner participation, ultimately leading to improved language proficiency and learner satisfaction. As such, it is recommended that language educators consider integrating mobile-assisted tasks into their teaching practices to optimize grammar learning outcomes and establish a more engaging and interactive learning context for their students. For example, they could create a mobile-based dictogloss task where learners listen to a short audio clip on a mobile device and then work in pairs to reconstruct the text. This task helps learners to practice learning grammar points while focusing on listening comprehension and collaborative writing. Using dictogloss and jigsaw tasks via MALL allows teachers to create a more interactive and collaborative learning environment. They can use collaboration tools like Google Docs or Padlet to facilitate group work and sharing. Through MALL, teachers can offer a diverse range of authentic language resources, including audio recordings and videos, that reflect real-world contexts. Platforms like YouTube or TED Talks exemplify engaging video resources. The provision of dictogloss and jigsaw tasks gives the learners opportunities for active participation and collaboration. Collaboration tools like Google Docs or Padlet serve as potential sites for group work and sharing.

Despite considerable findings, this study faced some constraints that could be addressed in future research. Firstly, the study had a limited number of participants, which may impact the generalizability of the results. A larger sample size is crucial because it

allows researchers to capture a broader range of experiences and outcomes, making the findings more representative of the larger population. For instance, a larger sample can help identify patterns or trends that might not be apparent in a smaller group. Secondly, the study focused on intermediate language learners aged between 13 and 20. Expanding the participant pool to include learners with different proficiency levels and adult learners would provide a more comprehensive understanding of how mobile-assisted TBLT affects diverse groups.

Future research should involve a larger and more diverse sample of participants from various proficiency levels to ensure that the findings can be applied more widely. Moreover, the study only examined learners' development of conditional sentences. Investigating other grammatical constituents could offer insights into how mobile-assisted TBLT impacts the learning of various grammatical structures. This broader focus would help educators understand which tasks are most effective for different aspects of grammar. As the study did not explore teachers' perceptions of using tasks through MALL, including this perspective in future research could provide valuable insights into the efficiency and practicality of mobile-assisted TBLT in an EFL context. Teachers' feedback can highlight challenges and benefits that might not be apparent from learner data alone, helping to refine the implementation of mobile-assisted tasks.

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First Author: collected data, designed, conducted the procedure, and wrote the first draft.

Second Author: read, made necessary revisions, and approved the final manuscript.

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References

Alami, M., Rajabi, P. & Madani, D. (2014). The effect of using Internet resources in teaching English grammar on the achievement of secondary school students in Iran. *Journal of Social Issues and Humanities,* 98-105. http://dx.doi.org/10.5296/v5i1.9893

Alodail, A. K. (2014). Impact of technology (Powerpoint) on students' learning. *International Interdisciplinary Journal of Education, 3*(4), 200-206. http://dx.doi.org/10.12816/0006872

Andon, N., & Eckerth, J. (2009). Chacun à son gout? Task-based L2 pedagogy from the teacher's point of view. *International Journal of Applied Linguistics, 19*(3), 286-http://dx.doi.org/310. 10.1111/j.1473-4192.2009.00240.x

Asadi, M., & Ebadi, S. (2025). Integrating augmented reality in EFL reading comprehension: a mixed-methods study. *Research and Practice in Technology Enhanced Learning*, *20*, 23-53. https://doi.org/10.58459/rptel.2025.20023

Asadi, M., & Ebadi, S., & Mohammadi L. (2025). The impact of integrating ChatGPT with teachers' feedback on EFL writing skills. *Journal of Thinking Skills and Creativity*. https://doi.org/10.1016/j.tsc.2025.101766

Asadi, M., Taheri, R. (2024). Enhancing peer assessment and engagement in online IELTS writing courses through a teacher's multifaceted approach and AI integration. *Technology Assisted Language Education (TALE)*, *11*(1). https://doi.org/10.22126/tale.2024.11083.1058

Azkarai, A., & del Pilar García Mayo, M. (2015). Task-modality and L1 use in EFL oral interaction. *Language Teaching Research*, *19*(5), 550-571. https://doi.org/10.1177/1362168814541717

Baleghizadeh, S., & Oladrostam, E. (2011). The effect of mobile assisted language learning (MALL) on grammatical accuracy of EFL students. *MEXTESOL Journal*, *34*(2), 1-10. https://doi.org/10.29140/tltl.v2n1.140

Bruner, J.S. (1983). *Child's talk: Learning to use language*. New York: W.W. Norton.

Bygate, M. (1999). Quality of language and purpose of task: Patterns of learners' language on two oral communication tasks. *Language Teaching Research, 3*(3), 185-214.

Bygate, M., Norris, M. J., & Van den Branden, K. (2015). Task-based language teaching. *Encyclopedia of Applied Linguistics* (pp. 1-8). Chichester: Wiley.

Bygate, M., Swain, M., & Skehan, P. (2013). *Researching pedagogic tasks: Second language learning, teaching, and testing*. London: Routledge.

Cavanaugh, A. J., & Song, L. (2014). Audio feedback versus written feedback: Instructors' and students' perspectives. *Journal of Online Learning and Teaching*, *10*(1), 122–136.

Chen, T. H., & Chih-Cheng, L. (2018). Enhancing L2 English learning through mobile-assisted TBLT: EFL learners' perspectives. *Journal of Asia TEFL*, *15*(2), 453. https://doi.org/10.18823/asiatefl.2018.15.2.13.453

Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford university press.

Dörnyei, Z., & Csizér, K. (2012). How to design and analyze surveys in second language acquisition research. *Research Methods in Second Language Acquisition: A Practical Guide*, *1*, 74-94. https://doi.org/10.1002/9781444347340.ch5

Douglas, S. R., & Kim, M. (2014). Task-based language teaching and English for academic purposes: An investigation into instructor perceptions and practice in the Canadian context. *TESOL Canada Journal, 31*(8), 1-23.

https://doi.org/10.18806/tesl.v31i0.1184

Duc, N. C., & Tho, P. X. (2019). Examining the effects of three jigsaw listening activities on text comprehension: an exploratory study. *VNU Journal of Foreign Studies*, *35*(6). 1-15. https://doi.org/10.25073/2525-2445/vnufs.4473

East, M. (2012). *Task-based language teaching from teachers' perspective: Insights from New Zealand.* Amsterdam, NL: John Benjamin Publishing.

Ebrahimpour, A., Rajabali, F., Siamian, H., Rahbar, F., & Vahedi, M. (2016). The effect of social networks on the scientific research relations, prospectiveness, creativity and satisfaction of scientific position. *International Journal of Medical Research & Health Sciences*, 5(7S), 413–418

Faghani, B., Derakhshan, A., & Zangoei, A. (2015). A review on the effect of using dictogloss tasks and fake scoring on children's dictation ability. *English Linguistics Research*, 4(3), 58-71. http://doi.org/10.5430/elr.v4n3p58

Farhady, H., Jafarpour, A., & Birjandi, P. (1994). *Testing language skills*. Tehran: SAMT Publications.

Gan, B., Menkhoff, T., & Smith, R. (2015). Enhancing students' learning process through interactive digital media: New opportunities for collaborative learning. *Computers in Human Behavior*, *51*, 652-663.

https://doi.org/10.1016/j.chb.2014.12.048

Geranpayeh, A. (2003). A quick review of the English Quick Placement Test. *Research Notes, 12,* 8-10.

Ghorbani, N., & Ebadi, S. (2020). Exploring learners' grammatical development in mobile assisted language learning. *Cogent Education, 7*(1), 1704599.

Goh, T. T., Seet, B.-C., & Chen, N.-S. (2012). The impact of persuasive SMS on students' self-regulated learning. *British Journal of Education Technology*, *43*(4), 624– 640. https://doi.org/10.1111/j.1467-8535.2011.01236.x

González-Lloret, M. (2017). Technology for task-based language teaching. In Shannon, S., & Chapelle, C., *The handbook of technology and second language teaching and learning*, (pp. 234-247).

Hwang, G. J., Rahimi, M., & Fathi, J. (2024). Enhancing EFL learners' speaking skills, foreign language enjoyment, and language-specific grit utilising the affordances of a MALL app: A microgenetic perspective. *Computers & Education*, 214, 105015. https://doi.org/10.1016/j.compedu.2024.105015

Izumi S. (2002). Output, input enhancement, and the noticing hypothesis: An experimental study on ESL relativization, *Studies in Second Language Acquisition, 24*(4), 541-77. https://doi.org/10.1017/S0272263102004023

Khodabandeh, F., & Soleimani, H. (2017). The Effect of MALL-based tasks on EFL learners' grammar learning. *Teaching English with Technology*, *17*(2), 29-41.

Khoshsima, H., & Khoobkhahi, H. (2022). The impact of output-based tasks on the grammatical development of intermediate Iranian EFL learners regarding passive voice. *Journal of Foreign Language Teaching and Translation Studies*, *7*(2), 117-141. https://doi.org/10.22034/efl.2022.340684.1163

Kim, D., Rueckert, D., Kim, D.-J., & Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology*, *17*(3), 52–73. http://dx.doi.org/10125/44339

Kowal, M., & Swain, M. (1994). Using collaborative language production tasks to promote students' language awareness**.** *Language Awareness*, *3*, 73-93. https://doi.org/10.1080/09658416.1994.9959845

Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.) *Sociocultural theory and second language learning* (pp. 1-26). Oxford: Oxford University Press.

Lantolf, J. P. (2004). Sociocultural theory and second and foreign language learning: An overview of sociocultural theory. In K. van Esch and O. St. John (Eds). *New insights into foreign language learning and teaching.* Frankfurt am Main: Peter Lang.

Lapkin, S., Swain, M. & Smith, M. (2002). Reformulation and the learning of French pronominal verbs in a Canadian French immersion context. *Modern Language Journal*, 86, 485–507. https://doi.org/10.1111/1540-4781.00157

Littlewood, W. (2014). Communication-oriented language teaching: Where are we now? Where do we go from here? *Language Teaching*, *47*(3), 349-362.

https://doi.org/10.1017/S0261444812000134

Liu, X., Sun, L., & Tu, J. F. (2019). Effects of computer assisted language learning on learner autonomy. In *2019 IEEE International Conference on Computation, Communication and Engineering (ICCCE)* (pp. 124-126). IEEE.

Marashi, H., & Khaksar, M. (2013). Dictogloss or dicto-phrase: Which works better for listening comprehension? *imanager's Journal on English Language Teaching*, *3*(1), 22-29. https://doi/10.26634/jelt.3.1.2147

Modarresi, G. (2021). The effect of dictogloss vs. debating on L2 writing proficiency: A mixed-methods study. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, *40*(4), 121-160.

https://doi.org/10.22099/jtls.2021.39939.2954

Mohammadi, L., Asadi, M., & Taheri, R. (2024). Transforming EFL Lesson Planning with "To Teach AI": Insights from Teachers' Perspectives. *Technology Assisted Language Education (TALE)*, *2*(3), 46–73. https://doi.org/10.22126/tale.2025.11490.1080

Murad, H. M. (2017). The effectiveness of using dictogloss strategy on developing tenth graders' English grammar learning and writing skills in Gaza. https://iugspace.iugaza.edu.ps/handle/20.500.12358/20924?localeattribute=en

Nassaji, H., & Fotos, S. S. (2011). *Teaching grammar in second language classrooms: Integrating form-focused instruction in communicative context*. Routledge.

Norris, J. M. (2009). Task-based teaching and testing. In M. H. Long, & C. Doughty (Eds.), *Handbook of language teaching* (pp. 578-594). Cambridge: Blackwell.

Parsa, N., & Anjomshoa, L. (2022). Impact of mobile-assisted language learning (MALL) on EFL learners' grammar achievement and self-efficacy. *International Journal of Language and Translation Research*, *1*(4), 71-94.

https://doi.org/10.22034/978389966744_005

Pica, T., Kang, H. S., & Sauro, S. (2006). Information gap tasks: Their multiple roles and contributions to interaction research methodology. *Studies in Second Language Acquisition*, *28*(2), 301-338.

https://doi.org/10.1017/S027226310606013X

Puebla, C., Fievet, T., Tsopanidi, M., & Clahsen, H. (2022). Mobile-assisted language learning in older adults: Chances and challenges. *ReCALL*, *34*(2), 169-184.

https://doi.org/10.1017/S0958344021000276

Rashtchi, M., Porkar, R., & Ghazi MirSaeed, S. (2020). Jigsaw and dictogloss tasks: Do they facilitate the development of speech acts?. *International Journal of Research in English Education*, *5*(1), 53-69. https://doi.org/10.29252/ijree.5.1.53

Robinson, P. (2007). Task complexity, theory of mind, and intentional reasoning: Effects on L2 speech production, interaction, and perceptions of task difficulty. *International Review of Applied Linguistics in Language Teaching, 45*, 191-213.

https://doi.org/10.1515/iral.2007.009

Robinson, P. (2011). *Second language task complexity: Researching the cognition hypothesis of language learning and performance* (Vol. 2). John Benjamins Publishing Company.

Samuda, V., & Bygate, M. (2008). *Tasks in second language learning*. Basingstoke: Palgrave Macmillan.

Shabani, K., & Vahedi, R. (2023). The role of class participation structure in the effectiveness of incidental form-focused instruction. *Language Related Research, 13*(6), 167-200. https://doi.org/10.1111/lang.12020

Shuib, M., Abdullah, A., Azizan, S. N., & Gunasegaran, T. (2015). Designing an intelligent mobile learning tool for grammar learning (i-MoL). *International Journal of Interactive Mobile Technology*, *9*(1), 41-46.

https://doi.org/10.3991/ijim.v9i1.4238

Skehan, P., & Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. *Language Learning*, *49*, 93-120.

https://doi.org/10.1111/1467-9922.00071

Smith, S., & Wang, S. (2013). Reading and grammar learning through mobile phones. *Language Learning & Technology*, *17*(3), 117-134.

Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In Lantolf, J. (ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford: Oxford University Press,

Swain, M., & Lapkin, S. (2001). Focus on form through collaborative dialogue: Exploring task effects. In M. Bygate, P. Skehan, & M. Swain (Eds.). *Researching pedagogic tasks: Second language learning, teaching, and testing* (pp. 99-118). London: Longman.

Venkataraman, S., & Sivakumar, S. (2015). Engaging students in Group based Learning through e-learning techniques in Higher Education System. *International Journal of Emerging Trends in Science and Technology*, *2*(01), 1741-1746.

https://doi.org/10.1007/s10639-024-12901-x

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes.* Cambridge, Mass: Harvard University Press.

Wajnryb, R. (1990). Grammar dictation. Oxford: Oxford University Press.

Wang, Sh., & Smith, S. (2013). Reading and grammar learning through mobile phones. *Language learning & Technology*, *17*(3), 117-134.

Wang, T. H. (2014). Developing an assessment-centered e-Learning system for improving student learning effectiveness. *Computers & Education*, *73*, 189-203.

https://doi.org/10.1016/j.compedu.2013.12.002

Wertsch, J. V. (1991). Sociocultural setting and the zone of proximal development: The problem of text-based realities. *Culture, Schooling and Psychological Development*, 71-86.

Xin, J. (2014). The effectiveness of m-learning in the form of smart phones in English grammar teaching. *Sino-US English Teaching*, *11*(1), 13-17.

https://doi.org/10.4018/978-1-7998-4769-4.ch008

Yilmaz, Y. (2011). Task Effects on Focus on Form in Synchronous Computer-Mediated Communication. *The Modern Language Journal*, *95*(1), 115–132. https://doi.org/10.1111/j.1540-4781.2010.01143.x

Yilmaz, Y., & Granena, G. (2010). The effects of task type in synchronous computer-mediated communication. *ReCALL*, *22*(1), 20-38.

https://doi.org/10.1017/S0958344009990176

Yulian, T. (2012). The effectiveness of using jigsaw and sq3r technique in instruction toward the students' reading comprehension of narrative text at the eight grade of

junior high school state 8 metro academic year 2011/2012. *Premise Journal of English Education*, 1(2), 152-163. http://ojs.fkip.ummetro.ac.id/index.php/english/article/view/1119/794

Yusof, N. A., & Saadon, N. (2012). The effects of Web-based language learning on University students' grammar proficiency. *Procedia-Social and Behavioral Sciences, 67*, 402-408. https://doi.org/10.1016/j.sbspro.2012.11.344

Zahra, R. O. (2014). The use of jigsaw technique in improving students' ability in writing a descriptive text. *Journal of English and Education*, 2(1), 64-75. Retrieved March 10, 2018, from http://ejournal.upi.edu/index.php/LE/article/view/748/544

Zeng, G. (2017). Collaborative dialogue in synchronous computer-mediated communication and face-to-face communication. *ReCALL*, 1–19. https://doi.org/10.1017/S0958344017000118

Appendix 1.

1. How do you feel about using tasks through Telegram for your grammar learning?
2. Do you find the use of tasks through Telegram more engaging and motivating compared to traditional classroom activities?
3. What advantages do you see in accessing grammar learning materials and resources through Telegram?
4. To what extent can the grammar tasks through mobile help you improve your grammar learning? How?
5. Overall, what are your perceptions and satisfaction with using tasks through Telegram for your grammar learning?